

**AGENCY FOR  
INTERNATIONAL  
DEVELOPMENT**



**ANNUAL BUDGET SUBMISSION  
FY 1980**

**SRI LANKA & ANNEXES A & C**

BEST AVAILABLE

**DEPARTMENT  
OF  
STATE**

MAY 1978



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ANNUAL BUDGET SUBMISSION

FY 1980

USAID SRI LANKA

Prepared May 1978

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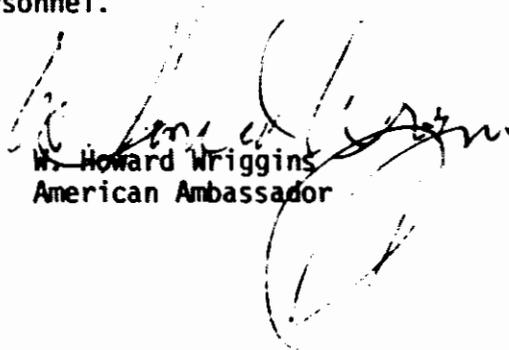
Colombo, Sri Lanka

May 18, 1978

FORWARDING STATEMENT BY THE AMERICAN AMBASSADOR TO SRI LANKA

I am pleased to forward the FY 1980 Annual Budget Submission for Sri Lanka. The Budget proposes a \$33 million development loan and grant program and a \$15.4 million Title I and II program. The Budget includes funds for the Mahaweli Basin irrigation program, commodity inputs for agriculture and the anti-malaria campaign, and new projects in water management, coarse grains and pulses, and reforestation and watershed management.

USAID is budgeting 17 U.S. Direct-Hire staff persons in FY 1979 and 21 in FY 1980. I approve 17 persons for FY 1979 but am withholding approval of 21 for 1980 at this time. The USAID's proposed increase for FY 1980 is based on assumptions that FY 1980 new starts will be successful and expand in FY 1981 and FY 1982 and also on the assumption that there will be additional new programs added in FY 1981 and FY 1982 for which staff expansion in 1980 is needed. I believe both assumptions need critical scrutiny over the coming year before acting on any staff increase. I plan to continue to encourage USAID to find means of doing its business in ways which minimize the need for U.S. Direct-Hire personnel.



W. Howard Wriggins  
American Ambassador

Colombo, Sri Lanka

May 25, 1978

FORWARDING STATEMENT BY A.I.D. MISSION

The Sri Lanka Mission proposes the following program for FY 1980:

	(\$ millions)
<u>I. Development Assistance</u>	
1. Water Management Improvement	3.0
2. Coarse Grains and Pulses	3.0
3. Mahaweli Basin Development	15.0
4. Reforestation & Watershed Management	2.0
5. Agricultural Inputs (Fertilizer)	5.0
6. Malaria (Malathion)	4.0
7. Operational Program Grants	1.0
Sub Total:	\$ 33.0 million
<u>II. PL 480</u>	
1. Title I (75,000 tons/wheat flour)	9.0
2. Title II CARE MCH & School Feeding	6.3
Sub Total:	\$ 15.4 million
TOTAL ASSISTANCE OF ALL KINDS:	<u>\$ 48.4 million</u>

The FY 1980 request continues the concentration on agriculture and rural development which has characterized our program here since the resumption of development assistance in 1976. Stimulating widespread increases in farm productivity is the prime requisite for quickening economic growth, reducing unemployment and poverty, and backing-up Sri Lanka's social programs.

The Mission is including two background documents with this ABS. These are an overview of poverty in Sri Lanka done for USAID by Marga Institute and an Agriculture Sector Paper. The final version of the Agriculture Sector Paper is being prepared in AID/W, and we presume will be appended to the ABS at headquarters.

The Mission's proposed FY 1980 program raises several policy issues. These include: (a) the pros and cons of continuing to expand agriculture assistance programs versus expansion into other fields; (b) the extent to which the Mahaweli

program can or should be additional to "normal" levels of U.S. assistance as suggested by the World Bank; (c) the strategic and tactical utility of reducing the Title I PL 480 budget to 75,000 tons of wheat flour; (d) personnel and management implications of the FY 1980 program; and (e) the prospects for further expansion of U.S. assistance in the next five years.

We look forward to a discussion of these and other issues in the Budget reviews.

Charles H. Antholt  
Thomas M. Arndt  
Clark H. Billings  
Lawrence T. Cowper  
Jeffrey W. Evans  
Barbara P. Jones

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TABLE 1 - LONG RANGE PLAN DECISION UNIT: Sri Lanka  
(\$ millions)

	FY 1978 ESTIMATE	FY 1979 ESTIMATE	FY 1980		PLANNING PERIOD				
			MINIMUM	MARK	PROPOSED	BY+1	BY+2	BY+3	BY+4
<b>Food &amp; Nutrition</b>	19.0	26.6	13.0	26.0	28.0	39.0	49.0	54.0	54.0
Grants	7.0	2.9	0.5	0.5	0.5	1.0	2.0	2.5	2.5
Loans	12.0	23.7	12.5	25.5	27.5	38.0	47.0	51.5	51.5
<b>Population</b>	-	-	-	-	-	-	-	-	-
Grants	-	-	-	-	-	-	-	-	-
Loans	-	-	-	-	-	-	-	-	-
<b>Health</b>	7.0	-	-	-	4.0	-	-	-	-
Grants	-	-	-	-	-	-	-	-	-
Loans	7.0	-	-	-	7.0	-	-	-	-
<b>Education</b>	-	-	-	-	-	-	-	-	-
Grants	-	-	-	-	-	-	-	-	-
Loans	-	-	-	-	-	-	-	-	-
<b>Selected Development</b>	-	-	-	-	1.0	1.0	1.0	1.0	1.0
Grants	-	-	-	-	1.0	-	-	-	-
Loans	-	-	-	-	-	-	-	-	-
<b>Total Functional Accounts</b>	26.0	26.6	13.0	26.0	33.0	40.0	50.0	55.0	55.0
Grants	7.0	2.9	0.5	0.5	1.5	2.0	3.0	3.5	3.5
Loans	19.0	23.7	12.5	25.5	31.5	38.0	47.0	51.5	51.5
<b>Other Accounts</b>	-	-	-	-	-	-	-	-	-
Grants	-	-	-	-	-	-	-	-	-
Loans	-	-	-	-	-	-	-	-	-
<b>Total Program</b>	26.0	26.6	13.0	26.0	33.0	40.0	50.0	55.0	55.0
Grants	7.0	2.9	0.5	0.5	1.5	2.0	3.0	3.5	3.5
Loans	19.0	23.7	12.5	25.5	31.5	38.0	47.0	51.5	51.5
<b>PL 480 (non-add)</b>	41.1	13.9	12.4	15.4	15.4	18.6	18.4	18.3	18.1
Title I	35.4	8.7	6.1	9.1	9.1	12.1	12.1	12.1	12.1
Title II	5.7	5.2	6.3	6.3	6.3	6.5	6.3	6.2	6.0
<b>Housing Guaranties (non-add)</b>	-	-	-	-	-	-	-	-	-
<b>Personnel (workyears)</b>	12.7	31.7	37.6	41.6	41.6	45.5	51.5	57.5	63.5
Mission - US	7.1	15.0	17.0	19.0	19.0	21.0	23.0	25.0	27.0
- FN	5.0	15.5	20.0	22.0	22.0	24.0	28.0	32.0	36.0
TDY - USDH	0.6	1.2	0.6	0.6	0.6	0.5	0.5	0.5	0.5
Contract, other	-	-	-	-	-	-	-	-	-
<b>Operating Expenses</b>	0.9	1.1	1.1	1.3	1.3	1.6	1.9	2.2	2.5



TABLE III - SUMMARY OF RESOURCES - BY ACTIVITY  
 (FUNDING IN \$000 AND OPERATING EXPENSES FUNDED PERSONNEL IN WEEKS (M, N))

DECISION UNIT  
 UBAID/UTI Links

PAGE 2 OF 2

ACTIVITY	FY: 1978		FY: 1979		FY: 1980		EXPANDED		PROPOSED			
	FUNDING	PERSONNEL UB PN										
<b>NON-PROGRAM ACTIVITIES:</b>												
Policy Direction and Management		2.60	0.50	4.40	3.00	7.55	7.50	872.8	5.55	5.50	7.25	6.75
Financial Management		0.10	-	1.00	2.00	1.00	2.00	107.6	1.00	2.00	1.00	2.00
Mission Support		-	1.00	-	2.50	-	3.50	148.8	-	3.50	-	3.50
IDIA		-	-	0.50	-	1.00	-	141.0	1.00	-	1.00	-
Other(Specialty)		-	-	-	-	-	-	141.0	-	-	-	-
Non-Mission Specific Personnel		0.75	0.25	1.00	0.50	1.00	0.50	1,121.4	1.00	0.50	1.00	0.50
<b>Operating Expenses:</b>												
Personnel	481.6		758.7		1,002.3		872.8		1,002.3			
Housing	270.5		178.3		175.2		107.6		175.2			
Office Operations	113.4		177.9		148.8		141.0		148.8			
Total	865.5		1,114.9		1,326.3		1,121.4		1,326.3			

## DECISION UNIT OVERVIEW

1. Long-Range Goal: The Mission's long-range goal is agricultural development that: (1) increases domestic food production; (2) expands employment opportunities; and (3) improves standards of living. 1/

Poverty in Sri Lanka is principally rural. Appendix A to the ABS indicates that 92 percent of those below the poverty line live in the rural rather than the estate or urban sectors. About 86 percent of the poverty group lives in the mid-country and low-land dry zone. These are Sri Lanka's chief food producing areas.

The antidote to rural poverty is widespread increases in farm productivity leading to improved earning opportunities for the rural population. Growing agricultural production increases farm income and demand for labor; it stimulates employment in construction, services and trades; it alleviates the wages goods constraint to non-farm employment; it lowers the relative cost of food thereby progressively benefiting the poor; and it frees foreign exchange for import of investment goods.

The predominant present development task in Sri Lanka is to generate job-creating growth which reinforces the country's social achievements. Agriculture dominates the Sri Lanka economy. Increased production of both field and tree crops is the engine for national economic growth and improvements in popular welfare.

2. Major Objectives: The Mission has three major objectives:

1. Expand the productive resource base through more efficient use of water and opening new rainfed and irrigated lands to production.

In Sri Lanka there is a continuing need to open new lands to production through expansion of irrigation and development of upland crops, particularly coarse grains which can supplement paddy in the diet. It is estimated that Sri Lanka's dry zone contains about 5 million acres of uncultivated arable lands of which 1 million acres are irrigable. This is more than double the 4.5 million acres currently under cultivation. Opening new lands to production also contributes to relieving

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1/ The PPC guidance requests comments on the eligibility of recipient countries for U.S. assistance in terms of their commitment to human needs, their human rights situation, and the level of their defense expenditures. These factors are positive in Sri Lanka and have been extensively documented in previous USAID submissions and other papers. For information on Sri Lanka's equitable development patterns, see "Development in Sri Lanka: Issues and Prospects", March 22, 1978 World Bank, Annex A; For information on economic reforms, see World Bank Report, op cit, and "Sri Lanka - Recent Economic Developments", IMF, April 24, 1978; For information on human rights, see "Country Report on Human Rights Priorities" Report to HIRC and SFRC, February 30, 1978; For information on Sri Lanka's low defense expenditures, see Colombo 1912 dated 6/3/77.

landlessness and promoting regional growth. Concomitant with opening new lands for productive use is the need to bring about a more efficient use of water resources. This permits higher cropping intensities as well as extending cultivated acreage.

2. Increase farm productivity through technology, inputs, and the development of the institutions and skilled manpower required for modern, more productive agriculture.

Increasing farm productivity requires a transition to science-based agriculture -- the substitution of knowledge (hard and soft technology) for scarce resources. Elements in this transition include agricultural research programs oriented toward small farmers, effective price incentives and marketing, supply of high yield inputs, and development of skilled manpower and supporting institutions such as those for farmer education and credit.

3. Encourage and support growth-oriented production policies.

This objective serves a dual purpose. While it is a necessary adjunct of the other two major objectives, it has a range which extends well beyond both the major objectives and to some extent beyond the goal itself. The GSL has undertaken a number of politically difficult reforms such as reducing food subsidies, devaluation and unification of the exchange rate, import liberalization, and raising of interest rates. The Government needs substantial donor support to sustain and extend the reforms and mount an effective development program.

Appendix B to this ABS reviews the agriculture sector. The sector paper yields the following recommendations for programs to assist in achievement of the USAID's objectives: (1) water management to increase cropping intensities in major and minor irrigation schemes; (2) development of rainfed agriculture in the dry and intermediate zones; (3) expansion of irrigation through the Mahaweli Basin irrigation program; (4) fertilizer supply; and (5) assistance in agriculture planning and policy analysis. The analysis also endorses institutional development programs underway by USAID: strengthening paddy and cropping systems research; strengthening paddy storage and marketing institutions, particularly the Government's ability to maintain guaranteed prices for farmers; and developing under-graduate and graduate agricultural education.

USAID endorses these recommendations. Programs in fertilizer supply are underway, and we have submitted PIDs to begin projects in water management, rainfall agriculture, and Mahaweli irrigation. We agree with, and are continuing to discuss the need for, improved agricultural planning with the GSL. In addition to the above, USAID is also proposing to begin a program in reforestation and watershed management in FY 1980. This introduces a long-range environmental aspect into our pursuit of agriculture and rural development and contributes to the preservation of the productive resource base (Objective 1 above).

3. Alternative Strategies: Alternative strategies are considered here rather than alternative tactics. The tactical questions -- whether, given the USAID strategy of agriculture development investments in fertilizer, water management,

and dryland agriculture are higher priority than, say, investment in coconut rehabilitation, farmer credit, minor tank rehabilitation, and horticulture were the basis for the agriculture sector review. The sector team's recommendations reflect their judgments as to the high pay-off investments. 2/

Alternative agriculture strategies might be investment in "integrated rural development" and/or programs addressed to target farmers. Integrated rural development programs -- which seek to package administratively both the farm and non-farm components of rural progress -- are perhaps best suited to areas where investment in rural areas has been low and where much of the social, institutional and physical infrastructure to support agriculture development is lacking, i.e., the new settlement areas under the Mahaweli program where this is a necessary approach. The premise of integrated rural development programs is that administrative integration of multiple investments will insure more rapid rural growth and prevent benefits from flowing disproportionately to favored groups. This premise is being tested in many developing countries today although there are grounds for doubting its efficacy in both the literature on agriculture development and on the functioning of bureaucracies. 3/ In any case, there has been and continues to be substantial, diverse rural investment in Sri Lanka. Both the physical and social infrastructure in rural areas is relatively well developed. Land owning patterns, while far from homogeneous, are dominated by small farmers and producers. Benefits from the supply of public goods -- while inevitably not equally distributed -- are not monopolized by a Sri Lankan kulak class. The democratic political system acts to widen the incidence of benefits from public programs. In summary, the Mission believes that "integrated rural development" except as applied to newly settled areas in the Mahaweli program, is not a more suitable or higher pay-off approach to rural and national progress in Sri Lanka than our present strategy of attempting to generate widespread improvements in farm productivity through support of a more productive agriculture sector.

This is also true of strategies to target technology, inputs and resources to poorer, less viable farmers. This approach may have merit where land distribution is highly skewed. Where there are large numbers of small farmers, as in Sri Lanka, attempts to target resources on marginal farmers may be counter-productive. The literature on diffusion of innovations indicates that new practices flow to marginal farmers through larger farmers. New technology is first adopted by better educated, socially prominent, and wealthier farmers. Adoption by these farmers is a pre-condition for adoption by more marginal farmers; that is, productivity increasing innovations will generally not be adopted by marginal farmers unless first taken up by stronger opinion leaders. The policy aim in the Sri Lankan

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2/ Formal models for making investment choices still suffer deficiencies. Johnston notes: "There is still a large gap between what the (agriculture sector) models can deliver and what the users need ... for policy formulation. The shortcomings of formal models are perhaps most produced when they are used in the choice of strategies for agriculture development, expansion of employment, and reduction of poverty". (Bruce F. Johnston, Food, Health & Population in Development, Journal of Economics Literature.)

3/ See, for instance, Ruttan, Vernon W. "Integrated Rural Development Programs: A Skeptical Perspective". International Development Review, 1975.

context is to continue to improve the access of the smaller farmer to new technology but not to try to direct programs exclusively toward them.

4. Accomplishments: Although the Mission has made little tangible progress toward any of our major objectives since resumption of the development assistance in FY 1976, it has laid a solid foundation for such accomplishments. Over the past two years the Mission has been occupied with program planning, project development and establishing rapport and credibility with the Government of Sri Lanka. The parameters and content of a rational program suited to both Sri Lanka's needs and AID's new directions has been developed. As of this submission, six projects have been developed and launched. Another five projects are under development with an additional three projects scheduled to enter the development process within several months. This has been undertaken with a very modest staff which has grown from 3 USDH and 2 FNDH personnel in FY 1976 to 6 USDH and 6 FNDH personnel as of this writing.

As the six projects already launched gain momentum, progress towards attainment of our major objectives will be more evident.

5. Commenting on Personnel and Operating Expenses: The \$32 million proposed for FY 1980 is 23 percent above FY 1980 mark allocated Sri Lanka by PPC. The increase reflects the need for substantial donor support to help the Government of Sri Lanka sustain and extend the economic reforms begun in November 1977.

Despite the overall increase, \$15 million of the FY 1980 program is proposed for the long-term Mahaweli Basin Development Program. At the Sri Lanka Aid Group Meeting in Paris this year, there was agreement that contributions to Mahaweli should be additions to the donors' normal contributions. The aim is not to choke off rapid growth in other sectors because of investment in the long-term Mahaweli program. In this context, i.e., Mahaweli contribution is "additional", the FY 1980 program is a decline from our FY 1978 and FY 1979 budget requests of \$23 million and \$25 million.

USAID has not proposed more new projects in FY 1980 partly because the additional proposals we received from the government were not, in our judgment, of high priority. More importantly, 14 new projects have been proposed or started under this Mission in the past two years. Although a staff expansion has been authorized, assembling the staff and familiarizing them with their duties is just underway. The Mission is in a consolidation phase. The primary job for the medium term is implementation and project management. The four new activities proposed for FY 1980 are intended as long-term programs which will form the core of our agriculture program for the future. Limiting new starts and not fully funding the new FY 1980 projects is designed to allow the Mission to: (1) concentrate on program management while building up staff; (2) adequately plan and slowly expand the new long-term projects; and (3) leave some reserve capacity to add a few new projects in priority areas such as agriculture planning and policy analysis.

The proposed FY 1980 projects are ranked in order of priority in the decision packages.

The Mission recommendation for PL 480 Title I, 75,000 tons both in FY 1979 and FY 1980, is a marked reduction from the 200,000 tons provided in the last two

years. The clear policy aim of the GSL and Mission is to raise flour prices, reduce flour consumption and imports, and encourage paddy and other crop production. The availability of high levels of PL 480 inputs on concessional terms inhibits achievement of this policy. At this writing, the price relationships between imported flour and domestically produced crops encourage flour imports and discourage local production. Provision of large amounts of PL 480 on concessional terms places the United States in a position of subsidizing a cheap flour policy in controvention of the Food for Development Act. The Mission believes that PL 480 supplies should be held down until price relationships are corrected.

The Mission endorses CARE/Sri Lanka's request for an increase in the Title II program from \$5.7 million in FY 1978 to \$6.3 million in FY 1980.

The Mission proposes a staff increase from 13 USDH authorized in FY 1978 to 17 in FY 1979 and 21 in FY 1980. The Embassy has approved the increase in FY 1979, but is withholding concurrence for the additional expansion in FY 1980. The FY 1980 expansion is based on two assumptions: that the new starts in water management and dryland agriculture, and Mahaweli Ganga will be expanded in the early 1980's; and that new projects will be added in FY 1981 and 1982 for which staff expansion in 1980 is required. The Embassy states that it is withholding approval for additional staff until such time as there is more information as to what specific program expansion or new starts would have to be dropped without an increase in staff to 21. The withholding of approval for additional staff will not affect planning and beginning the proposed FY 1980 projects. We recommend that AID/W budget sufficient operating budget for the full FY 1980 staff increase pending subsequent discussions with the Embassy.

6. Long Range Planning: The PPC guidance projects an 87 percent increase in regional bureau programs between FY 1980 and 1982. USAID/Colombo FY 1982 projections show a 92 percent increase above the FY 1980 mark. The projected program level is \$50 million for FY 1982. The Mahaweli program will absorb approximately \$20.0 million per year over the next five years. We are projecting an increase in other (non-Mahaweli) assistance from \$17 million in FY 1980 to \$30 million in FY 1982. This assumes successful implementation and expansion of the new starts in watershed management, dryland agriculture, reforestation, plus a few additional new projects each year. We believe this expansion is feasible within AID's current "mandate related" program constraints and operating patterns.

7. Other Initiatives: The Asia Bureau ABS guidance requested Mission comments on several new initiatives including alternative energy sources, rural based employment, low-cost health and family planning delivery systems, non-formal education, and Title III. The Mission has not had time nor staff to gather extensive information on these. A brief paper on health systems is appended to the ABS. The Mission has commissioned a paper on non-formal education by the Chairman of the Non-Formal Education Sub-Committee of the Sri Lanka Educational Reforms Commission, but it had not been received by the ABS deadline. We hope to forward it before the Budget reviews.

Regarding off-farm employment, neither we nor the GSL have good information on this situation. The Dudley Seers Employment Mission which was here in March has not submitted a report. We expect it to be general in any case. The World Bank will shortly complete a review of the industry sector which may be helpful in assessing the role of rural-based small industries. The primary generator of rural employment is increased agriculture production. However, more information on the relative role of programs and policies to stimulate off-farm industrial and service enterprises is needed, and the Mission will be pursuing this when its expanded program staff arrives.

The question of rural energy is partly covered in the PID for the Reforestation and Watershed Management project. There will be further examination of rural energy alternatives as part of the development of this project.

In regard to Title III, the Government has at this date not responded to offers of Title III assistance. The GSL has indicated interest if Title III local currency expenditures are credited against currently payable Title I obligations. We understand such a procedure has been proposed by the House International Relations Committee for "RLDCs". If this provision is extended, we believe the GSL will request a Title III program.

MINIMUM DECISION PACKAGE

MINIMUM DECISION PACKAGE DESCRIPTION

DECISION PACKAGE: Minimum

The minimum program required to allow for an adequate contribution to Sri Lanka's agriculture development will necessitate 17 USDH and 20 FNHD personnel required to manage and implement the 11 projects begun since FY 1976, second year funding for one of these projects, 3 new project starts, a PL 480 Title I Program for 50,000 MT of wheat flour, and contribution of the PL 480 Title II program. This program level constitutes 62.7% of the current year's (FY 79) total program and 48.9% of the current year's development assistance program.

	<u>RESOURCE REQUIREMENTS</u>		<u>THIS PACKAGE</u>				<u>CUMULATIVE TOTAL</u>
	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>	<u>FY 81</u>	<u>FY 82</u>	<u>FY 83</u>	
Food and Nutrition	19,000	26,600	13,000	-	-	-	13,000
Population	-	-	-	-	-	-	-
Health	7,000	-	-	-	-	-	-
Education	-	-	-	-	-	-	-
Selected Development Activities	-	-	-	-	-	-	-
Sahel Development Program	-	-	-	-	-	-	-
Other (specify)	-	-	-	-	-	-	-
<b>Total Program</b>	<b>26,000</b>	<b>26,600</b>	<b>13,000</b>	<b>13,000</b>	<b>13,000</b>	<b>13,000</b>	<b>13,000</b>
PL 480 Title I (non-add)	(35,400)	(8,700)	(6,050)	(6,050)	(6,050)	(6,050)	(6,050)
(of which Title III)	-	-	-	-	-	-	-
PL 480 Title II (non-add)	(5,684)	(5,164)	(6,324)	(6,324)	(6,324)	(6,324)	(6,324)
Housing Guaranties (non-add)	-	-	-	-	-	-	-
<b>Employment - Full-time Permanent</b>							
U.S. Direct Hire	7.10	15.00	17.00	17.00	17.00	17.00	17.00
Foreign Nationals	5.00	15.50	20.00	20.00	20.00	20.00	20.00
TDY	0.60	1.15	0.60	0.60	0.60	0.60	0.60
<b>Total</b>	<b>12.70</b>	<b>31.65</b>	<b>37.60</b>	<b>37.60</b>	<b>37.60</b>	<b>37.60</b>	<b>37.60</b>
<u>FIVE YEAR PROJECTIONS</u>							
	<u>FY 80</u>	<u>FY 81</u>	<u>FY 82</u>	<u>FY 83</u>	<u>FY 84</u>		
Program Personnel	13,000	15,000	15,000	15,000	15,000		
Mission - US	17.00	17.00	17.00	17.00	17.00		
- FN	20.00	24.00	28.00	32.00	36.00		
TDY - USDH	0.50	1.00	1.00	1.00	1.00		

Short-term Objectives: The Mission's short-term objectives are to maximize the country's near-term payoffs in food production through expanding the country's productive resource base and establishing and maintaining a momentum in the transition to science-based agriculture both of which are essential to increasing Sri Lanka's food production. This decision package will enable completion of the Water Management project which is designed to economize the use of water -- a prime requisite for additional agricultural production -- by developing and implementing improved operational methods and maintenance of major irrigation systems. It will also enable the initiation of three new projects. The proposed Coarse Grains and Grain Legumes project will open research into Sri Lanka's dry-land agriculture in addition to increasing the production of coarse grains and legumes. The \$5 million requested for the proposed Mahaweli Basin Development project is considered as the absolute minimum input required for the U.S. to maintain some voice in a massive multi-donor program costing an estimated \$1 billion which is designed to bring 600,000 acres of new land under cultivation and to improve cultivation on 300,000 acres of land. The proposed Reforestation and Watershed Management is designed to reforest 40,000 acres in the dry zone. This acreage includes 25,000 acres of fuelwood forest and 15,000 acres of denuded forest land. The PL 480 Title I and II programs are the minimum necessary to make modest contribution to Sri Lanka's food and nutrition gaps.

Impact on Major Objectives: In theory, although not in practice, the Mission could continue for several years to make some contribution toward attainment of two major objectives without any FY 80 program funding at all. While completion of the 11 projects funded and initiated prior to FY 80 would enable some degree of attainment in two of our major objectives, it would deny the objective of encouraging and promoting growth oriented production policies and thus negate the Mission's long-term goal. The primary consideration in determining what a minimum program could be, therefore, was the level of assistance necessary to maintain a credible commitment to Sri Lanka's development. Without the Government of Sri Lanka's confidence in such a commitment our program stands little chance of contributing significantly to either our long-term goal or any of our major objectives since the Mission would be denied an active voice in both Sri Lanka's development strategies and programs. We are therefore enjoined to play a substantial role in the accelerated Mahaweli Basin Development Program to which the government is fully committed. At the same time, care must be taken to insure that the predominance of Mahaweli does not eclipse other major objectives essential to attaining the long-term goal. While the Mahaweli Program will contribute substantially to the objective of expanding the country's productive resource base, it should not be allowed to proceed at the expense of other elements of which are essential adjuncts to this objective such as the efficient use of water resources and the supply of productive inputs. Neither should it be undertaken with out due regard for such major objectives as the planning capabilities and institutions required for the need for growth oriented production policies.

While this minimum program allows satisfactory attention to the concerns already identified, it does not allow for as much leverage as the Mission deems necessary in the Mahaweli program nor does it allow for sufficient attention to encouraging and supporting growth oriented agriculture production policies through assisting the government with its short-term foreign exchange and food requirements.

Other Information: The 17 USDH and 20 FNDH positions requested in this minimum package involve no increase over the current year (FY 79) request and are essential to successfully conducting the 11 projects started since FY 76 and initiating the proposed 3 new projects.

Table IV A

Activity Data Sheet

Project Title: Population Activities

The USAID does not directly sponsor any family planning activities in Sri Lanka nor is it intended that AID become directly involved in any such activities. The U.S. position in Sri Lanka coupled with the ethnic sensitivities (i.e., ethnic balance and religious attitudes) and their potential political manifestations preclude any direct U.S. involvement in the foreseeable future. To do otherwise would run the danger of politicizing family planning in Sri Lanka at the expense of both U.S. interests and the GSL's family planning program.

However, the Mission does support centrally funded AID/W grants to PVOs to conduct family planning activities in Sri Lanka. Recipients of such AID grants presently active in Sri Lanka are the Association for Voluntary Sterilization (AVS), the International Fertility Research Program (IFRP), and the International Planned Parenthood Federation (IPPF). AVS is assisting the Sri Lanka Association for Voluntary Sterilization to develop a leadership role in the field of voluntary sterilization and a mini-laparotomy training program. IFRP is conducting a study to develop protocols and instruments for the collection of comparative data on the means of fertility control and a study on operational research of fertility control services. IPPF is assisting the Family Planning Association of Sri Lanka by providing substantial budget support (80% of total) and a community based delivery program.

TABLE IVB  
ACTIVITY BUDGET  
DATA

Population Activities

USAID/SPI Lanka

Minimum

PY 80

N/A

PN

N/A

N/A

N/A

ACTIVITY INPUTS

ACTIVITY INPUTS TOTAL

Centrally funded population activities conducted by intermediaries.

HC AND OTHER DONOR TOTAL

PERSONNEL WORKYEARS (XX.X)

FISCAL YEAR

1978 1979 1980 1981 1982

PROGRAM ACCOUNT TDY (NON-OPERATING EXPENSES)

0.20 0.20 0.20 0.20 0.20

PERSONNEL INTERESTY

HIGH

MEDIUM

LOW

PARTICIPANTS PROGRAMMED

TYPE

LONG-TERM

SHORT-TERM

FISCAL YEAR

1979 1980 1981

CONTRACT

TEAM

FOOTNOTES

LIFE OF PROJECT

Table IV A

Activity Data - Narrative

Project Title: Rice Research

1. Purpose: To increase productivity of paddy land through: (1) increased yield per unit area; and (2) increase the cropping intensity of paddy land.
2. Background: Paddy is the most important cereal grain in Sri Lanka. Sri Lanka has had a good varietal development program but principally impacting on the irrigated areas of the dry zone. To increase domestic paddy production, continued varietal development and more intensive farming systems need be developed.
3. Project Description: N/A
4. Progress to Date: The IRRI contract was signed in May 1977. The first IRRI team members arrived in July; the second in August; and the IRRI team leader in October 1977. Some project vehicles and household appliances for the IRRI team have arrived. No long-term trainees have been sent off yet. Short-term training is ahead of schedule. Research equipment orders and IMFs have not been developed. Procurement of field utility vehicles have been delayed due to U.S. procurement regulations, misleading information from AMC viz jeeps and now further delayed by GSL having reservations about procurement of "Scouts" which are \$3,000 more expensive than GSL standard jeep imports from Japan and diesel powered Scouts only available with automatic transmissions. Project work plans for the major activity areas are in draft but are three months overdue. Cropping system support by the IRRI team is on track, the rice breeding support has been slow in starting, and technical assistance for the field trials division has not been realized. GSL recruitment of additional staff has been slow and identification of available trainees has not moved forward as rapidly as anticipated.
5. Beneficiaries: Rice farmers. With the emphasis on increased regionalization of the breeding work, paddy farmers in the wet zone (Sri Lanka's smallest farmers) should benefit proportionately more. Cropping system work should have a greater proportional impact on cultivation on more marginal lands, particularly in the small tank area where seasonal weather fluctuations are more severe. Increased paddy supplies mean increased availabilities which, in turn, is relatively more important to the lower income consumers.
6. Current Year Program: Preparation of detailed project work plans that take forward the PP and develop detailed project work plans. Reaffirming project equipment needs, developing IFBs and ordering project equipment. Nine long-term trainees off, identification of 14 long-term trainees for the project's second year and sending off 13 short-term participants. Initiation of three research at three field sites for cropping systems work.
7. Budget Year Program: Cropping system and field trial capability to effectively operate in cooperation with the five major rice stations. Eleven short-term participants trained; 12 long-term trainees returned; 5 long-term trainees sent off for training; and two identified for training in the fourth year of the project.
8. Major Outputs: See detailed list in Project Paper (Major outputs are too detailed to list in this table).

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE	Rice Research	DECISION UNIT	USAID/Sr1 Lanka	DECISION PACKAGE	Minimum	BUDGET YEAR	FY 80
PROJECT NUMBER	383-0040	INITIAL OBLIGATION	FY 76	FINAL OBLIGATION	FY 76	TOTAL COST	\$ 3,800
APPROPRIATION	FY	DATE PP/REVISION	6/76	DATE LAST PAM	N/A	DATE NEXT PAM	8/78

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	TOTAL	FY: 1978		FY: 1979		FY: 1980				
		OBLIGATION	EXPENDITURE	OBLIGATION	EXPENDITURE	OBLIGATION	EXPENDITURE			
AID-FINANCED	-	1,050	2,755	-	605	2,150	-	590	1,560	
Technical Assistance (Contract)			210		95	795			200	595
Equipment			250		190	55			55	-
Vehicles			325		35	-			55	-
Supplies & Materials			165		65	110			55	55
Training			100		220	570			280	290
Contingency			-		-	620			-	620
HC AND OTHER DONOR	TOTAL-	553		581						

LIFE OF PROJECT  
3,430

PERSONNEL WORKYEARS (XX,X)	FISCAL YEAR					PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED			FOOTNOTES	
	1978	1979	1980	1981	1982		TYPE A	TYPE B	FISCAL YEAR		
						HIGH	LONG-TERM	SHORT-TERM	1978	1979	1980
						MEDIUM	LONG-TERM	SHORT-TERM	3	22	12
						LOW	LONG-TERM	SHORT-TERM	22	14	11

PROGRAM ACCOUNT	FISCAL YEAR					PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED			FOOTNOTES	
	1978	1979	1980	1981	1982		TYPE A	TYPE B	FISCAL YEAR		
TDY (NPS-)	-	0.10	-	0.10	-	HIGH	LONG-TERM	SHORT-TERM	3	22	12
EXPENSES	0.35	0.30	0.20	0.20	0.20	LOW	LONG-TERM	SHORT-TERM	22	14	11

Table IV A

Activity Data - Narrative

Project Title: Paddy Storage & Processing - I

1. Purpose: To increase the efficiency of paddy procurement, storage and processing and increase storage and milling capacity.
2. Background: The project's role is to support the GSL's paddy price support program and increase the quality and quantity of milled rice. The price support program is aimed at encouraging increasing input utilization by paddy farmers thus increasing domestic paddy production and thereby reducing the need for imported cereal grains. Improving the paddy to rice ratio through more effective handling and milling increases food availabilities through higher rice recoveries from a given amount of paddy, e.g., increasing milling out-turn in Sri Lanka by one percent increases availabilities of rice to consumer by about 20,000 tons.
3. Project Description: The project focuses activities on three major areas. First, project assistance is directed at improving the Paddy Marketing Board's (PMB) ability to purchase, grade, handle and process paddy purchased under the price support program. Project assistance will be for moisture meters, cleaning equipment, drying equipment and rice mills. Secondly, the project will support and increase in the GSL's paddy storage capacity. Thirdly, the project will support upgrading the private rice milling sector through introduction of new prototype mills, assistance to local mill manufacturers and importation of component parts. Project implementation will be carried out by the PMB with assistance from Louisiana State University (LSU) under a host-country contract.
4. Progress to Date: The PMB has recently selected LSU as a potential contractor. Contract negotiations will take place in June 1978. Specifications for the IMFs covering equipment and storage have recently been completed.
5. Beneficiaries: Project beneficiaries are two groups. First, those paddy farmers who have surplus paddy to sell, and secondly, the general rice consumer public, the latter being benefitted through improved quality of available rice and through increased quantities of rice. Cost per family benefitted is not meaningful.
6. Current Year Program: Contracts will be awarded and equipment delivered by the end of CY 1977 for seven modern rice mills and 22,000 tons of additional storage facilities.
7. Budget Year Program: Project outputs will be: (1) establishment of seven modern rice processing plants with 22,000 tons additional storage capacity and an additional annual milling capacity of 63,000 tons; (2) 2,700 moisture meters in use; (3) 325 six ton per hour paddy cleaners in use; (4) drying facilities installed at 100 PMB stores; (5) six modern prototype rice mills will be in use by private millers and four prototypes will be available for local manufacturers.

8. Major Outputs: (1) 22,000 tons additional flat storage; (2) 21,000 tons additional bulk storage; (3) 2,700 moisture meters in use; (4) 75 grain dryers in use at purchase centers; (5) 286 dryers in use at PMB stores; (6) 220 cleaners in use at purchase centers; (7) 325 cleaners in use at PMB stores; (8) average paddy in storage at 14 percent moisture; (9) PMB milling capacity increased by 80,000 tons; (10) rice outturn at 71 percent for parboiled and 69 percent for raw milling; (11) 288 private millers trained; (12) 150 locally manufactured modern rice mills.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE <b>Paddy Storage &amp; Processing - I</b>	DECISION UNIT <b>USAID/Sri Lanka</b>	DECISION PACKAGE <b>Minimum</b>	BUDGET YEAR <b>FY 80</b>
PROJECT NUMBER <b>383-0041</b>	INITIAL OBLIGATION <b>FY 77</b>	FINAL OBLIGATION <b>FY 77</b>	TOTAL COST <b>\$ 5,400</b>
APPROPRIATION <b>FM</b>	DATE PP/REVISION <b>6/76</b>	DATE LAST PAR <b>N/A</b>	DATE NEXT PAR <b>7/79</b>
ESTIMATED U.S. DOLLAR COST (\$ 000)			

ACTIVITY INPUTS	TOTAL-	FY: 19 78		FY: 19 79		FY: 19 80		LIFE OF PROJECT	
		OBLI- GATION	EXPEN- DITURE	OBLI- GATION	EXPEN- DITURE	OBLI- GATION	EXPEN- DITURE		
AID-FINANCED	-	75	5,325	-	1,835	3,490	-	3,265	225
Technical Assistance									
Equipment			30		250	345		200	145
Training			45		25	50		30	20
Facilities (Construction)			2,142		500	1,642		1,642	
Contingencies			320		160	160		100	60
HC AND OTHER DONOR	TOTAL-	2,345		1,085				4,400	

FUNDING	PERSONNEL WORKYEARS (XX, X)					PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED			FOOTNOTES
	1978	1979	1980	1981	19		BEYOND	TYPE A NONCONTRACT	TYPE B CONTRACT	
PROGRAM ACCOUNT - TDY (A/B)										
OPERATING EXPENSES	0.35	0.30	0.25	0.25						

Table IV A

Activity Data - Narrative

Project Title: Mahaweli Ganga Irrigation

1. Purpose: To enable irrigated agricultural production in 106,000 acres of land along the Mahaweli River.
2. Background: One of the major GSL strategies for increasing domestic food production and rural employment is to bring new land under irrigated cultivation and to provide an assured water supply to existing land so that more than one crop can be produced. The centerpiece of this effort is the Mahaweli Ganga program to divert the resources of Sri Lanka's major river to provide irrigation. This project is one element of the overall program. It is directly related to AID's focus in Sri Lanka on agricultural development that increases domestic food production; expands employment opportunities; and improves the small farmers' standard of living. AID is one of several donors financing this project.
3. Project Description: N/A
4. Progress to Date: The GSL has decided to complete this project in substantially less time than the 5 years originally envisioned and is currently drawing up a new implementation schedule. More than \$2 million of AID-financed equipment has been ordered and specifications for the remaining equipment will be completed and bids requested in the next few months.
5. Beneficiaries: The project will directly benefit 15,300 small farmer/landless families who will be resettled in the project area by providing them with secure tenure on their own land and raising their incomes to the national level. The project will have substantial secondary employment effects in marketing, processing, supply of farm inputs, and services and will help relieve unemployment and underemployment in the area. Assuming a 50 year life of project, the annual costs are \$85/family if costs are attributed directly to families to be settled in the area. When secondary beneficiaries are included, the annual costs are less than \$44/family.
6. Current Year Program: By the end of FY 1979 all donor financed equipment will have arrived; canals, cultivated and homestead areas will have been laid out; and initial construction and land clearing will begin.
7. Budget Year Program: It is the intention of the GSL to complete the project prior to the end of FY 1980.
8. Major Outputs: Major outputs are 64,000 additional acres under double cropping, social infrastructure serving 24,700 families, 15,300 new families settled and farming, increased annual production of 38,000 tons of rice, 16,000 tons of other food crops.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE Mahaweli Ganga Irrigation	DECISION UNIT USAID/Sri Lanka	DECISION PACKAGE Minimum	BUDGET YEAR FY 80
PROJECT NUMBER 383-0042	INITIAL OBLIGATION FY 77	FINAL OBLIGATION FY 77	TOTAL COST \$ 5,200
APPROPRIATION PN	DATE PP/REVISION 5/77	DATE LAST PAR N/A	DATE NEXT PAR 7/80

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	TOTAL-	FY: 1978			CY: 1979			BY: 1980			LIFE OF PROJECT	
		OBLI- GATION	EXPEN- DITURE	PIPE- LINE	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE		PIPE- LINE
Equipment			2,313	1,687		1,687						
Local Costs				1,200		600						600
<b>TOTAL-</b>	<b>-</b>	<b>2,313</b>	<b>2,887</b>		<b>2,287</b>	<b>600</b>						<b>600</b>
HC AND OTHER DONOR	TOTAL-	10,015			10,015							50,075
HC		2,575			2,575							12,875
Other Donors		7,440			7,440							37,200

FUNDING	PERSONNEL WORKYEARS (XX.X)				PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED			FOOTNOTES
	1978	1979	1980	BEYOND 1982		TYPE A=NONCONTRACT B=CONTRACT	FISCAL YEAR 19	FISCAL YEAR 19	
PROGRAM ACCOUNT TBY (NON- OPERATING EXPENSES)	0.20	0.20	0.25	0.15	<input checked="" type="checkbox"/> HIGH <input type="checkbox"/> MEDIUM <input type="checkbox"/> LOW	TYPE A LONG-TERM SHORT-TERM	TYPE B LONG-TERM SHORT-TERM		

Table IV A

Activity Data - Narrative

Project Title: Malaria Control

1. Purpose: To bring malaria under control and to strengthen the GSL's capability for administering the malaria control program on a long-term basis.
2. Background: Resurgence of reported malaria cases in the past several years has reached epidemic proportions, particularly in rural areas where rice production is the major agricultural pursuit. Increased infant mortality and general illness and debilitation of the agricultural work force is evidence in the affected areas. The Sri Lanka Anti-Malaria Campaign (AMC) is based on an existing organization with a limited corps of health workers which needs refresher training and an increased staff of field workers. Lack of adequate equipment and supplies combined with a growing resistance to DDT by the main mosquito vector, An culicifacies, has further limited the AMC's ability to control the rapid spreading of disease through use of this insecticide. At the end of the project, an effective malaria surveillance program will be in operation and the Anti Malaria Campaign organization will begin the integration process into the General Health Services. More immediately, certain targeted outputs will be realized by FY 1978.
3. Project Description: N/A
4. Progress to Date: Malaria control program design and environmental, social, and economic analyses have been completed. The existing AMC organization is being strengthened and reorganized with more vertical operational control. Following notification that AID/W had approved the project, the AMC launched its intensive spraying campaign in August 1977 with malathion financed from its own foreign exchange reserves. Soon after, spraying operations were suspended due to communal disturbances. Intensive spraying was resumed in October 1977. The GSL signed agreements with both the Netherlands (GON) and the U.K. late in 1977. Procurement of GON-financed malathion is underway with shipments arriving in port and UK-financed vehicles have been ordered. All first year conditions precedent have been satisfied. The first IFBs will be issued in June. Initial shipments of US-financed malathion are expected to arrive in October.
5. Beneficiaries: The immediate beneficiaries are the 10 million persons (69% of the country's population most of whom are rural) who reside in the malarial areas of the country. Of these 10 million persons, approximately 4 million reside in high risk areas and 6 million in low risk areas.
6. Current Year Program: In FY 1979 approximately 1.0 million houses in high risk areas will be sprayed for four rounds/yearly providing protection for 4 million persons. In addition, increased malaria control activities will be provided to populations living at risk of malaria in low risk areas.

7. Budget Year Program: In FY 1980 1 million houses in high risk areas will be sprayed for four round/yearly providing protection for 4 million persons. Populations residing in low risk areas will have increased protection through localized spraying and increased surveillance.

8. Major Outputs: By the end of FY 1982 it is expected that spraying can be reduced in the intensive spray areas to limited four cycle and two cycle spraying operation and to cover most of the area through surveillance and general public health. The project will have reduced the incidence of malaria in Sri Lanka to a minimum of one case per 1,000 population per year country-wide.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE <b>Malaria Control</b>		DECISION UNIT USAID/Sri Lanka	DECISION PACKAGE Minimum	BUDGET YEAR FY 80
PROJECT NUMBER 383-0043	APPROPRIATION HE	INITIAL OBLIGATION FY 77	FINAL OBLIGATION FY 78	TOTAL COST \$ 12,000
ESTIMATED U. S. DOLLAR COST (\$ 000)		DATE PR/REVISION 2/7	DATE LAST PAN N/A	DATE NEXT PAN 10/78

ACTIVITY INPUTS	TOTAL	FY: 1978			FY: 1979			FY: 1980			
		OBLIGATION	EXPENDITURE	PIPE-LINE	FUNDING PERIOD (FR-TO)	OBLIGATION	EXPENDITURE	PIPE-LINE	FUNDING PERIOD (FR-TO)	OBLIGATION	EXPENDITURE
AID-FINANCED	7,000	2,076	9,924	10/77-9/82	-	5,006	4,918	-	-	2,506	2,412
Insecticide (Malathion)		2,000	9,900			5,000	4,900			2,500	2,400
Safety Equipment & Protective Clothing			50								
Spraying and Laboratory Equipment			20								
Training			6								
			24								
			6								
			18								
			6								
			12								

HC AND OTHER DONOR	TOTAL-	10,450	9,850	LIFE OF PROJECT 42,500
HC		7,700	7,500	33,690
UK		650	250	4,300
Netherlands		2,000	2,000	4,000
WHO		100	100	510

FUNDING	PERSONNEL WORKYEARS (XX, X)				PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED			FOOTNOTES
	1978	1979	1980	1981		1982	BEYOND	TYPE A	
PROGRAM ACCOUNT									
TDY (NDR)									
DELETIONS	0.40	0.40	0.40	0.40	0.40	-			

Table IV A

Activity Data - Narrative

Project Title: Agricultural Base Mapping

1. Purpose: To meet the mapping requirements of rural development in Sri Lanka.
2. Background: Planning the agricultural and rural development programs for Sri Lanka requires a variety of data much of which can only be gained on a timely basis from maps based on aerial photography. The current national map series is based on 22 year old photography. Rural planners need new up-to-date maps to plan effective programs.
3. Project Description: N/A
4. Progress to Date: The contract to provide technical assistance has been negotiated and the contractor is expected to be on site in July 1978. Plans for facility modifications and equipment specifications are being completed.
5. Beneficiaries: The project will benefit rural families primarily those living in areas where development projects are planned. A cost per family benefitted figure is not meaningful.
6. Current Year Program: During FY 1979 roughly half the country will be photographed and initial 1/50,000 maps will be produced. Facility modifications will be completed and all equipment will be in place.
7. Budget Year Program: Nationwide map coverage at 1/50,000 scale will be completed in FY 1980 and initial maps at 1/10,000 scale will be produced for priority areas.
8. Major Outputs: Major outputs are a nationwide map series at 1/50,000 and 1/10,000 scale and a functioning user assistance center.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE	Agricultural Base Mapping		DECISION UNIT	USAID/Sri Lanka	DECISION PACKAGE	Minimum	BUDGET YEAR	FY 80
PROJECT NUMBER	383-0045		INITIAL OBLIGATION	FY 77	FINAL OBLIGATION	FY 77	TOTAL COST	\$ 4,500
APPROPRIATION	FM		DATE FM/REVISION	8/77	DATE LAST PAR	N/A	DATE NEXT PAR	11/78

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	TOTAL-	FY 1978			FY 1979			FY 1980			LIFE OF PROJECT
		OBLI- GATION	EXPEN- DITURE	PIPE- LINE	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	
HC AND OTHER DONOR		155			155			1,310			
HC		155			155			1,000			
AIID-FINANCED		-	825	3,675		1,658	2,017		921	1,096	
Technical Assistance			75	428		200	228		200	28	
Equipment			600	1,161		1,000	161		161	-	
Facilities			50	50		50					
Materials			100	749		400	349		200	149	
Technical Training			-	254		8	246		60	186	
Contingencies & Inflation			-	1,033			1,033		300	733	

AID 1330-8 (3-78)

Table IV A

Activity Data - Narrative

Project Title: On-Farm Water Management

1. Purpose: Development of information or alternative cost effective methods/ systems to increase the efficiency of On-Farm Water use.
2. Background: Water is the most limiting factor for agriculture products in most of Sri Lanka. Water use efficiencies in existing irrigation projects are low. This project was conceived as an initial effort to identify ways to increase the efficiency of water in relationship to agriculture production.
3. Project Description: The project will be carried out near Kalawawa in the Mahaweli project area. One long-term advisor, working with the Land Use Division of the Irrigation Department will work on a small research site and with adjoining farmers. Project activities will focus on alternative field channel layouts, field layouts, water delivery schedules, volumes of water deliveries, etc. Complementing this effort will be sub-contracts with other Sri Lanka institutions to carry out social/economic analyses of factors related to water use.
4. Progress to Date: The project site has been developed. Initial experiments have been started. In June 1978 the water management specialist will arrive.
5. Beneficiaries: Principal beneficiaries will be those farmers who have land in irrigation schemes but who currently don't receive enough water because of overuse of water by farmers at the upper end of systems. A cost per family is not known but assuming successful dissemination of the research results, these costs will be very low.
6. Current Year Program: Finish site preparation and breaking in of the technical specialist and getting equipment delivered will be the major objectives realized this year.
7. Budget Year Program: Realization of research results, particularly on irrigation frequencies, methods, minimal requirements, and system for delivery of water. Also results should be available on land shaping, effective rainfall and drainage methods.
8. Major Outputs: Basically the same as budget year results except more advanced and further verified. In addition, however, these results will have been field tested under "normal" field conditions whereas much of the research will have to be initially done under more controlled conditions.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE	On-Farm Water Management		DECISION UNIT	USAID/Sr1 Lanka	DECISION PACKAGE	BUDGET YEAR
PROJECT NUMBER	383-0048	APPROPRIATION	DATE PP/REVISION	5/77	DATE LAST PAR	N/A
		ESTIMATED U.S. DOLLAR COST (\$ 000)				
			INITIAL OBLIGATION	FY 77	FINAL OBLIGATION	FY 77
			DATE PP/REVISION	5/77	DATE LAST PAR	N/A
			MINIMUM		TOTAL COST	\$ 800
					DATE NEXT PAR	7/79

ACTIVITY INPUTS	TOTAL-	FY: 1978			FY: 1979			FY: 1980			LIFE OF PROJECT	
		OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FM- TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FM- TO)	OBLI- GATION		EXPEN- DITURE
AID-FINANCED												
Technical Assistance (Contract)												
Vehicles			40	346		80	266			80	186	
Equipment			46			16						
Supplies & Materials			70	16		6	18			6	12	
Training			8	24		10	30			10	20	
Special Studies			15	195		70	125			70	55	
HC AND OTHER DONOR												
TOTAL-	80				55					270		

FUNDING	PERSONNEL WORKYEARS (XX.X)				PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED				FOOTNOTES	
	1978	1979	1980	1981		1982	BEYOND	TYPE A LONG-TERM	TYPE B SHORT-TERM		
PROGRAM ACCOUNT TOY (X) EXPENSES			0.10	0.10	0.10						
			0.10	0.15	0.15						

Table IV A

Activity Data Sheet

Project Title: YMCA Nation-Wide Rural Development (OPG)

In FY 77 an OPG for the YMCA Nation-wide Rural Development program was authorized for \$383,164. The purpose of this OPG, is to assist the YMCA of Sri Lanka to implement a 3-year rural development program designed to make each of the 21 YMCA centers a dynamic program development center. This program is designed to develop the leadership, provide training, and stimulate the motivation required for developing and implementing projects which will assist the rural population to become more self-reliant and to enjoy a higher standard of living.

TABLE IVB  
ACTIVITY BUDGET  
DATA

YMCA Nation-Wide Rural Development (OPD)

USAID/Sri Lanka

Minimum

FY 80

PROJECT NUMBER: SD  
DATE OF ESTIMATION: N/A  
DATE OF REVISION: N/A  
TOTAL COST: \$ 383  
DATE NEXT REV: N/A

ESTIMATED TOTAL PROJECT COST (\$ 000)

ACTIVITY BUDGET	FISCAL YEAR	FY 78		FY 79		FY 80		LIFE OF PROJECT
		EXPEN- DITURE	PERF- ORMANCE	EXPEN- DITURE	PERF- ORMANCE	EXPEN- DITURE	PERF- ORMANCE	
Personnel	1978	136	247	-	-	110	137	137
Personnel	1979	32	67	-	-	33	34	34
Personnel	1980	9	15	-	-	8	7	7
Training		24	15	-	-	14	14	14
Commodities		52	28	-	-	33	59	59
Other Direct Costs		141	49	-	-	11	11	11
Monitoring & Evaluation		33	11	-	-	11	12	12
Administration		34	23	-	-	11	12	12
<b>TOTAL</b>		<b>415</b>	<b>342</b>					

PERSONNEL WORK YEARS (E, A, N)

PERSONNEL INTENSITY

PARTICIPANTS PROVIDED

FOOTNOTES

PROGRAM ACCOUNT TYPE (N, O, D, E, A, N, S)

1978 1979 1980

0.10 0.10 0.10

Table IV A

Activity Data - Narrative

Project Title: Agriculture Education Development

1. Purpose: To double the annual number of indigenously trained B.Sc. graduates and triple the annual number of indigenously trained post-graduates in agriculture by 1985.
2. Background: The number of personnel trained in agriculture is insufficient to meet current and future demand. The only indigenous organizations to provide such training are the University of Sri Lanka and the Post-Graduate Institute of Agriculture. These organizations must expand to provide additional training. The project is directly related to the Mission's effort and GSL priority of increasing domestic food production.
3. Project Description: N/A
4. Progress to Date: N/A
5. Beneficiaries: Immediate beneficiaries are the people who will be trained at the institutes. More significantly, the project will ultimately benefit everyone in Sri Lanka. A cost per beneficiary is not meaningful.
6. Current Year Program: Equipment will be ordered; 21 participants will depart for training; technical assistance will begin.
7. Budget Year Program: Technical assistance will continue, equipment will arrive, 17 additional participants will depart for training.
8. Major Outputs: Capacity to train 200 undergraduates and 13 postgraduates annually.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE	Agriculture Education Development		DECISION UNIT	USAID/Sr1 Lanka	DECISION PACKAGE	Minimum	BUDGET YEAR	FY 80
PROJECT NUMBER	383-0049		INITIAL OBLIGATION	FY 78	FINAL OBLIGATION	FY 78	TOTAL COST	\$ 6,000
APPROPRIATION	FM		DATE PP/REVISION	6/79	DATE LAST PAR	N/A	DATE NEXT PAR	9/80

ESTIMATED U. S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	TOTAL-	FY: 1978		FY: 1979		FY: 1980		LIFE OF PROJECT	
		OBLI- GATION	EXPEN- DITURE	OBLI- GATION	EXPEN- DITURE	OBLI- GATION	EXPEN- DITURE		
ALB-FINANCED	6,000	6,000		1,794	4,206			1,672	2,534
Technical Assistance (Institution Contract)	2,553	2,553		500	2,053			500	1,553
Training	1,868	1,868		313	1,555			593	962
Equipment & Materials	1,344	1,344		775	569			569	
Vehicles	196	196		196					
Miscellaneous	39	39		10	29			10	19
HC AND OTHER DONOR	TOTAL- 600			866				5,018	
HC Other Donors	224 376			490 376				3,135 1,883	
PERSONNEL WORKYEARS (XX,X)		PERSONNEL INTENSITY		PARTICIPANTS PROGRAMMED		FOOTNOTES			
FUNDING		FISCAL YEAR		TYPE A/NONCONTRACT		FISCAL YEAR			
19 78 19 79 19 80 19 81 19 82 BEYOND		<input checked="" type="checkbox"/> HIGH <input type="checkbox"/> MEDIUM <input type="checkbox"/> LOW		19 78 19 79 19 80					
PROGRAM ACCOUNT		TYPE A		TYPE B					
TDB (NOB-)		LONG-TERM		SHORT-TERM					
OPERATING EXPENSES		0.25 1.20 1.20 1.20 1.20		-		21 17			

TABLE IV A

Activity Data - Narrative

Project Title: Agricultural Inputs - II

1. Purpose: Increased use of fertilizer by small farmers.
2. Background: As part of their effort to increase food production, the GSL is attempting to increase fertilizer use by farmers through subsidized prices, changes in the distribution and marketing system, and increased supply. U.S. assistance is being provided for this supply. The project is directly related to the Mission's emphasis on assistance for increased food production.
3. Project Description: N/A
4. Progress to Date: N/A
5. Beneficiaries: Project beneficiaries are primarily paddy farmers. Since there are approximately 700,000 paddy farmers, the cost per beneficiary family is \$37.
6. Current Year Program: The bulk of the fertilizer to be financed under the loan will arrive and be used.
7. Budget Year Program: The loan will be fully disbursed and all fertilizer financed will be used.
8. Major Outputs: 540,000 tons of paddy.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE <b>Agricultural Inputs - II</b>		DECISION UNIT <b>USAID/Sri Lanka</b>		DECISION PACKAGE <b>Minimum</b>		BUDGET YEAR <b>FY 80</b>	
PROJECT NUMBER <b>383-0051</b>		INITIAL OBLIGATION <b>FY 78</b>		FINAL OBLIGATION <b>FY 79</b>		TOTAL COST <b>\$ 26,000</b>	
APPROPRIATION <b>FN</b>		DATE PP/REVISION <b>6/78</b>		DATE LAST PAR <b>N/A</b>		DATE NEXT PAR <b>10/79</b>	

ESTIMATED U. S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	TOTAL-	FY: 1978			FY: 1979			FY: 1980			LIFE OF PROJECT
		OBLI- GATION	EXPEN- DITURE	PIPE- LINE	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	
Fertilizer	12,000	12,000	-	12,000	14,000	16,000	10,000	-	10,000	-	10,000
HC AND OTHER DONOR	TOTAL-	24,350			31,100						55,450
HC		12,250			19,000						31,250
Other Donors		12,100			12,100						24,200

FUNDING	PERSONNEL WORKYEARS (XX, X)					PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED					FOOTNOTES
	FISCAL YEAR						TYPE A/NONCONTRACT					
	1978	1979	1980	1981	1982		FISCAL YEAR					
PROGRAM ACCOUNT TYPE (NON- TDY (NON- EXPENSES)	0.10	0.10	0.10	-	-	<input checked="" type="checkbox"/> LOW <input type="checkbox"/> MEDIUM <input type="checkbox"/> HIGH						

AID 1350-8 (3-78)

Table IV A

Activity Data - Narrative

Project Title: Development Services and Training

1. Purpose: To provide a sound basis for planning specific projects and to strengthen GSL institutional capabilities to carry out a development program.
2. Background: Complex major development initiatives require careful study and planning before they can be implemented. This project provides financing for such studies and plans as well as limited funds for short-term training and information systems.
3. Project Description: N/A
4. Progress to Date: The Project Paper has been completed for AID/W review.
5. Beneficiaries: Project beneficiaries are small farmers who will receive the benefits of carefully planned rural development programs such as Dryland Agriculture, Mahaweli Basin Development, and Reforestation. A figure for the cost per family benefitted is not meaningful.
6. Current Year Program: During FY 1979 three major studies will be initiated, 13 people will receive short-term training, and equipment and supplies will be ordered for the ARTI Information Center.
7. Budget Year Program: During FY 1980 three major studies will be completed and one more initiated. Twelve people will receive training and an expanded ARTI Information Center will become operable.
8. Major Outputs: Major outputs are studies and plans for four major development or environmental programs, 36 trained people, and a centralized operating center for information on rural development.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE	Development Services & Training		DECISION UNIT	USAID/St-1 Lanka	DECISION PACKAGE	Minimum	BUDGET YEAR	FY 80
PROJECT NUMBER	383-0044		INITIAL OBLIGATION	FY 78	FINAL OBLIGATION	FY 78	TOTAL COST	\$ 2,600
APPROPRIATION	FM		DATE PP/REVISION	6/78	DATE LAST PAR	N/A	DATE NEXT PAR	9/79

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	TOTAL-	FY: 1978		FY: 1979		FY: 1980		LIFE OF PROJECT
		OBLI- GATION	EXPEN- DITURE	OBLI- GATION	EXPEN- DITURE	OBLI- GATION	EXPEN- DITURE	
AIR-FINANCED	1,000	-	1,000	1,600	1,426	1,174	729	382
Technical Assistance	1,000		836	1,148	688	464	224	
Training			234	78	156	78	78	
Equipment & Supplies			350	200	150	150	150	
Miscellaneous			180		180	100	80	
HC AND OTHER DONOR	TOTAL-	-	-	-	-	-	-	-

**PERSONNEL WORKYEARS (XX, X)**

FUNDING	FISCAL YEAR				PERSONNEL INTENSITY	PARTICIPANT'S PROGRAMMED			FOOTNOTES
	1978	1979	1980	1981		TYPE A	TYPE B	FISCAL YEAR	
PROGRAMMATIC ACCOUNT TOY (X, X)					<input checked="" type="checkbox"/> HIGH <input type="checkbox"/> MEDIUM <input type="checkbox"/> LOW	NONCONTRACT	CONTRACT	1978 1979 1980	
OPERATING EXPENSES	0.50	2.00	2.00	1.00		LONG-TERM	SHORT-TERM	13 12	

AID 1330-8 (3-78)

Table IV A

Activity Data - Narrative

Project Title: Paddy Processing & Storage - II

1. Purpose: Effective implementation of the Guaranteed Price Scheme for paddy, and to improve the quality of paddy storage and handling.
2. Background: This project is an extension of Phase I activities and expands support to the government's effort to produce more domestic rice.
3. Project Description: The project will involve construction of 100,000 additional tons of paddy storage and 50,000 tons of additional rice storage. Cleaning and drying equipment will be provided to complement the additional paddy and rice storage. Technical advice and training will also be provided, particularly as it relates to paddy procurement, paddy/rice movement, inventory control, price analysis and management information systems.
4. Progress to Date: Development of the Project Paper is currently being carried out.
5. Beneficiaries: Paddy producers with surplus paddy and consumers. Paddy farms average about 1.12 acres. The bulk of the surplus producers are in 1 to 3 acre category. Rice accounts for a relatively high proportion of the cost of food of lower income groups. To the extent this project contributes to larger availabilities of rice it is expected that consumers benefit in proportion to the relative amounts expended on rice. A cost per family is not meaningful.
6. Current Year Program: Development of the Project Paper.
7. Budget Year Program: Construction of paddy and rice storage facilities as well as installation and drying and handling facilities. The exact details will be developed in the Project Paper.
8. Major Outputs: 100,000 additional tons of paddy storage; 50,000 additional tons of rice storage; trained professionals for price analysis, planning and inventory management.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE	Paddy Storage & Processing - II		DECISION UNIT	USAIT/Bvt Lanka	DECISION PACKAGE	Minimum	BUDGET YEAR	PY 80
PROJECT NUMBER	383-0052		INITIAL OBLIGATION	PY 79	FINAL OBLIGATION	PY 79	TOTAL COST	\$ 8,000
APPROPRIATION	FY		DATE PP/REVISION	9/78	DATE LAST PAN	N/A	DATE NEXT PAN	1/80

ESTIMATED U. S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	TOTAL	FY: 1978		PIPE-LINE	FY: 1979	FY: 1980		TOTAL			
		OBLIGATION	EXPENDITURE			OBLIGATION	EXPENDITURE				
AMOUNT AWARDED	-	-	-	-	7/79-6/84	8,000	1,150	6,850	-	3,650	3,200
Equipment						2,000		2,000		1,500	500
Vehicles						500		500		500	
Training						500	150	350		150	200
Facilities (Construction)						4,500	1,000	3,500		1,500	2,000
Contingency						500		900			500
NO AND OTHER DONOR	TOTAL-	-				1,000				4,000	

FUNDS	PERSONNEL WORKYEARS (XX, X)					PERSONNEL INTENSITY	PARTICIPANT'S PROGRAMMED			FOOTNOTES
	1978	1979	1980	1981	1982		TYPE A	TYPE B	TYPE C	
						BEYOND	LONG-TERM	SHORT-TERM		
							LONG-TERM	SHORT-TERM		
							LONG-TERM	SHORT-TERM		
							LONG-TERM	SHORT-TERM		
							LONG-TERM	SHORT-TERM		
							LONG-TERM	SHORT-TERM		
							LONG-TERM	SHORT-TERM		
							LONG-TERM	SHORT-TERM		

Table IV A

Activity Data - Narrative

Project Title: Water Management

1. Purpose: To design and implement a package of improved operations and maintenance activities in the major irrigation systems, and field research to test alternative strategies for achieving more efficient social and physical organization/layout for on-farm water management.
2. Background: Water is the most limiting factor in relationship to agricultural production. Approximately one million acres are under major and minor irrigation systems. Experience has been that the productivity of water is far less than planned for and thus an under-utilization of the large investments made in the various irrigation systems.
3. Project Description: Two major areas will be addressed in this project. First will be the operation and maintenance of systems delivering water to the field channels. This will involve rehabilitation of three initial irrigation schemes, installation of metering and control devices, and improving the managerial capability of Irrigation Department field staff. The second area is research aimed at identifying alternative social and physical organizations/layouts for more productive delivery of water to the field channel level. This activity will complement the U.S. supported On-Farm Water Management project which focuses more on the actual farm level use of water. Research activities will involve estimating conveyance losses, studies of administrative and social feasibility of rotational water issues, studies of flow rates into field channels, studies regarding re-channeling irrigation water from upstream areas back into the lower reaches of the water delivery system and so forth.
4. Progress to Date: The PID was submitted to AID/W in May 1978.
5. Beneficiaries: Direct beneficiaries are those farmers in the lower two thirds of existing irrigation systems who now do not receive sufficient water.
6. Current Year Program: Initiate development of the Project Paper (PP).
7. Budget Year Program: To be determined in the PP.
8. Major Outputs: To be determined in the PP.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE <b>Water Management</b>	DECISION UNIT <b>USAID/8r1 Lanka</b>	DECISION PACKAGE <b>Minimum</b>	BUDGET YEAR <b>FY 80</b>
PROJECT NUMBER <b>383-0057</b>	INITIAL OBLIGATION <b>FY 79</b>	FINAL OBLIGATION <b>FY 80</b>	TOTAL COST <b>\$ 6,000</b>
APPROPRIATION <b>FM</b>	DATE PP/REVISION <b>1/79</b>	DATE LAST PAR <b>N/A</b>	DATE NEXT PAR <b>7/80</b>

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	TOTAL-	FY: 1978			FY: 1979			FY: 1980			
		OBLIGATION	EXPENDITURE	PIPE-LINE	OBLIGATION	EXPENDITURE	PIPE-LINE	OBLIGATION	EXPENDITURE	PIPE-LINE	
Technical Assistance	-	-	-	-	3,000	525	2,475	7/81-6/83	3,000	1,720	3,755
Vehicles	-	-	-	-	550	100	450		550	250	750
Equipment	-	-	-	-	200		200		50	200	50
Supplies & Materials	-	-	-	-	50		50		50	50	50
Training	-	-	-	-	50		50		50	50	50
Special Studies	-	-	-	-	225	100	125		100	100	125
Canal Rehabilitation (Construction)	-	-	-	-	1,825	325	1,500		2,100	1,000	2,600
HC AND OTHER DONOR	TOTAL-	-	-	-	1,500				1,500		

PUNDING	PERSONNEL WORKYEARS (XX.X)					PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED			FOOTNOTES
	1978	1979	1980	1981	1982		TYPE A	TYPE B	FISCAL YEAR	
PROGRAM ACCOUNT						<input checked="" type="checkbox"/> HIGH				
TDY (ADS -)	0.10	0.20	0.20	0.10	0.10	<input type="checkbox"/> MEDIUM				
OPERATING EXPENSES	0.20	1.00	1.00	0.50	0.30	<input type="checkbox"/> LOW				

PROGRAM ACCOUNT	PERSONNEL WORKYEARS (XX.X)					PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED			FOOTNOTES
	1978	1979	1980	1981	1982		TYPE A	TYPE B	FISCAL YEAR	
TDY (ADS -)	0.10	0.20	0.20	0.10	0.10	<input type="checkbox"/> MEDIUM				
OPERATING EXPENSES	0.20	1.00	1.00	0.50	0.30	<input type="checkbox"/> LOW				

Table IV A

Activity Data - Narrative

Project Title: Coarse Grains and Grain Legumes

1. Purpose: Increase production of coarse grains and grain legumes.
2. Background: While Sri Lanka is dependent on its irrigated sector for the bulk of its grain supplies the country has considerable acreage (about 3.5 million acres) that are cultivatable under dryland farming practices. Much of this land is suitable for coarse grain and grain legume production.
3. Project Description: This project will focus to a large degree on opening up assured market channels for dryland grain producers. IDRC and CIDA of Canada are assisting the GSL with varietal development and field research on sorghum and grain legumes. The U.S. project assistance will be with maize and finger millet varietal development. Also, U.S. project assistance will be associated with establishing processing facilities for incorporating coarse grain flour into wheat flour, processing concentrate, developing more effective dryland village tillage practices and helping the GSL establish the requisite seed production and handling facilities.
4. Progress to Date: PID was submitted to AID/W in May 1978.
5. Beneficiaries: Dryland farmers who by definition have a poorer resource base than farmers with irrigated land. The Mission has begun to initiate a study to identify more precisely Sri Lanka's dryland agriculture families.
6. Current Year Program: N/A
7. Budget Year Program: To be developed in the PP.
8. Major Outputs: To be developed in the PP.



Table IV A

Activity Data - Narrative

Project Title: Mahaweli Basin Development

1. Purpose: Irrigation, development and settlement of 338,000 acres of land in the contiguous Mahaweli and Madura Oya River Basins of East Central Sri Lanka.
2. Background: One of the major GSL strategies for increasing domestic food production and rural development is to bring new land under cultivation. The centerpiece of the effort is the Mahaweli Ganga program to harness the resources of Sri Lanka's major river to provide irrigation. The current project is part of a long-term program toward which AID already provides funding under the FY 1977 Mahaweli Irrigation Loan.
3. Project Description: The proposed phase of the Mahaweli Ganga program includes construction of five major dams and downstream development of 377,000 essentially uninhabited acres including resettlement of and support facilities for 136,000 new families. AID's contribution will be part of a coordinated multi-donor assistance program and is expected to primarily provide financing for downstream development.
4. Progress to Date: N/A
5. Beneficiaries: Primary beneficiaries are the 136,000 landless or small holder farm families who would be resettled on the land. Secondary beneficiaries are expected to be at least an equivalent number of people who would find work both during construction and off-farm after project completion. Tertiary beneficiaries are the population as a whole which will benefit from increased domestic food production. Assuming a 50 year life of project, the annual cost per family benefitted is roughly \$60 if the costs of the project are attributed to primary and secondary beneficiaries.
6. Current Year Program: None
7. Budget Year Program: Equipment will be ordered and arrive.
8. Major Outputs: 136,000 tenured farmers; 800,000 jobs (includes five people/farm family); increased production at a level yet to be determined.



## Table IV A

### Activity Data - Narrative

**Project Title:** Reforestation and Watershed Management

1. **Purpose:** To retard depletion of the dry zone forests by reforesting 15,000 acres of denuded lands and planting 25,000 acres of fuelwood forest to meet rural energy needs.

2. **Background:** Sri Lanka occupies 24,000 square miles or 16 million acres of land. As of 1970, approximately 37 percent of the land was in forests divided among the wet zone (557,100 acres), the intermediate zone (283,900 acres) and the dry zone (5,280,200 acres). The GSL estimates that total forest cover dwindled by 14 percent between 1958 and 1970. In the mountains of Sri Lanka (above 500 feet) the total area under forests dropped from 22 percent in 1956 to 8 percent in 1977. This depletion is the result of opening land to agriculture, continuing slash and burn agriculture, clearing highland forests for seasonal horticulture, and cutting of timber for firewood by rural families.

The rate of exploitation of the forest is estimated to be 2 to 3 times the permissible level for balanced natural regeneration leaving forest areas without adequate cover, soil erosion problems and increasing water run-off. This is happening despite the efforts of the Forest Department which has reforested 90 thousand acres in the past 5 years. The present forestation program is expected to meet Sri Lanka's demand for lumber by the end of the century, but is not sufficient to offset the depletion of the forests for fuelwood.

3. **Project Description:** The GSL has initially requested USAID assistance with two activities:

(A) An intensive study of Sri Lanka's upper mountain catchments in order to develop an area-wide program for forestation, watershed management and soil conservation. The study will focus first on the Mahaweli catchment and then be extended to other high mountain areas. Upon completion of the study, the GSL is expected to begin a major program with USAID assistance in the mountain areas including reforestation, planting in grasslands, and soil conservation of agricultural holdings. Funds for this study are being requested as part of a project to finance feasibility studies which will be submitted by USAID/Colombo for funding in FY 1978.

(B) The second activity requested by the GSL is to reforest 40,000 acres in the dry zone over 5 years. Twenty-five thousand acres of this will be plantations for fuelwood; 15,000 acres will be land denuded by slash and burn agriculture or by lumbering operations. At the end of 5 years the Forest Department will have a continuing capacity to reforest 5,000 acres of fuelwood and 3,000 acres of denuded land per year. This represents a 44 percent increase over the Department's current forestation program of approximately 18,000 acres per year.

4. **Progress to Date:** The Project Identification Document was forwarded to AID/W in May 1978.

5. Beneficiaries: To the extent the project helps stabilize the environment and prevents depletion of forests, the social gains from the project will be general and national in scope. Particular beneficiaries will be rural families who will be assured of continuous supplies of fuelwood thus preventing or delaying their switching to kerosene for domestic fuel. Since fuelwood is several times less expensive than kerosene, low income families will benefit most from these conservation measures.

6. Current Year Program: N/A

7. Budget Year Program: No results are expected in FY 1980.

8. Major Outputs: Reforestation of 40,000 acres of which 25,000 acres will consist of fuelwood forest.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE	Reforestation and Watershed Management	DECISION UNIT	USAID/Sri Lanka	DECISION PACKAGE	Minimum	BUDGET YEAR	FY 80
PROJECT NUMBER	383-0055	INITIAL OBLIGATION	FY 80	FINAL OBLIGATION	FY 81	TOTAL COST	\$ 3,500
APPROPRIATION	FN	DATE PP/REVISION	3/79	DATE LAST PAR	N/A	DATE NEXT PAR	10/81

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	TOTAL-	FY: 1978			FY: 1979			FY: 1980				
		OBLI- GATION	EXPE- N- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPE- N- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPE- N- DITURE	PIPE- LINE
AID-FINANCED	-	-	-	-	-	-	-	10/80-3/82	2,000	-	-	2,000
Equipment									1,460			1,460
Training									280			280
Local Costs									260			260

HC AND OTHER DONOR	TOTAL-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HC		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

PERSONNEL WORKYEARS (XX.X)

PERSONNEL INTENSITY

PARTICIPANTS PROGRAMMED

FOOTNOTES

FUNDING	FISCAL YEAR				BEYOND	HIGH	MEDIUM	LOW	TYPE A=NONCONTRACT B=CONTRACT	FISCAL YEAR							
	1978	1979	1980	1981						1982	1978	1979	1980				
PROGRAM ACCOUNT - TDY (AND - )																	
OPERATING EXPENSES																	
	0.10	0.25	0.25	0.45													

AID 1330-B (3-78)

Table IV A

Activity Data - Narrative

Project Title: P.L. 480 Title II (CARE/Sri Lanka's Maternal/Child Health and School Feeding Projects)

1. Purpose: To improve the nutritional status of vulnerable groups (pre-schoolers, pregnant and lactating mothers, primary school children) in Sri Lanka.
2. Background: Forty to forty-two percent of pre-school and primary school children suffer from 2nd and 3rd degree malnutrition: malnutrition is particularly prevalent in low income groups. With its emphasis on social welfare, the Sri Lanka Government gives priority to the provision of nutritional supplements, in health centers and schools throughout the country, to safeguard the health of "at risk" children and their mothers. The purchase of subsidiary crops to produce the pre-schooler mothers nutritional supplement is encouraging agricultural development. The food industry is being developed through the production and processing of the nutritional supplements.
3. Project Description: N/A for on-going projects.
4. Progress to Date: Nutritional supplements of high acceptability are being regularly provided to vulnerable groups throughout the country in an integrated nutrition program, including health education and nutritional surveillance. Plans are being finalized for construction of a factory to produce a low-cost nutritional supplement for pre-schoolers and mothers.
5. Beneficiaries: The program is reaching 500,000 medically selected pre-school children and pregnant and lactating mothers and 1,250,000 primary school children in selected schools. The majority are low income groups living in rural areas.
6. Current Year Program: During FY 1979, 1,750,000 beneficiaries will be reached by a nutritional supplement. The factory for pre-schoolers/mother nutritional supplement will become operational, and the factories producing the primary schoolers supplement will be enlarged to permit production of an increased ration; and a program of nutritional education and surveillance will be undertaken.
7. Budget Year Program: During FY 1980 beneficiary level will be 1,750,000; the pre-schoolers/mothers supplement will become 40 percent indigenous through the increased use of local cereals; commercial production of low-cost fortified food will commence; the program of nutrition education and surveillance will continue.
8. Major Outputs: A nutritional supplement distributed to 1,800,000 malnourished beneficiaries; construction of a factory producing low-cost commercialized nutritional supplement; increased purchase of subsidiary crops reaching 6,600 metric tons; establishment of primary school children's surveillance system; provision of nutrition education materials to health centers and schools throughout the country.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE	PL 480 Title II		DECISION UNIT	USAID/Sri Lanka	DECISION PACKAGE	Minimum	BUDGET YEAR	FY 80
PROJECT NUMBER	-		INITIAL OBLIGATION	FY 56	FINAL OBLIGATION	-	TOTAL COST	-
APPROPRIATION	-		DATE PP/REVISION	MYP - 5/78	DATE LAST PAR	5/78	DATE NEXT PAR	-

ESTIMATED U. S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	TOTAL-	FY: 1978			FY: 1979			FY: 1980				
		OBLI - GATION	EXPEN - DITURE	PIPE - LINE	FUNDING PERIOD (FR- TO)	OBLI - GATION	EXPEN - DITURE	PIPE - LINE	FUNDING PERIOD (FR- TO)	OBLI - GATION	EXPEN - DITURE	PIPE - LINE
Nutritional Food Supplements	5,684	5,684	-	-	10/78-9/79	4,904	4,904	-	10/79-9/80	6,324	6,324	-
	4,139	4,139	-	-								
	5,684	5,684	-	-								

HC AND OTHER DONOR TOTAL- 5,734

HC CARE/Sri Lanka 5,585  
149

PERSONNEL WORKYEARS (XX, X)		PERSONNEL INTENSITY		PARTICIPANTS PROGRAMMED		FOOTNOTES													
1978	1979	1980	1981	1982	BEYOND	HIGH	MEDIUM	LOW	TYPE A=NONCONTRACT B=CONTRACT	FISCAL YEAR	19	19	19						

PROGRAM ACCOUNT TDY (ADD - )	OPERATING EXPENSES	0.25	0.25	0.25	0.25	0.25	-												
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Table IV A

Activity Data Sheet

Project Title: PL 480 Title I

See section on PL 480 Title I for details.

TABLE IVB ACTIVITY BUDGET DATA	ACTIVITY TITLE	DECISION UNIT	DECISION PACKAGE	BUDGET YEAR
	PL 480 Title I	USAID/Sri Lanka	Minimum	FY 80
PROJECT NUMBER	APPROPRIATION	INITIAL OBLIGATION	FINAL OBLIGATION	TOTAL COST
-	-	-	-	-
		DATE PP/REVISION	DATE LAST PAR	DATE NEXT PAR
		-	-	-

ESTIMATED U. S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	CY: 19 78		CY: 19 79		CY: 19 80		PIPE-LINE	EXPEN-DITURE	PIPE-LINE	EXPEN-DITURE		
	OBLI-GATION	EXPEN-DITURE	PIPE-LINE	FUNDING PERIOD (FR-TO)	OBLI-GATION	EXPEN-DITURE					PIPE-LINE	FUNDING PERIOD (FR-TO)
TOTAL-	35,400	35,400	-	10/78-9/79	8,700	8,700	-	8,700	-	6,050	6,050	-
Wheat Flour (200,000 MT)	35,400	35,400										
Wheat Flour ( 75,000 MT)					8,700	8,700				6,050	6,050	
Wheat Flour ( 50,000 MT)												
HC AND OTHER DONOR												
TOTAL-												

FUNDING	PERSONNEL WORKYEARS (XX, X)				PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED		FOOTNOTES
	19 78	19 79	19 80	19 81		TYPE A=NONCONTRACT B=CONTRACT	FISCAL YEAR	
PROGRAM ACCOUNT								
TODY (NON-)								
OPERATING EXPENSES	0.10	0.10	0.10	0.10	LOW			
AID 1330-8 (3-78)								

MARK DECISION PACKAGE

MARK DECISION PACKAGE DESCRIPTION

The "Mark" level program provides for incremental increase of 4 USDH (for a cumulative total of 21 USDH) and 4 FWD (for a cumulative total of 24) in addition to incremental funding for the Mahaweli Basin Development Project (\$10 million for a cumulative project total of \$15 million) and an increase in the Title I program to the FY 79/FY 80 baseline figure for wheat flour (25,000 MT for a cumulative total of 75,000 MT). It also provides \$3 million for the final year of funding for the Agricultural Inputs - II Project. This program level constitutes 97.7% of both the current year's (FY 79) total program and development assistance program.

	FY 80				THIS PACKAGE	CUMULATIVE TOTAL
	FY 78	FY 79	FY 81	FY 82		
<u>RESOURCE REQUIREMENTS</u>						
Food and Nutrition	19,000	26,600			13,000	26,000
Population	-	-			-	-
Health	7,000	-			-	-
Education	-	-			-	-
Selected Development Activities	-	-			-	-
Sahel Development Program	-	-			-	-
Other (specify)	-	-			-	-
Total Program	26,000	26,600			13,000	26,000
PL 480 Title I (non-add)	(35,400)	(8,700)			(3,025)	(9,075)
(of which Title III)						
PL 480 Title II (non-add)	(5,684)	(5,164)			-	(6,324)
Housing Guaranties (non-add)	-	-			-	-
Employment - Full-time Permanent						
U.S. Direct Hire	7.10	15.00			2.00	19.00
Foreign Nationals	5.00	15.50			2.00	22.00
TDY	0.60	1.15			-	0.60
Total	12.70	31.65			4.00	41.60
<u>FIVE YEAR PROJECTIONS</u>						
	<u>FY 80</u>	<u>FY 81</u>	<u>FY 82</u>	<u>FY 83</u>	<u>FY 84</u>	
Program	26,000	40,000	50,000	55,000	55,000	
Personnel						
Mission - US	19.00	21.00	23.00	25.00	27.00	
- FN	22.00	24.00	28.00	32.00	36.00	
TDY - USDH	0.50	0.50	0.50	0.50	0.50	

Short-term Objectives: The Mission's short-term objectives addressed in the minimum package are to maximize the country's near-term payoffs in food production through expanding the country's productive resource base, establishing and maintaining a momentum in the transition to science-based agriculture, both of which are essential to increasing Sri Lanka's food production. This decision package will enhance attainment of these short-term objectives as well as enabling the Mission to adequately encourage and support short-term growth-oriented production policies which is a major advantage over the minimum level program. This increment will be used to finance acceleration of the Mahaveli program, the importation of fertilizer, and the importation of a 25,000 MT increment of wheat flour which brings the PL 480 Program to the baseline figure of 75,000 MT for FY 80. The incremental funding requested in this decision package will allow more people to be settled more quickly on additional land in the Mahaveli Basin and will allow the Mission a more significant role and voice in determining major program thrusts at a relatively early and critical stage of the Mahaveli Program. It will also allow for the importation of additional fertilizer and PL 480 Title I wheat flour thereby accommodating short-term gaps in the country's foreign exchange and food. The funding of fertilizer in FY 80 has become considerably more important in view of increasing evidence that Sri Lanka's fertilizer plant may not reach its full production capacity until after FY 80. These incremental activities, therefore, will have a significant impact on both the short-term and long-term aspects of our major objectives.

Impact on Major Objectives: The "mark" level program will make a significant impact on two of our major objectives and an adequate impact on the objective to encourage and support growth oriented production policies. The latter objective has a range which extends well beyond the cumulative impact of all three major objectives and will enable more progress towards attainment of the Mission's goal than that afforded by the minimum program level.

Other Information: The incremental increase of 4 USDH and 4 FNDH requested in this "mark" package are considered necessary to successfully launch the larger Mahaveli Basin Development Project proposed in the incremental funding of this program level and to develop FY 81 and future year projects. It should be noted, however, that MODE clearances for the additional 4 USDH personnel has not yet been granted. Failure to secure this incremental increase in USDH personnel would have more serious consequences for the number and type of projects which could be developed and implemented in FY 81 than on the FY 80 program.

Table IV A

Activity Data - Narrative

Project Title: Mahaweli Basin Development

1. Purpose: Irrigation, development and settlement of 338,000 acres of land in the contiguous Mahaweli and Madura Oya River Basins of East Central Sri Lanka.
2. Background: One of the major GSL strategies for increasing domestic food production and rural development is to bring new land under cultivation. The centerpiece of the effort is the Mahaweli Ganga program to harness the resources of Sri Lanka's major river to provide irrigation. The current project is part of a long-term program toward which AID already provides funding under the FY 1977 Mahaweli Irrigation Loan.
3. Project Description: The proposed phase of the Mahaweli Ganga program includes construction of five major dams and downstream development of 377,000 essentially uninhabited acres including resettlement of and support facilities for 136,000 new families. AID's contribution will be part of a coordinated multi-donor assistance program and is expected to primarily provide financing for downstream development.
4. Progress to Date: N/A
5. Beneficiaries: Primary beneficiaries are the 136,000 landless or small holder farm families who would be resettled on the land. Secondary beneficiaries are expected to be at least an equivalent number of people who would find work both during construction and off-farm after project completion. Tertiary beneficiaries are the population as a whole which will benefit from increased domestic food production. Assuming a 50 year life of project, the annual cost per family benefitted is roughly \$60 if the costs of the project are attributed to primary and secondary beneficiaries.
6. Current Year Program: None
7. Budget Year Program: Equipment will be ordered and arrive.
8. Major Outputs: 136,000 tenured farmers; 800,000 jobs (includes five people/farm family); increased production at a level yet to be determined.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

<b>ACTIVITY TITLE</b>	Mahaveli Basin Development		<b>DECISION UNIT</b>	USAID/Str Lanka	<b>DECISION PACKAGE</b>	Mark	<b>BUDGET YEAR</b>	FY 80
<b>PROJECT NUMBER</b>	383-0056		<b>INITIAL OBLIGATION</b>	FY 80	<b>FINAL OBLIGATION</b>	FY 80	<b>TOTAL COST</b>	\$ 95,000
<b>APPROPRIATION</b>	FN		<b>DATE PP/REVISION</b>	1/80	<b>DATE LAST PAR</b>	N/A	<b>DATE NEXT PAR</b>	9/81

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	FY: 1978			FY: 1979			FY: 1980		
	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	OBLI- GATION	EXPEN- DITURE	PIPE- LINE
<b>AID-FINANCED</b>	-	-	-	-	-	-	10,000	-	10,000
<b>TOTAL-</b>	-	-	-	-	-	-	10,000	-	10,000

Input requirements for this proposed loan have not yet been determined.

HC AND OTHER DONOR TOTAL-

-	-	-	-	-	-	-	705,000	-	705,000
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HC & Other Donors

PERSONNEL WORKYEARS (XX, X)

PERSONNEL INTENSITY

PARTICIPANTS PROGRAMMED

FOOTNOTES

FUNDING	FISCAL YEAR					PERSONNEL INTENSITY	TYPE			LIFE OF PROJECT
	1978	1979	1980	1981	1982		A:NONCONTRACT	B:CONTRACT	FISCAL YEAR	
PROGRAM ACCOUNT						<input checked="" type="checkbox"/> HIGH			19	
TDY (ADD)	0.25	0.10	0.10	0.10	0.10	<input type="checkbox"/> MEDIUM			19	
OPERATING EXPENSES	0.10	0.55	1.75	2.50	2.50	<input type="checkbox"/> LOW			19	

TABLE IV A

Activity Data - Narrative

Project Title: Agricultural Inputs - II

1. Purpose: Increased use of fertilizer by small farmers.
2. Background: As part of their effort to increase food production, the GSL is attempting to increase fertilizer use by farmers through subsidized prices, changes in the distribution and marketing system, and increased supply. U.S. assistance is being provided for this supply. The project is directly related to the Mission's emphasis on assistance for increased food production.
3. Project Description: N/A
4. Progress to Date: N/A
5. Beneficiaries: Project beneficiaries are primarily paddy farmers. Since there are approximately 700,000 paddy farmers, the cost per beneficiary family is \$37.
6. Current Year Program: The bulk of the fertilizer to be financed under the loan will arrive and be used.
7. Budget Year Program: The loan will be fully disbursed and all fertilizer financed will be used.
8. Major Outputs: 540,000 tons of paddy.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE Agricultural Inputs - II		DECISION UNIT USAID/STI Lanka	DECISION PACKAGE Marfk	BUDGET YEAR FY 80
PROJECT NUMBER 383-0051	APPROPRIATION FN	INITIAL OBLIGATION FY 78	FINAL OBLIGATION FY 80	TOTAL COST \$ 26,000
		DATE PP/REVISION 6/78	DATE LAST PAM N/A	DATE NEXT PAM 10/79

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	TOTAL-	FY: 1978			FY: 1979			FY: 1980			LIFE OF PROJECT
		OBLIGATION	EXPENDITURE	PIPE-LINE	OBLIGATION	EXPENDITURE	PIPE-LINE	OBLIGATION	EXPENDITURE	PIPE-LINE	
AID-FINANCED	12,000	-	12,000	8/79-4/80	14,000	16,000	10,000	4/79-3/80	3,000	13,000	-
Fertilizer	12,000		12,000		14,000	16,000	10,000		3,000	13,000	-
HC AND OTHER DONOR	TOTAL-		24,350		31,100				55,450		
HC			12,250		19,000				31,250		
Other Donors			12,100		12,100				24,200		

FUNDING	PERSONNEL WORKYEARS (XX, X)					PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED					FOOTNOTES
	1978	1979	1980	1981	1982		BEYOND	TYPE A	TYPE B	TYPE R	TYPE S	
PROGRAM ACCOUNT												
OPERATING EXPENSES	0.10	0.10	0.10	-	-	<input checked="" type="checkbox"/> LOW						

AID 1330-B (3-78)

Table IV A

Activity Data Sheet

Project Title: PL 480 Title I

See section on PL 480 Title I for details.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE	PL 480 Title I	DECISION UNIT	USAID/Sri Lanka	DECISION PACKAGE	Minimum	BUDGET YEAR	FY 80
PROJECT NUMBER	-	INITIAL OBLIGATION	-	FINAL OBLIGATION	-	TOTAL COST	-
APPROPRIATION	-	DATE PP/REVISION	-	DATE LAST PAN	-	DATE NEXT PAN	-

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	TOTAL	FY 1978			FY 1979			FY 1980				
		OBLIGATION	EXPENDITURE	PIPE-LINE	FUNDING PERIOD (FR-TO)	OBLIGATION	EXPENDITURE	PIPE-LINE	FUNDING PERIOD (FR-TO)	OBLIGATION	EXPENDITURE	PIPE-LINE
AID-FINANCED	35,400	35,400	-	-	10/78-9/79	8,700	8,700	-	10/79-9/80	3,025	3,025	-
Wheat Flour (200,000 MT)	35,400	35,400	-	-								
Wheat Flour (75,000 MT)						8,700	8,700			3,025	3,025	
Wheat Flour (50,000 MT)												
HC AND OTHER DONOR	TOTAL-											

PERSONNEL WORKYEARS (XX, X)

FUNDING	FISCAL YEAR					PERSONNEL INTENSITY	PARTICIPANT'S PROGRAMMED			FOOTNOTES
	1978	1979	1980	1981	1982		TYPE A	TYPE B	FISCAL YEAR	
PROGRAM ACCOUNT (AID-7)						HIGH	LONG-TERM		19	
OPERATING EXPENSES	0.10	0.10	0.10	0.10	0.10	LOW	LONG-TERM		19	

AID 1330-8 (3-78)

PROPOSED DECISION PACKAGE

PROPOSED DECISION PACKAGE DESCRIPTION  
 DECISION PACKAGE: Proposed

The proposed program level provides incremental funding of \$7 million without any incremental increase in the personnel requirements over the "Mark" level program. This program level provides additional funding of \$2 million for the final year of funding for the Agricultural Inputs - II project (for a cumulative FY 80 project total of \$5 million), \$4,000 for the final year of funding for the Malaria Control project, and \$1 million for OPGs. This program level constitutes an increase of 19.6% over the current year's (FY 79) total program and an increase of 24.1% over the current year's development assistance program.

RESOURCE REQUIREMENTS	FY 78	FY 79	THIS PACKAGE				CUMULATIVE TOTAL
			FY 80	FY 81	FY 82	FY 83	
Food and Nutrition	19,000	26,600	2,000	-	-	-	28,000
Population	-	-	-	-	-	-	-
Health	7,000	-	4,000	-	-	-	32,000
Education	-	-	-	-	-	-	-
Selected Development Activities	-	-	1,000	-	-	-	33,000
Sahel Development Program	-	-	-	-	-	-	-
Other (specify)	-	-	-	-	-	-	-
<b>Total Program</b>	<b>26,000</b>	<b>26,600</b>	<b>7,000</b>	<b>0.30</b>	<b>0.30</b>	<b>0.30</b>	<b>33,000</b>
PL 480 Title I (non-add)	(35,400)	(8,700)	-	-	-	-	(9,075)
(of which Title III)							
PL 480 Title II (non-add)	(5,684)	(5,164)	-	-	-	-	(6,324)
<b>Employment - Full-time Permanent</b>							
U.S. Direct Hire	7.10	15.00	-	-	-	-	19.00
Foreign Nationals	5.00	15.50	-	-	-	-	22.00
TDY	0.60	1.15	-	-	-	-	0.60
<b>Total</b>	<b>12.70</b>	<b>31.65</b>	<b>0.30</b>				<b>41.60</b>
<u>FIVE YEAR PROJECTIONS</u>							
<b>Program Personnel</b>	<b>FY 80</b>	<b>FY 81</b>	<b>FY 82</b>	<b>FY 83</b>	<b>FY 84</b>		
Mission - US	33,000	40,000	50,000	55,000	55,000		
Mission - FN	19.00	21.00	23.00	25.00	27.00		
TDY - USDH	22.00	24.00	28.00	32.00	36.00		
	0.50	0.50	0.50	0.50	0.50		

Short-term Objectives: The incremental funding for the proposed program level will have a substantial impact on both the short-term and long-term aspects of our major objectives. The additional incremental funding for fertilizer and the incremental funding for the Malaria Control project both will enhance the purpose of these projects and serve to provide the quick disbursing assistance required to support the government's reform program. The incremental funding for operational program grants will provide the Mission with the flexibility to be responsive to PVO initiatives.

Impact on Major Objectives: The proposed program level will make a substantial impact on all three of our major objectives, particularly that objective which will enable the Mission to encourage and support growth oriented production policies. This latter objective is a necessary adjunct to the other objectives and does, in fact, go beyond the goal itself in that it addresses our concern for Sri Lanka's total development. This program level will reaffirm the U.S. commitment to Sri Lanka's development and thereby will maintain the government's confidence in our program. The government needs the substantial assistance afforded by this program level if it is to sustain and extend the politically difficult reforms undertaken and to mount an effective development program.

Other Information: The incremental funding for this proposed program level does not require any incremental increases over the "mark" level program in either USDH or FNDH personnel given the nature of its intended use. This incremental funding is, for the most part, additional funding of quick disbursing inputs for projects which will be fully developed and well advanced in the implementation stage by FY 80. The small additional workload involved can be easily absorbed with only minor impact on the Mission's staff.

TABLE IV A

Activity Data - Narrative

Project Title: Agricultural Inputs- II

1. Purpose: Increased use of fertilizer by small farmers.
2. Background: As part of their effort to increase food production, the GSL is attempting to increase fertilizer use by farmers through subsidized prices, changes in the distribution and marketing system, and increased supply. U.S. assistance is being provided for this supply. The project is directly related to the Mission's emphasis on assistance for increased food production.
3. Project Description: N/A
4. Progress to Date: N/A
5. Beneficiaries: Project beneficiaries are primarily paddy farmers. Since there are approximately 700,000 paddy farmers, the cost per beneficiary family is \$37.
6. Current Year Program: The bulk of the fertilizer to be financed under the loan will arrive and be used.
7. Budget Year Program: The loan will be fully disbursed and all fertilizer financed will be used.
8. Major Outputs: 540,000 tons of paddy.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE	Agricultural Inputs - II		DECISION UNIT	USAID/Sri Lanka	DECISION PACKAGE	Proposed	BUDGET YEAR	FY 80
PROJECT NUMBER	383-0051		INITIAL OBLIGATION	FY 78	FINAL OBLIGATION	FY 80	TOTAL COST	\$ 31,000
APPROPRIATION	FN		DATE PP/REVISION	6/78	DATE LAST PAR	N/A	DATE NEXT PAR	10/79

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	TOTAL-	FY: 1978			FY: 1979			FY: 1980			LIFE OF PROJECT	
		OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION		EXPEN- DITURE
AID-FINANCED		12,000	8,000	4,000	4/79-3/80	14,000	14,000	4,000	4/79-3/80	2,000	9,000	-
Fertilizer		12,000	8,000	4,000		14,000	14,000	4,000		2,000	9,000	-
HC AND OTHER DONOR	TOTAL-	24,350				26,100				50,450		
HC		12,250				14,000				26,250		
Other Donors		12,100				12,100				24,200		

FUNDING	FISCAL YEAR				PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED				FOOTNOTES		
	1978	1979	1980	1981		BEYOND	TYPE A=NONCONTRACT B=CONTRACT	FISCAL YEAR	19		19	
PROGRAM ACCOUNT TDY (ADD OPERATING EXPENSES)	0.10	0.10	0.10	-								
					<input checked="" type="checkbox"/> LOW							

Table IV A

Activity Data - Narrative

Project Title: Malaria Control

1. Purpose: To bring malaria under control and to strengthen the GSL's capability for administering the malaria control program on a long-term basis.

2. Background: Resurgence of reported malaria cases in the past several years has reached epidemic proportions, particularly in rural areas where rice production is the major agricultural pursuit. Increased infant mortality and general illness and debilitation of the agricultural work force is evidence in the affected areas. The Sri Lanka Anti-Malaria Campaign (AMC) is based on an existing organization with a limited corps of health workers which needs refresher training and an increased staff of field workers. Lack of adequate equipment and supplies combined with a growing resistance to DDT by the main mosquito vector, An culicifacies, has further limited the AMC's ability to control the rapid spreading of disease through use of this insecticide. At the end of the project, an effective malaria surveillance program will be in operation and the Anti Malaria Campaign organization will begin the integration process into the General Health Services. More immediately, certain targeted outputs will be realized by FY 1978.

AID has made two contributions to the five-year program -- \$5,000,000 in FY 1977 and \$7,000,000 in FY 1978. An additional \$4,000,000 has been requested in the proposed decision level for FY 1980 to cover: (a) the additional costs of malaria control imposed by acceleration of the Mahaweli Basin Development Program; and (b) to cover the foreign exchange shortfall of required insecticides for use in this project.

3. Project Description: N/A

4. Progress to Date: Malaria control program design and environmental, social, and economic analyses have been completed. The existing AMC organization is being strengthened and reorganized with more vertical operational control. Following notification that AID/W had approved the project, the AMC launched its intensive spraying campaign in August 1977 with malathion financed from its own foreign exchange reserves. Soon after, spraying operations were suspended due to communal disturbances. Intensive spraying was resumed in October 1977. The GSL signed agreements with both the Netherlands (GON) and the U.K. late in 1977. Procurement of GON-financed malathion is underway with shipments arriving in port and UK-financed vehicles have been ordered. All first year conditions precedent have been satisfied. The first IFBs will be issued in June. Initial shipments of US-financed malathion are expected to arrive in October.

5. Beneficiaries: The immediate beneficiaries are the 10 million persons (69% of the country's population most of whom are rural) who reside in the malarial areas of the country. Of these 10 million persons, approximately 4 million reside in high risk areas and 6 million in low risk areas.

6. Current Year Program: In FY 1979 approximately 1.0 million houses in high risk areas will be sprayed for four rounds/yearly providing protection for 4 million persons. In addition, increased malaria control activities will be provided to populations living at risk of malaria in low risk areas.

7. Budget Year Program: In FY 1980 1 million houses in high risk areas will be sprayed for four round/yearly providing protection for 4 million persons. Populations residing in low risk areas will have increased protection through localized spraying and increased surveillance.

8. Major Outputs: By the end of FY 1982 it is expected that spraying can be reduced in the intensive spray areas to limited four cycle and two cycle spraying operation and to cover most of the area through surveillance and general public health. The project will have reduced the incidence of malaria in Sri Lanka to a minimum of one case per 1,000 population per year country-wide.

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE <b>Malaria Control</b>	DECISION UNIT <b>USAID/8F1 Lanka</b>	DECISION PACKAGE <b>Proposed</b>	BUDGET YEAR <b>FY 80</b>
PROJECT NUMBER <b>383-0043</b>	INITIAL OBLIGATION <b>FY 77</b>	FINAL OBLIGATION <b>FY 80</b>	TOTAL COST <b>\$ 16,000</b>
APPROPRIATION <b>HE</b>	DATE PP/REVISION <b>2/77</b>	DATE LAST PAR <b>N/A</b>	DATE NEXT PAR <b>10/78</b>

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	TOTAL	FY: 1978			FY: 1979			FY: 1980			
		OBLI- GATION	EXPEN- DITURE	PIPE- LINE	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	
AID-FINANCED	7,000	2,076	9,924	10/77-9/82	-	5,006	4,918	10/81-9/82	4,000	2,506	6,412
Insecticide (Malathion)	7,000	2,000	9,900		5,000	4,900		4,000	2,500	6,400	
Safety Equipment & Protective Clothing			50								
Spraying and Laboratory Equipment			20								
Training			6		6	18			6	12	
HC AND OTHER DONOR	TOTAL-	10,450			9,850				38,500		
HC		7,700			7,500				29,690		
UK		650			250				4,300		
Netherlands		2,000			2,000				4,000		
WHO		100			100				510		

FUNDING	PERSONNEL WORKYEARS (XX, X)					PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED				FOOTNOTES	
	1978	1979	1980	1981	1982		BEYOND	TYPE A NONCONTRACT	TYPE B CONTRACT	1978		1979
PROGRAM ACCOUNT TOY (NRB- )						<input type="checkbox"/> HIGH <input checked="" type="checkbox"/> MEDIUM <input type="checkbox"/> LOW						
OPERATING EXPENSES	0.40	0.40	0.40	0.40	0.40							

Table IV A

Activity Data Sheet

Project Title: Operational Program Grants

**TABLE IVB  
ACTIVITY BUDGET  
DATA**

ACTIVITY TITLE	Operational Program Grants		DECISION UNIT	USAID/Sri Lanka	DECISION PACKAGE	Proposed	BUDGET YEAR	FY 80
PROJECT NUMBER	-		INITIAL ORIENTATION	FY 80	PROJECT ORIENTATION	-	TOTAL OBL.	\$ 1,000
APPROPRIATION	SD		DATE OF DIVISION	N/A	DATE LAST PART	N/A	DATE NEXT PART	N/A

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	TOTAL	FY 19 78			FY 19 79			FY 19 80				
		OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FM-TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FM-TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE
AID-FINANCED		-	-	-	-	-	-	-	-	1,000	200	800

Input requirements for OPGs have not yet been identified.

HC AND OTHER DONOR TOTAL-  
Unknown

FUNDING	PERSONNEL WORKYEARS (XX, X)					PERSONNEL INTENSITY	PARTICIPANT'S PROGRAMMED			FOOTNOTES	
	19 78	19 79	19 80	19 81	19 82		TYPE	AGREEMENT	FISCAL YEAR		
PROGRAM ACCOUNT TDY (NPN- )						BEYOND	CONTRACT	19	19	19	
OPERATING EXPENSES			0.30	0.30	0.30	LOW	SHORT-TERM				

PROPOSED PROGRAM RANKING

TABLE V - PROPOSED PROGRAM RANKING

TRANSACTION CODE:

BUREAU CODE:

DECISION UNIT  
USAID/S/1 Lanka

NAME OF DECISION PACKAGE SET

RANK	DESCRIPTION	APPROPRIATE ACCT	PROJECT TYPE	MISSION	WORKYEAR FUNDING FROM TOY	RESOURCE REQUIREMENTS	
						PROGRAM ACCOUNT	PROGRAM INCREMENT CUMULATIVE
<u>DECISION PACKAGE - MINIMUM</u>							
-	Population Activities (Centrally Funded)						
1	0040 Rice Research (L)	PN	M	0.20	-	-	-
2	0041 Paddy Storage & Processing - I (L)	FN	M	0.20	-	-	-
3	0042 Mahaweli Ganga Irrigation (L)	FN	M	0.25	0.10	-	-
4	0043 Malaria Control (L)	FN	M	0.25	-	-	-
5	0044 Agricultural Base Mapping (L)	HE	M	0.40	-	-	-
6	0045 On-Farm Water Management (G)	FN	M	0.40	-	-	-
7	0048 YMCA Nationwide Rural Development (OPG)	SD	L	0.15	0.10	-	-
8	0049 Agricultural Education Development (G)	SD	L	0.10	-	-	-
9	0051 Agricultural Inputs - II (L)	FN	H	1.20	-	-	-
10	0044 Development Services & Training (G)	FN	L	0.10	-	-	-
11	0052 Paddy Storage & Processing - II (G&L)	FN	H	2.00	-	-	-
12	0057 Water Management (G&L)	FN	M	0.25	0.10	-	-
13	0058 Coarse Grains & Grain Legumes (FN&LN)	FN	H	1.00	0.20	-	3,000
14	0056 Mahaweli Basin Development (LN)	FN	H	0.50	-	-	3,000
15	0055 Reforestation & Watershed Management (LN)	FN	H	1.00	0.10	-	5,000
16	PL 480 Title II	FN	M	0.10	-	-	2,000
17	PL 480 Title I (50,000 MT)	FN	M	0.25	-	-	6,324
			L	0.10	-	-	6,050
Summary by Personnel Intensity: Low (3 projects)							
Medium (9 projects)							
High (5 projects)							
	Total			(8.45)	(0.60)		(25,374)

TABLE V - PROPOSED PROGRAM RANKING

TRANSACTION CODE:

BUREAU CODE:

RANK	DECISION PACKAGES / PROGRAM ACTIVITY / SUPPORT ITEM	DESCRIPTION	APPROPRIATE ACCT	PERSONNEL INTENSIVITY	MISSION	TDY	RESOURCE REQUIREMENTS		PROGRAM INCREMENT	CUMULATIVE FUNDING
							WORKYEARS (XX, X)	PROGRAM FUNDING (\$ 000)		
18	DECISION PACKAGE - MARK									
19	0056	Mahaweli Basin Development (LN)	FN	H	-	-			10,000	23,000
20	0051	Agricultural Inputs (LO) PL 480 Title I (25,000 MT)	FN	L	-	-			3,000	26,000
		Summary by Personnel Intensity: Low (2 projects) Medium ( ) High (1 project)							(6,025)	(10,000)
		Cumulative Total							(8,45)	(41,399)
	DECISION PACKAGE - PROPOSED									
21	0054	Agricultural Inputs (LO)	FN	L	-	-			2,000	28,000
22	0043	Malaria Control (LO)	HE	M	-	-			4,000	32,000
23		Operational Program Grants (OPG)	SD	M	0.30	-			1,000	33,000
		Summary by Personnel Intensity: Low (2 projects) Medium (1 project) High ( )							(0.30)	(3,000)
		Cumulative Total							(8.75)	(48,399)

MISSION OPERATING EXPENSE FUNDED PERSONNEL REQUIREMENTS  
(in work years xx.x)

	FY 78		FY 79		FY 80 Mark		FY 80 Minimum		FY 80 Proposed	
	USDH	FNDH	USDH	FNDH	USDH	FNDH	USDH	FNDH	USDH	FNDH
MISSION SPECIFIC PERSONNEL:										
Directly Related to Activities*	3.65	3.25	8.10	7.50	8.45	8.50	8.45	8.50	8.75	9.25
Policy, Direction & Management	2.60	0.50	4.40	3.00	7.55	7.50	5.55	5.50	7.25	6.75
Financial Management	0.10	-	1.00	2.00	1.00	2.00	1.00	2.00	1.00	2.00
Mission Support	-	1.00	-	2.50	-	3.50	-	3.50	-	3.50
IDI's	-	-	0.50	-	1.00	-	1.00	-	1.00	-
OTHER (Specify)	-	-	-	-	-	-	-	-	-	-
TOTAL	6.35	4.75	14.00	15.00	18.00	21.50	16.00	19.50	18.00	21.50
END OF YEAR CEILING	12	7	Total 19	16 + 20 = 36	20 + 24 = 44	Total 44	16 + 20 = 36	Total 36	20 + 24 = 44	Total 44

NON-MISSION SPECIFIC PERSONNEL

	Auditor General & IIS		Other (Specify): Reg. Mal. Adv.		TOTAL	
	0.75	0.25	-	1.00	0.50	1.00
TOTAL	0.75	0.25	-	1.00	0.50	1.00
END OF YEAR CEILING	1	0	Total 1	1 + 0 = 1	Total 1	1 + 0 = 1

\*From Table V.

OPERATING EXPENSE BUDGET

EXPENSE CATEGORY	LINE NO.	OBJECT CLASS	EXPENSE RELATED TO	FY 1978		FY 1979		MARK	FY 1980				
				UNITS	\$	UNITS	\$		UNITS	\$	UNITS	\$	
PERSONNEL	01			-	-	-	-	-	-	-			
U.S. Direct Hire	02		USDH Workyears	7.1	474.9	15.1	740.1	19.1	976.6	17.1	819.6	19.1	976.6
U.S. Citizens Basic Pay	03	110	USDH Workyears	7.1	236.9	15.0	484.9	19.0	592.8				
Part-time, Temp. U.S. Basic Pay	04	112	USDH Workyears	0.1	2.6	0.1	3.2	0.1	3.2				
Differential Pay	05	116	USDH Workyears	7.1	47.4	15.0	97.0	19.0	118.6				
Living Allowances	06	118	USDH Workyears	-	-	-	-	-	-				
Other Pay	07	119		-	-	-	-	-	-				
Education Allowances	08	126	No. of Dependents	14	4.5	20	17.0	27	23.5				
Retirement	09	120	USDH Workyears	7.1	16.6	15.0	33.9	19.0	41.5				
Transportation/Travel	10				166.9		104.1		197.0				
Post Assignment - Travel	11	212	No. of Movements	40	(39.0)	14	(13.2)	19	(18.0)				
Home Leave	12	212	No. of Movements	3	(6.0)	7	(13.2)	33	(62.4)				
Post Assignment/Home Leave Freight	13	22			(100.7)		(42.0)		(85.6)				
R & R	14	215	No. of Movements	14	(7.8)	33	(18.7)	21	(11.6)				
Education Travel	15	215	No. of Movements	3	(3.6)	3	(7.2)	4	(9.6)				
Medical Travel	16	215			(5.0)		(5.0)		(5.0)				
Other Travel	17	215			(4.8)		(4.8)		(4.8)				
Other Personnel Benefits	18				-		-		-				
Local Employees	19		FNDH Workyears	5.6	6.7	16.1	18.6	22.6	25.7	20.6	23.2	22.6	25.7
Basic Pay	20	114	FNDH Workyears	5.0	4.4	15.5	12.7	22.0	17.4				
Overtime, Holiday Pay	21	115	FNDH Workyears	0.6	0.4	0.6	0.4	0.6	0.4				
Other Pay (CSR)	22	119			0.3		0.9		1.2				
Personnel Benefits	23	129	FNDH Workyears	5.0	1.6	15.5	4.6	22.0	6.7				
Benefits for Former Personnel	24	13			-		-		-				
Contract Personnel	25		Workyears	-	-	-	-	-	-				
PASA Technicians	26	258	Workyears	-	-	-	-	-	-				
Other Reimbursable Details	27	111	Workyears	-	-	-	-	-	-				
Experts and Consultants	28	113	Workyears	-	-	-	-	-	-				
Other Technicians	29	255	Workyears	-	-	-	-	-	-				
HOUSING	30				270.5		178.3		175.2		107.6		175.2
Acquisition of Land and Structures	31	320	No. of Residential Units	-	-	-	-	-	-				

OPERATING EXPENSE BUDGET

EXPENSE CATEGORY	LINE NO.	OBJECT CLASS	EXPENSE RELATED TO	FY 1978		FY 1979		FY 1980		PROPOSED
				UNITS	\$	UNITS	\$	UNITS	\$	
HOUSING Continued										
Rent	32	235	No. of Residential Units	12	24.6	16	34.0	20	91.3	
Utilities	33	235	No. of Residential Units	12	7.0	16	16.8	20	24.0	
Renovation	34	259	No. of Residential Units	8	16.0	4	8.0	4	8.0	
Maintenance	35	259	Total Square Feet	12	1.9	16	4.8	20	7.2	
Residential Furnishings and Equipment	36				209.3		75.0		30.0	
Replacement	37	311	No. of Residential Units	12	(146.0)	4	(48.0)	-	(-)	
Transportation	38	311			(14.7)		(12.0)		(24.0)	
Quarters Allowance	39	22			(48.6)		(15.0)		(6.0)	
Mission Director	40	172	No. of Residential Units	-	-	-	-	-	-	
Rent	41				11.7		19.7		14.7	
Utilities	42	235			(1.0)		(6.0)		(6.0)	
Renovation of Residence	43	235			(0.7)		(1.2)		(1.2)	
Maintenance of Residence	44	259			(-)		(2.0)		(-)	
Supplies and Materials	45	259			(0.5)		(0.5)		(0.5)	
Furniture Procurement	46	26			(0.1)		(0.1)		(0.1)	
Official Residence Allowance	47	311			(-)		(6.0)		(3.0)	
Official Residence Allowance	48	254			(0.2)		(0.2)		(0.2)	
Representation Allowance	49	252			(0.5)		(1.5)		(1.5)	
Vehicles	50				(XXX)		(XXX)		(XXX)	
Acquisition	51	312	Vehicles	1	(6.5)	1	(-)	-	(-)	
Operation/Maintenance	52	259	Vehicles	1	(2.2)		(2.2)		(2.2)	
Portion of Line 31-52 for Program Funded People	53				-		-		-	
OFFICE OPERATIONS	54				113.4		177.9		148.8	141.0
Acquisition of Land and Structures	55	320			-		-		-	
Rent	56	234			-		-		-	
Utilities	57	234			-		-		-	
Renovation	58	259			-		-		-	
Building Maintenance	59	259			-		-		-	
Office Furnishings and Equipment	60	310			34.6		32.9		-	
Additions to Inventory	61	310			-		-		-	
Replacement	62	310			-		-		5.8	

OPERATING EXPENSE BUDGET

EXPENSE CATEGORY	LINE NO.	OBJECT CLASS	EXPENSE RELATED TO	FY 1978		FY 1979		MARK	FY 1980	
				UNITS	\$	UNITS	\$		UNITS	\$
OFFICE OPERATIONS Continued										
Other Equipment	63	319			-		-			
Transportation (Freight)	64	22			14.9		14.2			
Communications	65	230			3.0		9.0			
Security (Guard Services)	66	259			4.1		10.7			
Printing and Reproduction	67	24			0.4		0.6			
Operational Travel	68				26.5		30.0			
International	69	210			(23.5)		(24.0)			
Domestic	70	210			(3.0)		(6.0)			
Charter/Contract Transportation	71	259			3.5		6.0			
Vehicles	72				3.3		11.0			
Addition	73	312	No. of Vehicles	1	(NC)	1	(6.0)			
Replacement	74	312	No. of Vehicles	-	(-)	-	(-)			
Maintenance	75	259	No. of Vehicles	2	(0.9)	3	(1.4)			
Automotive Supplies and Materials	76	26	No. of Vehicles	2	(2.4)	3	(3.6)			
Other Supplies and Materials	77	26			4.6		8.0			
FAMS	78	257			18.5		55.5			
Other U.S. Government Reimbursements	79	258			-		-			
Other	80	259			-		-			
Portion of Lines 55-80 for Program Funded People	81				-		-			

OPERATING EXPENSE BUDGET

EXPENSE CATEGORY	LINE NO.	FY 1978	FY 1979	FY 1980	
				MARK	PROPOSED
TOTAL OPERATING EXPENSE BUDGET		865.5	2,114.9	1,326.3	1,326.3
Reconciliation		319.4	671.3	816.7	
Deduct from item 87 items not funded from Mission's allotment:					
Object Class 11	83	204.3	581.9	711.4	
Object Class 12	84	16.6	33.9	41.5	
Object Class 13	85	-	-	-	
Net FMS (from line 78)	86	18.5	35.5	63.8	
Other - Explain on Attachment	87	-	-	-	
Net Allotment Requirements	88	546.2	443.6	509.6	
Operational Year Allotment Requirement by Quarter					
First Quarter	89		97.6		
Second Quarter	90		57.8		
Third Quarter	91		224.6		
Fourth Quarter	92		63.6		

ADDITIONAL SCHEDULES AND ANALYSES	Attached	
	Yes	No
Use of Trust Funds		X
ADP Equipment		X
Budget Line 31 Detail		X
Budget Line 55 Detail		X
Budget Line 80 Detail		X

## Commentary on Operating Expense and Workforce

USAID/Sri Lanka's requirements for USDH staff partly reflect managerial weaknesses in the GSL, but stem mainly from AID's own operating procedures and requirements. Although there are several countries with assistance programs as large as ours, there are none which require the same intensity of administrative personnel. The U.S. system is predicated on donor control of the assistance process.

In terms of all Mission personnel, USAID/Sri Lanka is a young Mission, and we are slowly building up a cadre of FNDH to serve the program. There are well-trained English speaking professional and clerical personnel available. We are projecting expansion of FNDH personnel, but it take time to bring FNDH on board and train them in the AID system. Our USDH expansion will allow sufficient staff to train FNDH.

As noted earlier, the Embassy is not at this time giving MQDE approval for the 21 USDH staff requested for FY 1980. They are adopting a wait and see attitude. We believe that should the Embassy not ultimately approve the 21 requested positions, the impact will be on the FY 1981 and 1982 programs rather than on the projects listed for FY 1980.

The Mission has several activities not directly related to its program which require staff. These include servicing centrally funded programs particularly in population, staff work for the Colombo Plan, coordination with private agencies, liaison with PVOs interested in working in the Maldives, and disaster relief.

Work force Requirements - Schedule 2 - New Positions Thru FY 79 [001] Sri Lanka/USAID Country/Organization [002]

Direct-Hire Only

1	Position Title	PP AI VA N D K	GR R A D E	Est. Date S/PAR to be sent to AID/W	Date Employee required on duty	Earliest lastest 009 010	Required AISC's for new position			New colling required 016 017	Made clearance required 019 020	Will IDI graduate be assigned to position 022 023	Remarks [022] No IDs are presently assigned to USAID/Sri Lanka
							Primary 012	Secondary 013	Tertiary 014				
1	ASST DIR		PBR 02	Submitted 3/78	7/78	9/78	0340.03			X			
2	ASST AG DVL OFF		PBR 04	Submitted 3/78	7/78	9/78	0136.21		X				
3	CTRL		PBR 04	Submitted 3/78	7/78	9/78	0505.02		X				
4	PROG ECON		PBR 03	Submitted 3/78	7/78	9/78	0110.01		X				
5	PROJ MGR AGRI		PBR 03	5/78	7/78	9/78	0401.15		X				
6	BHVRL SCI ADV		PBR 05	5/78	7/78	9/78	0101.49		X				
7	ASST PROG OPT		PBR 05	9/78	1/79	6/79	0345.03		X				
8	AG ECON		PBR 06	9/78	1/79	6/79	0110.35		X				
9	CP PROJ DVL OFF		PBR 04	9/78	1/79	6/79	1160.09		X				
10	CAP PROJ IMP OFF		PBR 04	9/78	1/79	6/79	1160.11		X				

May be encumbered by a graduate IDI  
May be encumbered by an IDI

78

SPECIAL CONCERNS

TABLE VI - FUNDING FOR SPECIAL CONCERNS

Decision Unit  
USAID/Sr1 Lanka

Obligations (\$ 000)

PROJECT NUMBER AND TITLE	APPROP CODE	SPECIAL CONCERN CODE	FY 78		FY 79		FY 80	
			PROJECT TOTAL	SPECIAL CONCERN	PROJECT TOTAL	SPECIAL CONCERN	PROJECT TOTAL	SPECIAL CONCERN
- PL 480 Title II (CARE)	-	PVOU	5,684	5,684	5,164	5,164	6,324	6,324
- YMCA Nation-Wide Rural Dev. (FY 77 OPG)	SD	PVOU	-	-	-	-	-	-
0040 Rice Research (\$3,800 in FY 76)	FN	RBSA	-	-	-	-	-	-
0048 On-Farm Water Mgt. (\$800 in FY 77)	FN	RBSA	-	-	-	-	-	-
- Women in Development (PDS Grant)	SD	WID	22	22	-	-	-	-
0058 Coarse Grains & Grain Legumes	FN	RBSA	-	-	-	-	1,000	3,000
0056 Mahaveli Basin Development	FN	ENVR	-	-	-	-	15,000	2,000
0055 Reforestation & Watershed Management	FN	ENVR	-	-	-	-	2,000	1,000
0055 Reforestation & Watershed Management	FN	ENVR	-	-	-	-	2,000	1,000
- Operational Program Grants	SD	PVOL	-	-	-	-	1,000	1,000

## SPECIAL CONCERNS

Energy Technologies: In FY 80 the Mission is proposing the new Reforestation and Watershed Management which is designed to retard depletion of the dry zone forests by reforesting 15,000 acres of denuded lands and planting 25,000 acres of fuelwood forest to meet rural energy needs. Ninety-four percent of Sri Lanka's rural families use fuelwood for cooking consuming approximately 4 million tons of fuelwood annually. This element of the project will serve to renew a major indigenous source of energy thereby assuring these rural families of continuous supplies of fuelwood thus preventing or delaying their switching to kerosene which is several times more expensive than fuelwood.

Environment: The Mission is proposing two projects in FY 1980 which will have significant impact on the environment. The Mahaweli Basin Development Scheme will clear about 350,000 acres of largely virgin dry zone forest for agriculture and settlement. The project will alter the ecological regimes in the area with particularly strong effects on wildlife. Replacing the current dry and wet seasons with year-round irrigation will also affect plant life, soil insects and other small organisms. The government of Sri Lanka is aware of the environmental effects of the Mahaweli project and has requested USAID assistance for a major environmental study. This study is expected to begin in 1978.

The second project affecting the environment is the proposed reforestation and watershed management project. The Sri Lankan Government has become concerned with the depletion of the forests in both the upper mountains and the dry zone and with growing problems of soil erosion and water run-off in the mountains. USAID assistance has been requested for a program of reforestation and watershed management. This project's purpose is to enhance the environment.

U.S. Private and Voluntary Organizations: The Mission is presently assisting two U.S. PVO's in Sri Lanka. CARE is assisted through the PL 480 Title II program and the Young Men's Christian Association (YMCA) with an OPG.

AID has contributed nutritional food supplements (e.g., wheat flour, dried milk, cooking oil and corn-soya) valued at US \$ 66.7 million since the beginning of CARE's program in 1956. These commodities are distributed through the joint CARE/GSL supplemental feeding programs carried out in conjunction with the Ministries of Education and Health. In FY 1978 USAID is providing nutritional foodstuffs valued at US \$5.7 million (excluding freight costs) for distribution through the CARE/Ministry of Health maternal/child health program (US \$3.1 million). The school feeding program currently involves 950,000 recipients (75% of the age group) who are enrollees in primary grades one through five in 7,362 schools throughout Sri Lanka. These children receive 8 biscuits daily (7.1 grams of protein and 185 calories). The maternal/child health program is an integral part of the Ministry of Health's National Family Health Scheme. This program currently involves 340,000 recipients who are pre-school children and lactating mothers who receive a take-home ration of 50 grams of nutritionally fortified weaning food daily.

In FY 77 an OPG for the YMCA Nation-wide Rural Development program was authorized for \$383,164. The purpose of this OPG, is to assist the YMCA of Sri Lanka to implement a 3-year rural development program designed to make each of the 21 YMCA centers a dynamic program development center. This program is

designed to develop the leadership, provide training, and stimulate the motivation required for developing and implementing projects which will assist the rural population to become more self-reliant and to enjoy a higher standard of living.

Applied Research: The USAID supported Rice Research Project is focused on three principal areas of applied research related to paddy production in Sri Lanka. The project is being implemented in cooperation with the International Rice Research Institute under a host country contract with the GSL. Principal areas of emphasis are: 1) breeding for varietal improvement; 2) cropping system research; and 3) an expansion of the regional field trial activities.

USAID is also supporting a limited effort involving research regarding handling of irrigation water at the farm level. Research activities will be focused on field channel layout alternatives and land shaping possibilities for more effective control and use of irrigation water at the farm level.

For FY 1980, USAID is proposing a project in coarse grains and grain legumes. A portion of the project activity will be directed at agronomic research, particularly involving varietal development work with maize and finger millet. Project funds will be used for technical assistance, training and some commodities to support the research program.

Women in Development: In FY 78 the USAID provided a grant of \$21,000 (PDS funds) to the University of Sri Lanka to undertake a research activity on the status of women in Sri Lanka. The purpose of this project is to promote a conscious concern of the role women play in the development process. This activity involves the collection of and organization of existing information so that it will be more readily available to development planners as well as to provide a preliminary assessment of woman's contribution to the household and national economies.

MISSION EVALUATION SCHEDULE

DECISION UNIT: USAID/Sri Lanka

Mission Evaluation Schedule for Operational Year and Budget Year

(1) Project Title and Number/Subject	(2) Number & Date of Last PAR/PFS Submitted	(3) Proposed date of next PFS	(4) Period to be Covered	(5) Identification of Special Evaluations & Purpose for them	(6) Remarks
0040 Rice Research		8/78	7/77-7/78		
0041 Paddy Storage & Processing -II		7/79	1/78-6/79		
0042 Mahaweli Ganga Irrigation		7/80	6/77-6/80		
0043 Malaria Control		10/78	8/77-9/78		
0045 Agricultural Base Mapping		11/78	11/77-10/78		
0048 On-Farm Water Management		7/79	7/77-6/79		
0049 Agriculture Education Dev.		9/80	9/79-8/80		
0051 Agricultural Inputs - II		10/79	10/78-9/79		
0044 Development Services & Trng.		9/79	9/78-8/79		
0052 Paddy Storage & Proc. - II		1/80	1/79-12/79		
0057 Water Management		7/80	7/79-6/80		
0058 Coarse Grains & Grain Legumes		1/81	1/80-12/80		
0056 Mahaweli Basin Development		9/81	9/80-8/81		
0055 Reforestation & Watershed Mgt.		10/81	10/80-9/81		

PL 480 TITLE I

PL 480 TITLE I BUDGET SUBMISSION FOR FY 1980

PL 480 Food Aid Requirement: For FY 1980 the Mission endorses a PL 480 level of 75,000 metric tons of wheat flour to be financed under standard concessionary loan terms. This level is a reduction from the 200,000 tons provided in FY 1977 and FY 1978. The Mission is also proposing that the FY 79 PL 480 wheat flour levels be reduced to 75,000 tons.

Mission's judgment is based on the following factors:

-- The CY 1977 paddy harvest was 1.68 million tons of paddy. With 60 percent of the CY 1978 crop in, we are projecting a 1978 paddy harvest of 1.86 million tons. Both of these are record harvests averaging 27 and 40 percent increases respectively over the previous four year average.

-- The 1977 Central Bank report states that "root crops have declined on account of increased availability of subsidized wheat flour."

-- Statements by experienced agriculturalists, whose judgments we respect, to the effect that large availabilities of subsidized wheat flour have significant disincentive effects on domestic producers of coarse grains.

-- Evidence that as a result of subsidized wheat flour prices there has been considerable substitution of wheat flour for rice. This in turn has aggravated GSL storage problems which is acute as a result of their effective price support program. Estimated substitution is at the rate of 20 - 25,000 tons per month.

-- The continued subsidized wheat flour price policy by the GSL. A recent price increase to Rs. 72 cents per lb. is still only 44 percent of the landed cost of flour. This price is also only 50 percent of the cheapest rice on the market. The effects of the resultant price distortions are pointed out above. In addition, this continued large subsidized consumption also represents a considerable drain on the national economy. At current import rates the wheat flour subsidy will cost the government nearly \$70 million in 1978.

-- The country's terms of trade have improved by 76 percent over 1975. In 1977 Sri Lanka had a trade surplus of Rs. 631 million. Taking account of receipts for services and net transfer payments, the current account balance of payments showed an unprecedented surplus of Rs. 1,259,000 (\$79.9 million).

See the "Preliminary Analysis of PL 480 as a Development Resource in Sri Lanka" set forth on pages 48 - 64 in USAID/Sri Lanka's FY 79 ABS for further details.

COUNTRY/PROGRAM: Sri Lanka

PL 480 Title I Agreements and Shipments  
(MT Thousands & \$ Millions)

Commodity	Past Year Estimate				Current Year Request			
	Agreements (\$) (MT)	Shipments (\$) (MT)	Carryover to FY 79 (\$) (MT)	FY 79	Agreements (\$) (MT)	Shipments (\$) (MT)	Carryover to FY 80 (\$) (MT)	FY 80
Wheat Flour	35.4	200	35.4	200	-	-	-	-
					8.7	75	8.7	75
Budget Year Request								
Commodity	Agreements (\$) (MT)	Shipments (\$) (MT)	Carryover to FY 81 (\$) (MT)	FY 81				
Wheat Flour	6.1	50	6.1	50	-	-	-	-
Wheat Flour	9.1	75	9.1	75	-	-	-	-
Wheat Flour	9.1	75	9.1	75	-	-	-	-
					Minimum			
					Mark			
					Proposed			

Prior Year (FY 77)  
Annual Year (FY 78)\*

Stock Situation  
(In thousands of MT)

Stock Situation  
(In thousands of MT)

Beginning Stocks	20	27
Production	-	-
Imports:		
Concessional	288	277
Non-Concessional	243	339
Consumption	524	546
Ending Stocks	27	97

Source: External Resources Division

\*Estimated

PL 480 TITLE II

## INTRODUCTION TO TITLE II PROGRAMS

This section of the ABS sets forth CARE's Multi-Year Plan for FY 1980-84, continuing the program beyond the present MYP which concludes at the end of FY 1979.

The Title II PL 480 Programs in Sri Lanka, for both of which CARE acts as the cooperating sponsor, are School Feeding (SF) and Maternal Child Health (MCH). CARE has been assisting the SF program in cooperation with the Ministry of Health since 1973.

The MCH program addresses the three predominant nutritional problems in Sri Lanka: Protein Calorie Malnutrition (PCM), Nutritional Anemia and Vitamin A deficiency. The 2nd and 3rd degree PCM rate is 43% among pre-school children. Through the monthly issuing of a nutritious supplement to medically selected pregnant and lactating mothers and pre-schoolers, the MCH program seeks to reduce the rate of 3rd degree malnutrition by 75% and the 2nd degree malnutrition by 50%. The MCH program is constructing a factory for local production of the nutritional supplement, which will be made commercially available at low cost.

Approximately 40% of Sri Lanka's primary school children suffer from nutritional deficiency. The primary school feeding program, through the delivery of a daily 60 gram nutritious ration to targeted schools, seeks to maintain and improve the nutritional status of primary school children in targeted schools. Nutrition education and a primary school nutritional surveillance system are integral parts of this program.

MYP PROPOSAL

COUNTRY : Sri Lanka  
MYP PERIOD : FY 1980-84  
PREPARED BY: Justin R. Jackson  
Acting Director  
CARE-Sri Lanka

PROJECT TITLES:  
1. Thriposha Feeding  
2. Thriposha Production  
3. Thriposha Marketing

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1.0 INTRODUCTION

1.1 General

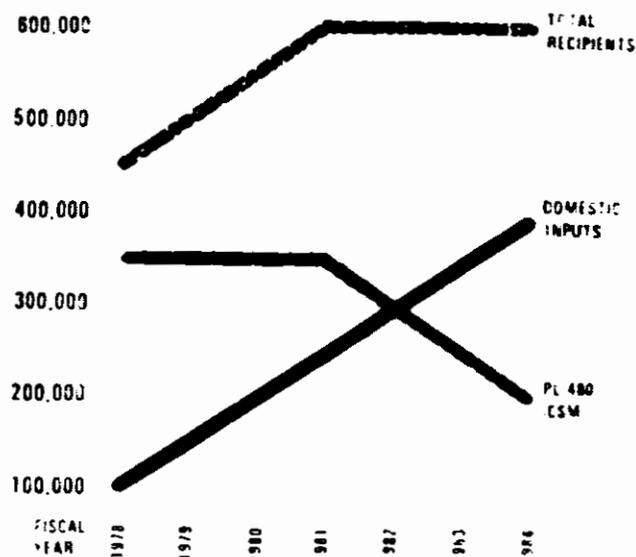
This Thriposha Program Multi-Year Plan combines three inter-related projects: Thriposha Feeding, Thriposha Production and Thriposha Marketing. The first is a nutrition intervention project designed to distribute Thriposha to medically selected beneficiaries throughout Sri Lanka. The second is a project to formulate and produce a low cost, indigenous, high protein, cereal-based product, Thriposha, which is blended with ICSM, a PL 480 commodity. The third project is the commercial marketing of Thriposha through retail outlets as a low-cost nutritious product. All three projects are undertaken by the Ministry of Health in cooperation with CARE. When referring to all three projects in this document the terminology MCH Program will be used.

1.2 Beneficiary and Commodity Levels

The beneficiary level of the Thriposha Feeding Project has been increasing at the rate of 50,000 recipients per year since FY 77. The project will continue to expand until it reaches a maximum recipient level of 600,000 beneficiaries during FY 81. Thereafter the recipient level will remain constant. The quantity of PL 480 commodities for the project has remained constant since FY 77 and will continue at the same level through FY 81 at which time they will phase down. (PL 480 commodities should be completely phased out by FY 88.) With PL 480 commodities at a constant level, the recipient expansion is being accomplished by means of indigenous commodities. Chart I graphically shows the relationship of recipients of domestic and PL 480 commodity inputs.

CHART I

RECIPIENT LEVELS



1.3 Beneficiary Categories

a. Maternal Child Health: Health Centers and Estates, Pre-School Children and Women

The MCH recipients attending Health Centers and living on estates for FY 80 will total 400,000 beneficiaries; for FY 81-84 they will total 490,000 beneficiaries. These recipients are medically selected by the medical and para-medical staff who identify expectant and lactating women and pre-school children requiring a nutritional supplement to their diet. The children are selected by means of a growth chart using weight-for-age norms. Nutritionally anemic women are identified by means of Talquist charts which assist to identify sub-normal hemoglobin levels.

b. School Feeding: Primary School Children

Primary school recipients, totalling 100,000 are children enrolled in those schools having the highest percentage of malnourished students that were identified by the National Primary School Nutrition Census conducted during 1973. A re-selection of schools will be undertaken during FY 79-80. Approximately 12% of all primary schools in Sri Lanka having about 9% of the total country-wide primary school enrolment are included in the project.

### c. Other Child: Social Service Institutions

The 10,000 beneficiaries who receive Thriposha in Social Service Institutions are selected on the basis of their low socio-economic status which is used for their admission to the institution. These institutions care for handicapped and deprived children. They include schools, orphanages and institutions for the physically and mentally handicapped. All children in such institutions are Thriposha recipients.

#### 1.4 Location of Beneficiaries

The latest census, undertaken in 1971, shows that the process of urbanization has accelerated in Sri Lanka, although 82% of the population still live in rural areas. Likewise, the recipients live primarily in rural areas (the exception being the social service institutions which are located primarily in urban areas). Within the rural population is the estate sector which makes up about 11% of the total country's population. They represent the population living and working on tea, rubber and coconut estates.

#### 1.5 Commercial Market

While the goal of the Thriposha Feeding Project is curative in nature the goal of the commercial marketing project is preventive. Though the present Thriposha Feeding Project is reaching a significant number of beneficiaries, greater impact can be obtained if Thriposha or similar products are available on a wider scale as a commercially, low cost, high quality product. During FY 79, a six-month commercial test market is to be undertaken to determine the commercial feasibility of the product.

#### 1.6 FY 78 Title II Evaluation

During FY 78, the Thriposha Feeding Project was evaluated by an AID sponsored Title II Evaluation Team (Robert Nathan Associates). This Team found that malnutrition was a serious problem in Sri Lanka and was particularly impressed with the project's efforts to utilize local commodities.

### 2.0 PROJECT DESIGN

#### 2.1 Statement of Problem

There are three major nutritional problems in Sri Lanka: Protein Calorie Malnutrition (PCM), Nutritional Anemia and to a lesser extent, Xerophthalmia (Vitamin A deficiency). The Thriposha Program's goal is to eradicate these nutritional problems (see Final Goal 2.2) by providing a nutritional supplement to targeted malnourished persons in Sri Lanka.

### 2.1.1 Protein Calorie Malnutrition

The PCM problem has been clearly identified by the 1975/76 Nutritional Status Survey conducted by the Ministry of Health with assistance from the Center for Disease Control (CDC), CARE and AID. The survey documented the extent of malnutrition in pre-school children aged 6-72 months:

- a. Acute undernutrition (wasting: weight-for-height) averaged 6.6%.
- b. Chronic undernutrition (stunting: height-for-age) averaged 34.7%.
- c. Concurrent acute and chronic under-nutrition (stunting and wastage) averaged 3.4% on a weighted average basis throughout the Island.
- d. On the basis of weight-for-age, 42% of the pre-school population (approximately 1,000,000) in Sri Lanka falls into the 2nd and 3rd degree categories of malnutrition and are in urgent need of nutritional intervention.

### 2.1.2 Nutritional Anemia in Women

The problem of Nutritional Anemia in women is particularly acute at the time of conception, and during pregnancy and lactation when the mother's nutritional requirements are greatest. Studies by the National Medical Research Institute (MRI) during 1972/73 revealed that 250,000 pregnant and lactating women required iron fortification. Of these women over 80,000 were severely anemic and required in addition, a protein-energy supplement. In addition, 24% of the pregnant women in Sri Lanka gave birth to infants weighing less than 2.5 Kgs., and 38% of the women gained less than 4.5 Kgs. during pregnancy, confirming the inadequacy of the mother's nutrient intake during pregnancy.

### 2.1.3 Vitamin A Deficiency

Xerophthalmia is a problem of less magnitude but is associated with PCM. The 1975/76 Nutrition Status Survey confirmed the presence of clinical symptoms (Bitot's Spots) of Xerophthalmia in 1.1% pre-school children with two areas of the country (Matara and Kegalle) having a prevalence exceeding the World Health Organization's (WHO) minimum criteria of 2%.

## 2.2 Final Goal

The final goal of the MCH Program is the reduction by 75% of the incidence of 3rd degree malnutrition among infants, and pre-school and school children; reduction by 50% of the incidence of 2nd degree malnutrition among infants and pre-school children in the program within a period of five years. It should be noted that the pregnant and lactating women participating in the program are provided with the Thripocha supplement in the nutritional interest of the unborn, new born and infant.

### 2.3 Intermediate Goal

The MCH Program's intermediate goal is the increased daily consumption by 50 grams containing 10 grams of protein and 190 calories for combating PCM; 9 mg. of Iron, 1.1 mg. Folic Acid and 2 mcg. Vitamin B<sub>12</sub> for meeting the Nutritional Anemia problem; and 850 IU Vitamin A as prophylaxis against Xerophthalmia through a daily 50 gram ration of Thriposha received by targeted malnourished pregnant and lactating women, infants, pre-school and primary school children.

### 2.4 Project Activity Targets

#### 2.4.1 Thriposha Feeding and Production

The following recipients are targeted to receive a monthly ration of 1.5 kilos (3.3 lbs.) of Thriposha:

	<u>FY 80</u>	<u>FY 81</u>	<u>FY 82</u>	<u>FY 83</u>	<u>FY 84</u>
	(in Thousands)				
Medical Centers, Health Stations and Estates	440	490	490	490	490
Primary Schools	100	100	100	100	100
Social Service Institutions	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>
TOTAL	<u>550</u>	<u>600</u>	<u>600</u>	<u>600</u>	<u>600</u>

#### 2.4.2 Thriposha Marketing

The Thriposha Commercial Market Research has been designed in two phases: Phase I consists of product concept research, Thriposha being provided free to 955 housewives to obtain their reaction to the product. This phase was undertaken during January-March 1978. The Phase I research results are expected May, 1978. Phase II research (scheduled for FY 79) consists of an actual test market.

Both Phase I and Phase II research will provide an indication of consumer reaction to Thriposha. Until Phase I and II information is available, it is difficult to estimate the quantity of Thriposha that might be sold. For the test market, however, the number of households in the suggested test market area (Kandy and Matale in the central region and Galle and Matara in the south) is being used to project possible monthly consumption. Anticipating that 15% of the households will purchase four pounds of Thriposha per month, it is estimated that 1.5 million pounds (1,100,000 pounds of ICSM and 400,000 pounds of local commodities) of Thriposha will be used during the six-month test market. While PL 480 Title II (ICSM) will be used for the test market it will not be used for the regular commercial market.

In the absence of market research data, the following tentative targets have been set for the Thriposha commercial sales:

<u>Fiscal Year</u>	<u>Metric Tons</u>
1980	1,800
1981	3,600
1982	7,200
1983	7,500
1984	7,800

#### 2.4.3 Field Evaluation

Four CARE Nutrition Educators will allocate 50% of their time visiting Centers where Thriposha is distributed to the medically selected recipients. It is planned that they will make approximately 1,000 visits per year. During these visits they will help evaluate the intermediate goals of the program by measuring the nutritional improvement of the recipients.

### 3.0 PROJECT OVERVIEW

#### 3.1 Project Development

The MCH Program, initiated in 1973, was designed to provide the medically selected and low income groups with a high protein, nutritious, cereal-based product. Initially PL 480 Title II Wheat Soy Blend (WSB) was imported, repacked and distributed as Thriposha in packets containing a two-week ration (750 grams). Beginning in 1974, Thriposha consisted of a cereal (sorghum) that was baked, ground and blended with the WSB. In 1976, it was decided to change from a wheat based product to a corn based product (ICSM), since corn is grown in Sri Lanka and wheat is not. At the beginning of 1976, processing equipment was imported by CARE (with financial assistance from USDA/AID and technical assistance from the Department of Agricultural Engineering, Colorado State University) and installed at Kundasale to cook (extrude) both locally grown soybeans and corn. During FY 78 it was decided by the Ministry of Health and CARE (and approved by the Ministry of Finance and the Greater Colombo Economic Commission) to relocate the processing site in Colombo. This decision was based on a feasibility study which indicated that the total cost of transporting the local PL 480 Title II commodities and the finished product could be minimized by locating the plant in Colombo. Presently, local commodities are processed at Kundasale and transported 90 miles to Colombo where they are blended with ICSM and packed into attractive plastic bags bearing the well-known picture of the healthy Thriposha-fed baby.

The site for the new consolidated operation has been selected at Kandana, Ja-Ela, 11 miles north of Colombo, approximately half way to the International Airport. The 7-acre site is ideally situated having direct access to rail and road transport. The new processing facilities will include stores for both raw materials and finished products. The heart of the system is the Brady Cooker/Extruder, a low cost processor. The consolidated system will consist of storing grain, blending and grinding of

ICSM, vitamin-mineral additives and packaging. Packaging will continue to be labor intensive with very strict standards of hygiene.

The Ministry of Health has played a central role in the development of the MCH Program by financing all in-country project costs including the procurement of indigenous commodities, processing operations and distribution expenses.

### 3.2 Project Strategy

#### 3.2.1 Relation to Host Government Objectives and Priorities

The Thripasha Program comes under the auspices of the Family Health Program of the Ministry of Health whose objective is to improve the quality of life of women and children in Sri Lanka. While the Thripasha Program is considered primarily as a nutritional intervention program for the maternal child health sector, it should also be viewed from an agricultural development perspective. The Thripasha Program is presently the largest consumer of soybeans and the second largest purchaser of corn in Sri Lanka. The Thripasha Program, by stimulating agricultural production and developing local markets, is making an important contribution by reducing Sri Lanka's dependence on imports. The annual requirements of local cereals and legumes for the Program will increase each year (See Section 4.4).

#### 3.2.2 Relation to other CARE Projects

The Thripasha Program supports the Ministry of Education/CARE School Feeding Project (refer 1.3) by providing 100,000 primary school students with a daily take-home ration. The Thripasha Program, through CARE's Applied Nutrition Service Project (ANSP) has provided nutrition education material to further the maternal child concept. The materials provided include posters and leaflets on nutrition and health care and aids for identifying and selecting recipients (Talquist charts, growth charts and scales). It is also related to CARE's Soy Foods Development Project (SFDP) which will be providing technical assistance for improving the Thripasha formulation and processing.

### 3.3 Project Continuity

The three-pronged Thripasha Program has been designed so that it will become self-sustaining by 1988. The Host Government's input is designed to increase each year, since the extension of the program and the phase out of PL 480 Title II commodities is made possible by the Host Government's inputs. CARE will continue to help with the planning and management of the program during the next five years and possibly until the program is completely indigenous. The Ministry of Health and the Ministry of Finance have cooperated in the development of this five-year program and have approved the program as outlined in this MYP.

### 3.4 Project Potential

The Government of Sri Lanka feels that the optimum recipient level of the free distribution program is 600,000. Given its limited financial resources and given the other constraints under which the program operates this is also felt to be the maximum effective levels which the Maternal Child Health infrastructure can support. Of the approximately one million pre-school children requiring a nutritional supplement, it is estimated that 450,000 can be effectively reached. Similarly, of the 250,000 pregnant women identified as moderately and severely nutritionally anemic, it is estimated that approximately 150,000 can be effectively reached through existing health channels.

The commercial marketing of Thriposha is expected to have broader distribution. It is premature to estimate the size of the marketing project. However, it is felt that if commodity and production costs are kept to the lowest possible levels, so that it will be within the economic reach of low income groups, the project should have a very significant nutritional impact.

### 3.5 Project Constraints

#### 3.5.1 Delivery System

The delivery of Thriposha to the Maternal Child Health recipients can only be as effective as the Health Service's delivery system. The Ministry of Health in 1976 found that 58.4% of all pregnant women received ante-natal care services. Likewise, it was found that only 45% of pre-school children were reached by Family Health Services.

#### 3.5.2 Local Commodities

The availability of local ingredients in sufficient quantities and their quality are additional constraints on the program. The quality of soybeans and maize is directly related to the storage practices utilized which in the past have not been directly under the Thriposha Program's management control. When the Program starts operating its own storage facilities at the new plant, the quality of these products will be improved through scientific storage procedures.

#### 3.5.3 Marketing Projects

The success of the commercial program will depend largely upon the availability of low cost raw materials. The National Soybean Project, which is presently restricting soybean cultivation to keep supply parallel with demand will assist the program to obtain its full requirements. Should domestic commodities be inadequate, one possible option available would be the use of Section 205 Title I of the Agriculture Trade Development and Assistance Act of 1954, as amended by Section 114 of 1977. This Act provides assistance to developing countries making the transition from Title II food assistance programs to economic

self sufficiency. This is made possible through the Title I sale of high protein blended foods where the repayment is waived for up to that part of the product value which is attributable to the cost of processing, enrichment and fortification. The use of Title I commodities, however, would be restricted exclusively to that quantity which is required to support a program not available from indigenous sources.

#### 3.5.4 Processing Capacity

The processing capacity of the new factory is a further constraint. The application of the Brady Extruder/Cooker for normal factory scale production was introduced for the first time in 1976. Certain production problems, therefore, may be encountered. With two processing lines and adequate spare parts on hand, however, such problems should be manageable.

#### 3.5.5 Budget Constraint

The Government of Sri Lanka is fully committed to supporting this program. Should the economy suffer a serious agricultural or economic set back, however, it could limit their financial input for the program.

#### 3.5.6 Other Constraints

Finally, other constraints are the availability of imported materials (such as vitamin/mineral premix, polythene resin and kraft paper), production of plastic bags, transport, packaging and civil disturbances which could each limit the production and distribution of Thripasha.

### 4.0 PROJECT IMPLEMENTATION

#### 4.1 Pre-Implementation Conditions

CARE operates in Sri Lanka under a Basic Agreement signed with the Government of Sri Lanka dated September 6, 1961. The Basic Agreement is supplemented by Annual Program Agreements, effective for 12-month periods (July 1 through June 30). Both the Basic Agreement and the Annual Program Agreements specify the conditions for carrying out CARE assisted programs. These conditions include those specified by AID Regulations 11.

Since the MCH Program is on-going, pre-implementation conditions are limited to aspects of the program which are presently being implemented. This is primarily the construction of the new facility in the Colombo area.

At the time of writing, the GSL is in the final stages of acquiring the site for the factory. Design specifications for the plant construction have also been finalized. Most of the equipment has been ordered from the United States and is being consolidated for ocean shipment.

#### 4.2 Implementation Plan and Schedule

The construction of the new Thripasha plant is expected to begin in May 1978, and completed within 4 to 6 months. A firm of Architects/Engineers has been commissioned to design the plant and supervise the construction. Tenders are being invited from only the eight most capable construction companies in the country. Considering the time required for equipment installation and start up, it is expected that the new plant will be commissioned by the end of FY 78. The plant has been designed to facilitate future expansion. The initial phase entails the construction of two 19,800 sq.ft. buildings. One building will contain two Brady/extruders with full capacity of 5,000 metric tons per year. Storage in the two buildings will total 35,000 sq.ft. A third building will be constructed (Phase II) in FY 80 to add another 19,800 sq.ft. of storage space. These facilities will be sufficient to meet the requirements through the end of FY 80. The anticipated rapid expansion of the marketing project and the gradual replacement of ICSM with local ingredients will necessitate the addition of further processing and storage facilities by FY 81. Tabled below are the anticipated storage and processing requirements for the MYP period:

F.Y.	Storage Capacity (Sq. ft)			Processing Capacity (MT/year)		
	MOH	COM	TOTAL	MOH	COM	TOTAL
1980	32,000	14,000	46,000	3,600	1,800	5,400
1981	38,000	27,000	65,000	4,500	3,600	8,100
1982	42,000	52,000	94,000	5,400	1,200	12,600
1983	47,000	53,000	100,000	6,300	7,500	13,800
1984	52,000	54,000	106,000	7,200	7,800	15,000

The Phase I processing capacity will be sufficient to meet the needs of the free distribution program through FY 81. Should the commercial program expand, as projected above, additional processing equipment will be required by FY 80. The projected processing capacity for FY 84 requires a minimum of 7 Brady/Extruders (at 75% rated capacity 9 Bradys would be required). However, it may be more suitable to use higher capacity (but more expensive) machines such as the Anderson or Wenger Extruders. To assist with the determination of whether to continue with the Brady or introduce another system, a team of experts from the food processing field should examine the program's requirements and make recommendations by FY 80. In either event, a new processing building (Phase III) will be required by FY 81).

The additional storage requirements can be met by adding new buildings or bulk storage silos. When deciding the type and location of storage, the transport aspect of the program will need careful consideration. Additional storage at the plant will require the transportation of the raw materials from the dry zone where they are grown, to the plant during the purchasing season. Since the national transport system is under heavy demand during the peak harvest season, it may be advisable to have additional storage in the dry zone itself. Consequently, the raw materials could be transported regularly throughout the year to the processing factory. Shortages in both processing and storage facilities may be encountered in FY 81. These anticipated shortages are due mainly to the assumed expansion of the commercial program. Thus, the decision on adding storage and processing facilities will be made by FY 80 when the success of the commercial program is better known.

#### 4.3 Technical Consideration

Technical consideration relates primarily to the processing factory; CSU under its contract with USDA/AID, provides technical assistance for this aspect of the program. In addition, Texas A&M University, under a separate contract with USDA/AID, provides commercial marketing assistance.

#### 4.4 Procurement Requirements

The procurement requirements for the project similarly relate to PL 480 (ICSM), local commodities (Corn & Soy), packaging materials, vitamin and minerals (V&M) and processing equipment. The anticipated commodity and packaging materials procurement requirement for the MYP period are tabled for both the free distribution to medically selected groups (MCH) and the commercial project. The Ministry of Health will cover all expenses for local commodities, vitamin and minerals and packaging materials for the Thripasha Feeding and Production projects. Consumers will cover all expenses for the Marketing Project.

#### Commodity Procurement Requirements

F.Y.	<u>MCH Project (MT/year)</u>				<u>Marketing Project (MT/year)</u>		
	<u>ICSM</u>	<u>Corn</u>	<u>Soy</u>	<u>V&amp;M</u>	<u>Corn</u>	<u>Soy</u>	<u>V&amp;M</u>
1980	6,300	3,200	1,200	50	1,600	600	25
1981	6,300	4,000	1,500	63	3,200	1,200	50
1982	5,400	4,800	1,800	76	6,400	2,400	100
1983	4,500	5,600	2,100	88	6,700	2,600	105
1984	3,600	6,400	2,400	100	7,000	2,700	110

## Packaging Materials Procurement Requirements

<u>F.Y.</u>	<u>MCH Program</u>		<u>Marketing Project</u>	
	<u>Plastic bags</u>	<u>Kraft bags</u>	<u>Paper boxes</u>	<u>Cartons</u>
1980	13,440,000	448,000	4,032,000	202,000
1981	14,662,000	489,000	8,064,000	403,000
1982	14,662,000	489,000	16,128,000	806,000
1983	14,662,000	489,000	16,800,000	842,000
1984	14,662,000	489,000	17,472,000	874,000

The expansion of the plant in FY 80 will require a wide range of machinery including extruders, reduction mills, dehullers, blenders and covering equipment. The cost of the machinery cannot be stated until the specifications are written. CARE will fund these capital development costs from donor funds.

### 4.5 Personnel Requirements

One full-time CARE International staff member is assigned to the project, assisted on a part-time basis by one other. As the program expands a second full-time International staff person may be required. Key personnel at the processing plant are also on the program's staff. They include two Technical Assistants and Quality Assurance Inspectors. A senior official of the Ministry of Health is also assigned to supervise the day to day monitoring of the recipient selection and Thripasha allocation.

### 5.0 PROJECT EVALUATION

#### 5.1 Final Goal

The final goal for the project has been stated earlier in Section 2.2. Two indicators will be used for measuring the effectiveness in achieving the final goal:

- a. Percentage of infants born with birth weights of 2.5 Kgs or more.
- b. Percentage of children showing a growth improvement as measured by their growth charts.

There are several critical assumptions which relate to the program's ability to meet the final goal of this program. The ability of nutrition intervention programs to contribute to improving the health and nutrition status of participating recipients is dependent on many factors outside the program's control. For example, if a child has parasites, does not receive proper immunization or is in generally poor health apart from the child's nutrition status, the impact of the nutrition intervention could be greatly diminished. Likewise, there may be macro-economic factors which can effect the program's impact such as:

- a. A worsening of the climatic conditions governing food production.
- b. Runaway inflation and a decline in real purchasing power.
- c. Reduction of hard currency reserves.
- d. A failure to maintain population control.

The economic impact of any combination of the above factors could require a revision of program strategy or an extension of the time required to achieve the goals. In connection with CARE's Annual Implementation Plan (AIP) and AID's Annual Estimate of Requirements (AER) the above factors will be assessed annually.

## 5.2 Intermediate Goals

The intermediate goals of the program have been stated earlier in Section 2.3. Four indicators to measure the attainment of the goals are:

- a. Percentage of women originally selected with signs of anemia (through means of the Talquist charts) who are no longer anemic.
- b. Percentage of infants born by mothers participating in the program with birth weights of 2,500 grams (WHO's international norm) or more.
- c. Percentage of children showing growth improvement (from 3rd to 2nd degree and 2nd to 1st degree malnutrition) as measured on their growth charts.
- d. Percentage of participants who indicate an increased consumption of 190 calories and 10 grams of protein as measured by a 24-hour dietary recall interview.

6.0 PROJECT FUNDING

6.1 CARE Managed

<u>F.Y.</u>	<u>Source</u>	<u>M/E</u>	<u>P/O</u>	<u>In Kind</u>	<u>Total</u>
1980	Ministry of Health	1,335,000	155,000	0	1,490,000
	CARE Donors	1,070,000	50,000	0	1,120,000
	PL 480 (ICSM)	0	0	2,331,000	2,331,000
	Ocean Freight	0	0	695,000	695,000
	<b>Total FY 80</b>	<b>2,405,000</b>	<b>205,000</b>	<b>3,026,000</b>	<b>5,636,000</b>
1981	Ministry of Health	1,635,000	180,000	0	1,815,000
	CARE Donors	200,000	60,000	0	260,000
	PL 480 (ICSM)	0	0	2,331,000	2,331,000
	Ocean Freight	0	0	695,000	695,000
	<b>Total FY 81</b>	<b>1,835,000</b>	<b>240,000</b>	<b>3,026,000</b>	<b>5,101,000</b>
1982	Ministry of Health	1,935,000	204,000	0	2,139,000
	CARE Donors	230,000	67,000	0	297,000
	PL 480 (ICSM)	0	0	1,998,000	1,998,000
	Ocean Freight	0	0	595,000	595,000
	<b>Total FY 82</b>	<b>2,165,000</b>	<b>271,000</b>	<b>2,593,000</b>	<b>5,029,000</b>
1983	Ministry of Health	2,175,000	235,000	0	2,410,000
	CARE Donors	265,000	77,000	0	342,000
	PL 480 (ICSM)	0	0	1,665,000	1,665,000
	Ocean Freight	0	0	496,000	496,000
	<b>Total FY 83</b>	<b>2,440,000</b>	<b>312,000</b>	<b>2,161,000</b>	<b>4,913,000</b>
1984	Ministry of Health	2,450,000	270,000	0	2,720,000
	CARE Donors	304,000	90,000	0	394,000
	PL 480 (ICSM)	0	0	1,517,000	1,517,000
	Ocean Freight	0	0	397,000	397,000
	<b>Total FY 84</b>	<b>2,754,000</b>	<b>360,000</b>	<b>1,914,000</b>	<b>5,028,000</b>

6.2. Non-CARE Managed

<u>F.Y.</u>	<u>Source</u>	<u>Type</u>	<u>Value</u>
1980	Ministry of Health	Administrative and Logistic Support	\$ 500,000
1981	Ministry of Health	Administrative and Logistic Support	\$ 575,000
1982	Ministry of Health	Administrative and Logistic Support	\$ 660,000
1983	Ministry of Health	Administrative and Logistic Support	\$ 760,000
1984	Ministry of Health	Administrative and Logistic Support	\$ 875,000

CARE: JRJackson:hp

## MYP PROPOSAL

COUNTRY : Sri Lanka PROJECT TITLE : School Feeding  
MYP PERIOD : FY 1980-84 PREPARED BY : June Magnaldi  
Field Representative  
CARE-Sri Lanka

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### 1.0 INTRODUCTION

#### 1.1 General

The Primary School Partnership Nutrition Program is a continuing supplementary feeding program managed by the Ministry of Education in cooperation with CARE. Highest priority is accorded by the Government of Sri Lanka to providing primary school children a daily nutritional supplement to improve their health and learning ability, and to promote school enrollment and attendance.

The scope of this program is being enlarged to include the provision of nutrition and basic health educational materials to schools, and the implementation of a primary school surveillance system to determine the nutritional status of school children and the impact of this feeding program.

#### 1.2 FY 1978 USAID Title II Evaluation

The evaluation of this program, conducted for USAID by Robert Nathan Associates during April 1978, found that the nutritional supplement was acceptable and popular, and that the extensive primary school network provided an effective delivery system for reaching malnourished children throughout Sri Lanka.

### 2.0 PROJECT DESIGN

#### 2.1 Statement of the Problem

Studies have shown the high incidence of malnutrition in Sri Lanka, its correlation to low income groups, and its prevalence among school children. School attendance and incidence of dropouts are also related to poverty and malnutrition. It is interesting to note that despite the use of different methodologies and target age groups (Sri Lanka households in general, primary school children and pre-schoolers), all three large scale studies described below found a fairly constant rate of malnutrition, i.e. 41-44 per cent, in the surveyed populations.

### 2.1.1 Malnutrition Among Low Income Groups

The most recent National Socio-Economic Survey (1969-70), concerning the economic and nutritional status of Sri Lankan families, found 44% to be deficient in protein and/or calorie intake. Furthermore, the low income families spent proportionately more on food. 43% of the families earned less than Rs.200 (US \$30.00) while another 37% earned less than Rs.400.00 (US \$60.00) a month. These families spent about 60% of their income on food, preeminently on cheaper commodities such as cereals and starchy staples, having limited nutritional value.

### 2.1.2 Malnutrition in School Children

The National Census of Nutritional Status of School Children, using arm circumference-for-height, found that 41% of the 1,122,773 children measured (the entire school population aged 6-12), fell below Sri Lanka's growth norms. This 1973 survey, conducted by the Sri Lanka Medical Research Institute, the Ministry of Education and CARE, found that "malnutrition, as evidenced by stunted growth, is pervasive throughout Sri Lanka". Based on this survey, schools having the highest percentage of malnourished children were included in the feeding program.

### 2.1.3 Protein Calorie Malnutrition in Pre-School Children

In the 1975-76 survey carried out by the US Center for Disease Control (CDC) the Ministry of Health and CARE, using the measurements of weight, height and arm circumference, second and third degree Protein Calorie Malnutrition was found in 42% of the children aged six months to six years. The CDC felt that while this survey was of pre-school children, it would serve as a reliable indicator of the overall nutritional status in the country.

It is significant to note that the 42% malnutrition figure closely corresponds with the rate of subnormal growth recorded by the 1973 census of primary school children. Furthermore, the CDC study found that malnutrition increased in the pre-school children as they grew older.

### 2.1.4 School-Aged Children Malnutrition Higher Than Pre-Schoolers

In a 1975 Colombo Hospital Study, weight, chest and head measurements were taken of 350 pre-school and primary school children. Second and third degree Protein Calorie Malnutrition was evidenced in 32% of the pre-schoolers and in 66.6% of primary school children, leading the researchers to observe: "There appears to be a progressive fall of nutritional status in the 5-10 age group". They also indicated: "It may be possible that the school child who has to contend with meal times that do not fit in well with family feeding times, who has a higher expenditure of energy and is more exposed to infection may suffer a shortfall in calories. It could also

be that with more emphasis placed on the problem of the pre-school child, and better MCH facilities afforded them, their nutrition has remained static, possibly showing nutritional dwarfism due to malnutrition in infancy".

#### 2.1.5 School Drop Outs Due to Poverty and Malnutrition

According to the findings of a 1975, Colombo YMCA study, sponsored by UNESCO and the International Bureau of Education, only 32% of the children in Colombo's poorest school districts complete sixth grade; and most drop out in fourth grade at age 10 because of poverty and malnutrition.

Although the government of Sri Lanka's primary goal in undertaking the school feeding program is to sustain and improve nutritional statics, the Ministry of Education recognizes the role the program plays in attracting and retaining children in school.

#### 2.2 Final Goal

The final goal of the School Feeding Program is the maintenance and improvement of the nutritional status of primary school children participating in the school feeding program.

#### 2.3 Intermediate Goals

Three intermediate goals for the program have been established:

- a. Increased consumption by 9 grams of protein and 285 calories through a supplementary food ration (60 grams) on 180 school days per year for the targeted primary school children.

The number of targeted school children by Fiscal Year are:

<u>FY 80</u>	<u>FY 81</u>	<u>FY 82</u>	<u>FY 83</u>	<u>FY 84</u>
1,250,000	1,300,000	1,350,000	1,400,000	1,450,000

During this five year period, it is anticipated that the number of schools will increase from 7,700 to 8,300.

- b. Improved administration by the Ministry of Education to plan and implement the school feeding program.
- c. Improved health and nutritional practices among primary school children.

## 2.4 Project Activity Targets

### 2.4.1 Nutritional Supplement for Children - Grades 1-5

Following the Ministry of Education's lowering of the primary school enrollment age from six to five years in FY 79, the program recipient level was increased from 950,000 to 1,250,000 to incorporate the five year olds. In recognition of the fact that the younger children represent the most nutritionally vulnerable group, the government accords paramount importance to providing a nutritional supplement to primary school children, commencing with the five year olds (which the government calls "pre-first graders"). Starting in FY 80 with 1,250,000 recipients, the number of children will increase by 50,000 annually, permitting the following categories to be absorbed into the program: 1) schools in nutritionally deprived sectors such as estates; 2) new schools built to serve the massive (600,000 acre) Mahaveli irrigation and colonization scheme; and 3) increased school enrollment due to population growth. The surveillance system described in Section 2.4.5 will be used to determine schools to be included in the feeding program.

In FY 80, with the arrival of additional food processing equipment, the ration will be increased from 44.4 grams containing 180 calories and 8 grams of protein, to 60 grams containing 285 calories and 9 grams of protein. The Sri Lanka Medical Research Institute estimates that the nutritional shortfall for primary school children is 300-400 calories and 5-10 grams of protein per day. Thus, the improved 60 gram ration goes considerably further towards meeting the nutritional shortfall than the previous ration.

### 2.4.2 Field Evaluation

Four CARE Nutrition Educators will allocate 50% of their time to visiting schools, often in conjunction with local circuit education officers. They will make about 1,000 visits a year. During these visits nutrition educators will evaluate the intermediate goals of the program by measuring recipients' nutritional improvement.

### 2.4.3 Increased Ministry of Education Program Management

The 16 regional education offices will prepare self evaluation management reports concerning each of the six yearly food distributions. These comprehensive reports will serve to monitor all aspects of program implementation, including transport and storage, food allocations to schools, payments to food manufacturers (carried out on a decentralized basis) and school visits.

Regional education officers will undertake a regular program of school visits to monitor the feeding program and promote nutritional awareness and health care among school children. In FY 80 they will visit 1,200 schools. This number of school visits will progressively increase to reach 2,200 schools by FY 84.

Improved factory commodity controls, including monitoring of commodity inputs and food processing outputs, will be undertaken by the Ministry of Education with assistance from CARE.

#### 2.4.4 School Health Program

Under CARE's Applied Nutrition Service Program, nutrition health media will be provided to schools, and a program for school children's health care will be undertaken. These are described in Section 3.2.2.

#### 2.4.5 Primary Schools' Nutritional Surveillance System

A stratified random sampling system, to collect data on the nutritional status of school children, will be developed and implemented by the Ministry of Education and CARE, in cooperation with the Department of Census and Statistics and the Ministry of Health. Each year 5% of the children in the program will be measured. The surveillance system will assist in determining schools to be included in the school feeding program.

### 3.0 PROJECT OVERVIEW

#### 3.1 Project Development

This Partnership Nutrition Program began in 1956, when the Government of Sri Lanka invited CARE to establish and implement a school feeding program to improve the nutritional status of school children. Initially, the program was administered entirely by CARE. Through the years, however, program administration has increasingly been assumed by the Ministry of Education, to the extent that in 1974, a special Nutrition Feeding Unit was formed in the Ministry of Education to manage the program. The Unit is responsible for: the transport of PL 480 commodities from port to food manufacturers; contracting food manufacturers; overseeing food production; providing packaging materials (at the FY 78 beneficiary level of 950,000 beneficiaries, this amounted to 855,000 cartons per annum); allocating biscuits to each Educational Region; and transporting the nutritional supplement to schools throughout the country. In addition to the Ministry's Nutrition Feeding Unit, administrative and field officers at the regional education offices are responsible for assuring proper program supervision.

CARE will cooperate with the Ministry in its implementation of the program by providing expertise to improve program management, commodity provision, inventory control, supervision of production and distribution, school visits to monitor the program, and the development and implementation of programs to improve the nutritional awareness and health of school children.

## 3.2 Project Strategy

### 3.2.1 Relation of Host Government Objectives and Priorities

Sustaining and improving the nutritional status of school children has been a government priority since the inception of this program. The high priority given to school feeding is demonstrated by the Ministry of Education's substantial budget in support of the program.

The Ministry's budget is divided into two major headings: Capital Expenditures, used for school construction and amounting to 7% of the total budget; and Recurrent Expenditures, amounting to 93% of the budget. Of the recurrent expenditures, 90% goes towards salaries for 110,000 teachers, plus administrative and other staff. Throughout the years, 25-30% of the non-salary recurrent expenditures have gone towards implementing the school feeding program. For FY 78, the Ministry's funding of the school feeding program amounted to Rs.24,000,000 (US \$1,600,000) and included:

- a. Payment to two food manufacturers for producing 855,000 cartons (7,634 tons) of the nutritional supplement.
- b. Purchase of sugar, other baking ingredients, and packaging materials.
- c. Transportation of the nutritional supplement to 7,700 schools for six distributions per year and rental of regional storage facilities.

During the past ten years, the Ministry's inputs have supported and equipped two food processing plants, one of which is among the most modern in Asia. Thus the school feeding program has served to enhance development of Sri Lankan food industries.

The Ministry of Education has indicated that its financial inputs will increase proportionately with the increased number of beneficiaries in the program. For FY 80, its budgetary expenditures are estimated at US \$3,290,150.

### 3.2.2 Relation to other CARE projects

CARE's Applied Nutrition Service Program (ANSP) will support the enlarged health education format of this program. Media material will be published and distributed to schools promoting nutrition education and health awareness. Health Education topics to be covered include hygiene, improved diets, deworming and latrines.

A pilot program for school children's health diagnosis and treatment will also be undertaken by the ANSP. Teachers assisted by local medical officers will be trained to recognize common childhood illnesses and suggest suitable remedies. A teacher's manual describing childhood diseases will be printed, as well as a special report card which will include

a health record section. The annual weighing of children, involving provision of scales to participating schools, will be undertaken. This school health program will be initiated in one or two regions in FY 81, and progressively expanded to other regions.

The Primary School Partnership Nutrition Program is also complemented by the Thripasha Program, operated by the Ministry of Health/CARE, which provides a take-home ration to 100,000 medically selected malnourished primary school children.

The Soybean Foods Development Project may assist in developing an improved food supplement.

### 3.3 Project Continuity

During this MYP period, the host government will continue its significant funding and management support. Given Sri Lanka's significant shortfall in food production (51% of its foodstuffs were imported in 1977), it is expected that despite full governmental support, CARE assistance, both in commodity support and project administration, will continue through FY 84. Should there be a marked improvement in agricultural production during the next five years, however, the MYP could be revised to reflect an increase in local commodity support by the Ministry of Education.

Community groups such as Parent Teacher Associations will be encouraged to support the school feeding program by providing fruits and other locally available agricultural commodities, which can be eaten with the nutritional supplement.

During this MYP period, the program will gradually expand to include schools in nutritionally deprived sectors, such as estates, the Mahaveli irrigation and colonization regions.

### 3.4 Project Constraints

#### 3.4.1 Production and Infrastructure

The government and the two food manufacturing firms have agreed to procure and install additional food processing equipment needed to increase the ration from 44.4 grams to 60 grams and the beneficiary level from 1,250,000 to 1,450,000.

Transport, particularly the availability of freight trains, is essential. Although rail and road transport is limited, the government has indicated that adequate transport will be available for this priority program.

### 3.4.2 Budgetary

The Ministry of Education is committed to the budgetary inputs entailed by this expanded program. However, should the government suffer a serious economic setback it may be necessary to limit financial support of the feeding program. Such budgetary constraints are unforeseen at this time.

### 3.4.3 Other Factors

Other possible constraints are the availability of paper for packaging material and production of media materials, adequate program supervision by the Ministry of Education, the timely arrival of PL 480 commodities, local commodity support, and civil disturbances which could limit the production and distribution of the nutritional supplement.

## 4.0 PROJECT IMPLEMENTATION

### 4.1 Pre-Implementation Conditions

CARE operates in Sri Lanka under a Basic Agreement, signed with the Government of Sri Lanka on September 6, 1961, and under Annual Program Agreements, specifying the conditions for conducting CARE assisted programs. These conditions include those listed in AID Regulation 11.

### 4.2 Implementation Plan and Schedule

The procurement of additional factory equipment is scheduled for February 1979, with production and distribution of the improved 60 gram ration to start in October 1979.

The following activities will be conducted throughout the MYP period:

- a. The publishing and dissemination of health education media to schools will commence in FY 80 and it is anticipated that two educational media will be issued each year. The teacher's diagnostic manual will be developed in FY 81.
- b. The Ministry of Education's increased management support and intensified program of field visits will commence in FY 80.
- c. The training of teachers to diagnose common childhood ailments will be initiated in FY 81. Medical Officers will cooperate in this program, especially in the medical follow-up. A report card, incorporating a basic record of the child's health, will be developed in FY 81. It is hoped that this new type of report card will be adopted for nationwide use by the Ministry of Education.

- d. The development and implementation (in cooperation with the Ministries of Education and Health, and the Department of Census and Statistics) of a continuous surveillance system to measure the nutritional status of school children and to select schools to participate in the feeding program will commence in FY 80.

#### 4.3 Technical Considerations

Personnel are required at the Department of Census and Statistics to assist in the development of the primary school children surveillance system.

#### 4.4 Procurement Requirements

The procurement requirements of the project relate primarily to PL 480 commodities (12% Soy Fortified Flour, Full Fat Soy Flour, Vegetable Oil). Costs of local commodities, food processing, packaging, transport and storage are met by the Ministry.

Additional processing equipment will be procured by the two manufacturing firms.

#### 4.5 Personnel Requirements

One full-time CARE international staff member, assisted by a senior program officer (national staff) is assigned to the project. Four CARE nutrition educators are required 50% of their time to visit schools. The CARE staff nutritionist monitors the nutritional quality of the nutritional supplement.

#### 5.0 PROJECT EVALUATION

The indicator to be used for measuring the effectiveness in achieving the final goal is: The primary school children surveillance system which will measure annually the weight and age of a five percent stratified random sample of primary school children, including both participants and non participants in the feeding program, to determine their nutritional status and growth patterns.

The food delivered by this program is a nutritional supplement only and the attainment of the program goal may be effected by social-economic factors, including the child's home diet and general health (immunizations, intestinal parasites, hygiene). These factors, which are outside the scope of this project, would require a revised program strategy. Through CARE's Annual Implementation Plan (AIP) and AID's Annual Estimate of Requirements (AER), the above factors will be assessed annually.

## 5.1 Intermediate Goals

The intermediate goals of the program have been stated earlier in Section 2.3. Attainment of these goals will be measured by four indicators:

- a. Field visit reports by CARE nutrition educators will measure consumption of the daily ration.
- b. Twenty-four hour recall dietary interviews will also be conducted to obtain data on school children's nutritional intake.
- c. Self-evaluation management reports, field visit reports and commodity control reports received from the Ministry of Education will measure improved administrative support.
- d. Improved health awareness and practices will be surveyed through questionnaires, completed annually by 5% of the primary school children in this program.

6.0 PROJECT FUNDING6.1 CARE Managed

<u>F.Y.</u>	<u>Source</u>	<u>M/E</u>	<u>P/O</u>	<u>In Kind</u>	<u>Total</u>
1980	Ministry of Education	0	178,000	0	178,000
	PL 480 Commodities	0	0	4,087,000	4,087,000
	Ocean Freight	0	0	1,597,000	1,597,000
	Total FY 80	0	178,000	5,684,000	5,862,000
1981	Ministry of Education	0	209,000	0	209,000
	PL 480 Commodities	0	0	4,262,000	4,262,000
	Ocean Freight	0	0	1,661,000	1,661,000
	Total FY 81	0	209,000	5,923,000	6,132,000
1982	Ministry of Education	0	239,000	0	239,000
	PL 480 Commodities	0	0	4,424,000	4,424,000
	Ocean Freight	0	0	1,725,000	1,725,000
	Total FY 82	0	239,000	6,149,000	6,388,000
1983	Ministry of Education	0	271,000	0	271,000
	PL 480 Commodities	0	0	4,589,000	4,589,000
	Ocean Freight	0	0	1,789,000	1,789,000
	Total FY 83	0	271,000	6,378,000	6,649,000
1984	Ministry of Education	0	302,000	0	302,000
	PL 480 Commodities	0	0	4,751,000	4,751,000
	Ocean Freight	0	0	1,853,000	1,853,000
	Total FY 84	0	302,000	6,604,000	6,906,000

6.2 Non-CARE Managed

<u>F.Y.</u>	<u>Source</u>	<u>Type</u>	<u>Value</u>
1980	Ministry of Education	Manufacture, Storage and distribution of biscuits	\$ 3,290,000
1981	Ministry of Education	Manufacture, Storage and distribution of biscuits	\$ 3,417,000
1982	Ministry of Education	Manufacture, Storage and distribution of biscuits	\$ 3,512,000
1983	Ministry of Education	Manufacture, Storage and distribution of biscuits	\$ 3,637,000
1984	Ministry of Education	Manufacture, Storage and distribution of biscuits	\$ 3,762,000

CARE: JMagnaldi:hp

P.L. 960 TITLE II  
(FY) 80

Country Sri Lanka

Sponsor's Name CARE

A. MATERNAL AND CHILD HEALTH ..... TOTAL RECIPIENTS 340

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
<u>340</u>	<u>ICSM</u>	<u>6,120</u>	<u>2,264</u>
<u>TOTAL MCH</u>		<u>6,120</u>	<u>2,264</u>

B. SCHOOL FEEDING ..... TOTAL RECIPIENTS 1,250

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
<u>1,250</u>	<u>12% SFF</u>	<u>8,446</u>	<u>1,748</u>
<u>1,250</u>	<u>ICSM</u>	<u>1,689</u>	<u>561</u>
<u>1,250</u>	<u>Vegot1</u>	<u>1,689</u>	<u>968</u>
<u>1,250</u>	<u>FISF</u>	<u>2,534</u>	<u>783</u>
<u>TOTAL SCHOOL FEEDING</u>		<u>14,358</u>	<u>4,060</u>

C. OTHER CHILD FEEDING ..... TOTAL RECIPIENTS 10

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
<u>10</u>	<u>ICSM</u>	<u>180</u>	<u>67</u>
<u>TOTAL OTHER CHILD FEEDING</u>		<u>180</u>	<u>67</u>

D. FOOD FOR WORK ..... TOTAL RECIPIENTS \_\_\_\_\_

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
_____	_____	_____	_____
<u>TOTAL OF FOOD FOR WORK</u>		_____	_____

E. OTHER (SPECIFY) ..... TOTAL RECIPIENTS \_\_\_\_\_

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
_____	_____	_____	_____
<u>TOTAL OTHER</u>		_____	_____

P.L. 480 TITLE II  
(FY) 81

Country Sri Lanka

Sponsor's Name CARE

A. MATERNAL AND CHILD HEALTH ..... TOTAL RECIPIENTS 340

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
340	ICSM	6,120	2,264
<u>TOTAL MCH</u>		<u>6,120</u>	<u>2,264</u>

B. SCHOOL FEEDING ..... TOTAL RECIPIENTS 1,300

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
1,300	12% SFF	8,784	1,818
1,300	ICSM	1,757	583
1,300	Vegoil	1,757	1,007
1,300	FFSF	2,635	814
<u>TOTAL SCHOOL FEEDING</u>		<u>14,933</u>	<u>4,222</u>

C. OTHER CHILD FEEDING ..... TOTAL RECIPIENTS 10

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
10	ICSM	180	67
<u>TOTAL OTHER CHILD FEEDING</u>		<u>180</u>	<u>67</u>

D. FOOD FOR WORK ..... TOTAL RECIPIENTS \_\_\_\_\_

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
_____	_____	_____	_____
<u>TOTAL OF FOOD FOR WORK</u>		_____	_____

E. OTHER (SPECIFY) ..... TOTAL RECIPIENTS \_\_\_\_\_

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
_____	_____	_____	_____
<u>TOTAL OTHER</u>		_____	_____

P.L. 480 TITLE II  
(FY) 82

Country Sri Lanka

Sponsor's Name CARE

A. MATERNAL AND CHILD HEALTH ..... TOTAL RECIPIENTS 290

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
<u>290</u>	<u>ICSM</u>	<u>5,220</u>	<u>1,931</u>
<u>TOTAL MCH</u>		<u>5,220</u>	<u>1,931</u>

B. SCHOOL FEEDING ..... TOTAL RECIPIENTS 1,350

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
<u>1,350</u>	<u>12% SFF</u>	<u>9,122</u>	<u>1,888</u>
<u>1,350</u>	<u>ICSM</u>	<u>1,824</u>	<u>606</u>
<u>1,350</u>	<u>Vegoll</u>	<u>1,824</u>	<u>1,045</u>
<u>1,350</u>	<u>FFSF</u>	<u>2,736</u>	<u>845</u>
<u>TOTAL SCHOOL FEEDING</u>		<u>15,506</u>	<u>4,384</u>

C. OTHER CHILD FEEDING ..... TOTAL RECIPIENTS \_\_\_\_\_

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
<u>10</u>	<u>ICSM</u>	<u>180</u>	<u>67</u>
<u>TOTAL OTHER CHILD FEEDING</u>		<u>180</u>	<u>67</u>

D. FOOD FOR WORK ..... TOTAL RECIPIENTS \_\_\_\_\_

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
_____	_____	_____	_____
<u>TOTAL OF FOOD FOR WORK</u>		_____	_____

E. OTHER (SPECIFY) ..... TOTAL RECIPIENTS \_\_\_\_\_

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
_____	_____	_____	_____
<u>TOTAL OTHER</u>		_____	_____

P.L. 480 TITLE II  
(FY) 83

Country Sri Lanka

Sponsor's Name CARE

A. MATERNAL AND CHILD HEALTH ..... TOTAL RECIPIENTS 240

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
<u>240</u>	<u>ICSM</u>	<u>4,320</u>	<u>1,598</u>
<u>TOTAL MCH</u>		<u>4,320</u>	<u>1,598</u>

B. SCHOOL FEEDING ..... TOTAL RECIPIENTS 1,400

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
<u>1,400</u>	<u>12% SFF</u>	<u>9,459</u>	<u>1,958</u>
<u>1,400</u>	<u>ICSM</u>	<u>1,892</u>	<u>628</u>
<u>1,400</u>	<u>Vegoll</u>	<u>1,892</u>	<u>1,084</u>
<u>1,400</u>	<u>FFSF</u>	<u>2,838</u>	<u>877</u>
<u>TOTAL SCHOOL FEEDING</u>		<u>16,081</u>	<u>4,547</u>

C. OTHER CHILD FEEDING ..... TOTAL RECIPIENTS 10

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
<u>10</u>	<u>ICSM</u>	<u>180</u>	<u>67</u>
<u>TOTAL OTHER CHILD FEEDING</u>		<u>180</u>	<u>67</u>

D. FOOD FOR WORK ..... TOTAL RECIPIENTS \_\_\_\_\_

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
_____	_____	_____	_____
<u>TOTAL OF FOOD FOR WORK</u>		_____	_____

E. OTHER (SPECIFY) ..... TOTAL RECIPIENTS \_\_\_\_\_

<u>No. of Recipients by Commodity</u>	<u>Name of Commodity</u>	<u>KGS</u>	<u>Dollars</u>
_____	_____	_____	_____
<u>TOTAL OTHER</u>		_____	_____

P.L. 480 TITLE II  
(FY) 84

Country Sri Lanka

Sponsor's Name CARE

A. MATERNAL AND CHILD HEALTH ..... TOTAL RECIPIENTS 190

No. of Recipients by Commodity	Name of Commodity	KGS	(Thousands)	Dollars
<u>190</u>	<u>ICSM</u>	<u>3,420</u>		<u>1,265</u>
<u>TOTAL MCH</u>		<u>3,420</u>		<u>1,265</u>

B. SCHOOL FEEDING ..... TOTAL RECIPIENTS 1,450

No. of Recipients by Commodity	Name of Commodity	KGS	(Thousands)	Dollars
<u>1,450</u>	<u>12% SFF</u>	<u>9,797</u>		<u>2,028</u>
<u>1,450</u>	<u>ICSM</u>	<u>1,959</u>		<u>650</u>
<u>1,450</u>	<u>Veg011</u>	<u>1,959</u>		<u>1,123</u>
<u>1,450</u>	<u>FFSF</u>	<u>2,939</u>		<u>908</u>
<u>TOTAL SCHOOL FEEDING</u>		<u>16,654</u>		<u>4,709</u>

C. OTHER CHILD FEEDING ..... TOTAL RECIPIENTS 10

No. of Recipients by Commodity	Name of Commodity	KGS	(Thousands)	Dollars
<u>10</u>	<u>ICSM</u>	<u>180</u>		<u>67</u>
<u>TOTAL OTHER CHILD FEEDING</u>		<u>180</u>		<u>67</u>

D. FOOD FOR WORK ..... TOTAL RECIPIENTS \_\_\_\_\_

No. of Recipients by Commodity	Name of Commodity	KGS	(Thousands)	Dollars
_____	_____	_____		_____
<u>TOTAL OF FOOD FOR WORK</u>		_____		_____

E. OTHER (SPECIFY) ..... TOTAL RECIPIENTS \_\_\_\_\_

No. of Recipients by Commodity	Name of Commodity	KGS	(Thousands)	Dollars
_____	_____	_____		_____
<u>TOTAL OTHER</u>		_____		_____

M A R G A I N S T I T U T E  
(Sri Lanka Centre for Development Studies)

~~Doc. M/40. May 1978~~  
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ANALYTICAL DESCRIPTION  
OF POVERTY IN SRI LANKA

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# C O N T E N T S

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## POVERTY IN SRI LANKA

### 1. Introduction

This study of poverty in Sri Lanka has several objectives. It proposes to measure poverty in terms of objective standards and to define a Poverty Line appropriate to the socio-economic conditions prevailing in the country. In terms of such a poverty line it will indicate the presence of poverty in relation to economic sectors and geographical zones.

The study begins with a brief introduction to the country's economy and to its development which have a bearing on the present pattern of incomes and economic activities. It next gives an account of the sources of data which are available and the main source used for the study. The substantive analysis in the study first seeks to determine an absolute poverty line which is the level of income at which households were able to meet the minimum requirements of food to satisfy a basic nutritional norm. This norm has been estimated in relation to the age composition of households. The pattern of household incomes and household food consumption has then been examined and the per capita incomes at which households were maintaining a marginal adequacy of food to satisfy the nutritional norm has been ascertained. Thereafter the number of households in absolute poverty is estimated, and its distribution in sectors and zones analysed.

The analysis of poverty is done not in terms of individual income receivers (who may be one or more in a household) but in terms of households, having in mind the per capita availability of resources for meeting the daily needs of the members. This has been prompted by the fact that the satisfaction of basic human needs, the provision of meals, housing, fuel and light, outlays on social and ceremonial needs etc. are generally met in terms of the household.

Immediately above the line of Absolute Poverty are many households which are still "poor" and who consider themselves poor and deprived. At the per capita income level which denotes the poverty line, households are able to secure a minimum of food and other non-food requirements, but this is still below the level at which a household's basic needs are satisfied. The next phase of the study is therefore an attempt to indicate the level at which households are able to satisfy their "basic needs." This level of basic needs is an estimation made, taking into consideration the resource capacity of the country and the actual pattern of consumption within households in the income groups at the next higher level above the absolute poverty line. The concluding section in this part of the study examines how poverty is manifested in inadequate or substandard housing and low educational attainment, and goes on to analyse rural poverty in relation to the availability of agricultural resources which provide the major source of incomes in the rural sector.

Part II of this study is a portrayal of poverty in a number of specific situations, namely, in five villages and in a community of people living on and working in a tea plantation. The representative villages are themselves chosen from different cultural-ecological regions, bringing out the fact that villages in Sri Lanka are not homogeneous in character and that the nature and circumstances of poverty are themselves varied. This part of the study indicates the different forms in which poverty manifests itself and examines how "poverty in housing" and "poverty in education" varies in intensity in different low income situations, resulting in different profiles of poverty.

The micro-study of the selected villages goes beyond the question of incomes and consumption levels. Drawing on the information gathered in the ongoing long-term study

of these villages, an attempt is made to identify the causes of poverty and marginalisation of the poorest households in the village, the constraints on their access to resources and the characteristics of poverty specific to these rural situations.

Finally, it should be noted that the analysis in Part I of the study is based on the socio-economic conditions prevailing in 1973 and estimates of poverty levels are given in prices current at the time of the survey. The steep inflation that followed on the energy crisis and significant changes in the structure of prices after the recent devaluation will necessarily alter the level at which present money incomes move beyond the poverty line. The study does not attempt to update the information available for 1973 as this would have required a countrywide investigation on the lines of the 1973 survey. The study however provides base line data which makes it possible to identify the specific dimensions of poverty in the country, and the location of the deepest pockets in terms of 1973 incomes. In this sense it establishes a quantitative base which can be used for the further refinement of the measurement of poverty and the formulation of poverty-oriented programmes.

## 2. THE ECONOMY OF SRI LANKA

Sri Lanka is an island of 25,332 square miles with a population of a little over 13.5 million people. The country is divided into nine provinces and twenty-two administrative districts, but for the purpose of socio-economic surveys the land has been divided into four cultural-ecological zones. In some surveys Colombo Municipality (which falls within the District of Colombo) has been treated as a separate zone. For the purpose of socio-economic studies the country has also been divided into three Sectors--the Urban, Rural and Estate.

The past history of the country lends meaning to its present sectoral division. Prior to the European culture-contact the country was organised in terms of village communities. The then-prevailing land-man ratio and the traditional technologies and life styles made these villages viable and adequate economic units to provide the accustomed standard of living. Backed by the availability of sufficient good land, the management of water from the monsoon rains and the cultivation of food for the people did not present intractable problems. An important aspect of the accumulation of social capital at that time was the establishment of a widespread and intricate system of irrigation and water control.

The latter part of the nineteenth century saw the rise of the plantation sector and thereafter the involvement of large numbers of people and their way of life in the monetary and contractual economy tied up with international trade. This period witnessed the influx of migrant Indian labour for the plantations and also the opening up of the country by a network of roads and railways. The plantations did not depend on the Village Sector for its requirements of rice. The required food was imported from other countries, mainly Burma. The village communities (the Rural Sector) continued to exist side by side with an expanding Estate Sector and the

simultaneous growth of the city and Port of Colombo, the mercantile establishments and of urbanisation in many parts of the country.

With the introduction of political democracy and universal suffrage in 1931 the villagers became a political force. There arose the necessity to develop an integrated economy that could satisfy mass needs in terms of new standards of well-being. The pursuit of mass well-being took an upward turn in the post-war period. The elected governments pursued policies of public welfare which included the provision of free education, free health services and even free rations of food. Rice was made available on a subsidised ration from the time of World War II and subsequently a part of the ration was even given free. Later the scheme was modified to make the free ration available only to non-income tax payers. Currently the rationing scheme has been revised restricting it further.

Free education begun in the 1940s (inclusive of University and Medical education) free health services (inclusive of maternity services, hospitalisation facilities and free drugs) also contribute substantially to the satisfaction of basic needs, particularly because these services are well distributed in a well roaded country. Public transport too carries an element of subsidy.

This direct assault on poverty "has succeeded during the lifetime of a single generation in significantly improving the levels of living of the low income majority, reducing mortality rates and raising life expectancy to levels comparable to the most advanced societies and achieving a literacy rate which is among the highest in the developing world. The country's trends in income distribution have also belied the normal expectations that income disparities would increase in the initial phase of development.

At very low levels of per capita income, Sri Lanka has been able to reduce income inequalities to a substantial extent and improve the income earning capacities of low income groups. It has also done this within a political system which is more participatory and allows far more civic freedom than what is operative in most other developing countries."<sup>1</sup>

Nevertheless we may also note the negative features of this process of rapid social change. The level of unemployment has continued to be burdensome, inclusive of unemployment of persons with secondary education. Foreign indebtedness has risen, dependence on international trade has not lessened appreciably and the rates of economic growth have been low. The discontent among the youth led to an insurgency in 1971.

In the present structure of the economy, agriculture is the main economic activity. The main sources of the Gross National Product in 1976 were as follows :

<u>Item</u>	<u>Percentage</u>
Agriculture, Forestry, Hunting & Fishing	31.2
Manufacturing	13.0
Transport, storage, communication	10.0
Wholesale and retail trade	13.5
Public administration, defence and various services	19.8

The Survey of Consumer Finances of 1973 gave the information on personal incomes and the main sources of these personal incomes. Agriculture, forestry and logging accounted for 50.37% of the total income receivers and they received 41.02% of the total incomes. Government services and other Services held 20.72% of the income receivers and they received 25.51% of the

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1 Vide Participatory Development and Dependence--the Case of Sri Lanka. Published by the Marga Institute.

incomes. Manufacturing and Industry held 8.63% of the income receivers and they had received 8.71% of the incomes. Trade and financial institutions held 6.88% and they received 10.63% of the incomes.<sup>1</sup>

### 3. SOURCES OF DATA

There are several sources of data from which the picture of poverty in the Island can be drawn up. The most relevant of them are the Survey of Consumer Finances carried out by the Central Bank of Ceylon in 1953, 1963 and 1973 and the Socio-Economic Survey of Sri Lanka 1969/70 carried out by the Department of Census & Statistics. In arriving at the overall picture one can use the data from both these sources side by side.

In both surveys the country is divided into three sectors--Urban, Rural and Estate.

The data is also presented in both surveys in terms of zones. The Survey of Consumer Finances presents the data for Colombo Municipality as a separate Zone V whereas in the Socio-Economic Survey the City of Colombo is included in Zone I which in both surveys include Colombo district. In other respects the zones are identical.

The Survey of Consumer Finances 1973 has certain advantages and features which make it the most appropriate to serve as the main source of data in a study of poverty. A similar survey was also done in 1963 and it enables one to make comparisons over a ten-year period.

The Survey of Consumer Finances sought to obtain by means of a sample survey direct estimates of personal incomes, consumption and savings. The survey examined the

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<sup>1</sup> Reference: Survey of Consumer Finance 1973. Table 75.

pattern of incomes both in terms of Income Receivers and in terms of Spending Units which are Households. The data in Income Receivers has been gathered in great detail and with reference to age, sex, community, sources of income, sectors and zones. Data on Household Incomes are presented in terms of sectors and zones and in terms of the income slabs of the households. Expenditures of Households are presented in terms of the income slabs of households and also in terms of per capita outlays. A special feature of the Survey of Consumer Finances of 1973 was the presentation of the data gathered on the per capita physical consumption of food in addition to the per capita expenditures on classified items of consumption such as food, clothing, housing, fuel and light, education etc.

A study of poverty requires data at the lower income levels in terms of small slabs of monthly household (and per capita) income. This is available in the Survey of Consumer Finances. Data on the physical consumption of food and on other classified items of expenditure are given in terms of two-month incomes of households at the levels of Rs.0-50, 51-100, 101-200, 201-400 and thereafter for two-month income slabs of Rs.201-400, 401-800, 801-1600, 1601-2000, 2001-3000 and over Rs.3000.

The data available includes the numbers constituting these households thus providing for a per capita analysis. This is important because the numbers in a household rise steadily with a rise in household income. Household income levels as such are not adequate indicators of poverty.

A further feature of this survey data (which is important when dealing with averages) is that the distribution of incomes of households is given ranked in terms of very small slabs of 2 month incomes, namely, in slabs rising by Rs.25 for the income ranges Rs.0-200,

in slabs of Rs.50 for Rs.201-500. From Rs.501-1000 (2 months) it is given in slabs of Rs.100 and thereafter in slabs of Rs.200.

This is also available in terms of Sectors and Zones.

With this data in hand, one could locate sector-wise and zone-wise the distribution of the poor households once we determine the level of per capita resources as a cut-off point for Absolute Poverty.

### Features of the two surveys

As data from both the Survey of Consumer Finances and from the Socio-Economic Survey are used, it is necessary to note some of the features of the two surveys.

In the collection of data the Socio-Economic Survey gathered the consumption data more accurately by resorting to four rounds of investigation spread over one year. In the Survey of Consumer Finances the data on actual consumption was recorded by three checks during one week for each household, the field work being carried out over the months of January and February 1973. This was a period before the paddy harvest and at a time when the crops of jak fruit, breadfruit and other fruits were very low. Data on average physical consumption in the Rural Sector has thus been somewhat understated in the Survey of Consumer Finances.

The report on the Survey of Consumer Finances 1973 observes that, apart from incomes in the form of salaries, there was a tendency to understate incomes, and understating of incomes by farmers was common (Report / Page 15). However, for the survey as a whole, it was thought there was also a tendency to overstate consumption.

Incomes included gifts of cash or consumption items, income in kind inclusive of the free rice ration, the value of which was included under gifts and charitable allowances.

Although both the Survey of Consumer Finances 1973 and the Socio-Economic Survey 1969/70 took into account income in kind, the Socio-Economic Survey of 1969/70 did not include in income an imputed value for the measure (2 lbs.) of free rice issued weekly to all persons. In the Survey of Consumer Finances the free measure of rice was valued at Rs.2 which was the subsidised price of the part of the ration that was paid for. Thus, in the Socio-Economic Survey 1969/70, the food actually consumed was related to a somewhat understated level of household income--a factor which is significant in the case of low income households.

It is also important to note that in the Sri Lanka situation there are certain benefits available to and enjoyed by all the people but which have been explicitly excluded from the total incomes in both these surveys. There was the value of the free medical services, free drugs etc. from State and Municipal medical establishments, free education, free mid-day meals received by some school children and free school books given to some children. Thus the money value of income given in the surveys is understated to the extent the households, especially of the poor, who availed of these services.

There was also a tendency to understate the value of income in kind when it came to home grown food. As this was valued at prices fetched in the nearest market, the villagers' home grown (and consumed) food would have been put down at a very low value although the same physical quantities would have been bought and sold at much higher prices in urban areas.

#### Zones and Sectors

As already stated, the data has been gathered in terms of Zones and Sectors.

The Zones in the Survey of Consumer Finances are as follows:

- Zone I consists of housing units in the districts of Colombo, Kalutara, Galle and Matara, excluding the housing units in the Colombo Municipality.
- Zone II consists of housing units in the districts of Hambantota, Moneragala, Amparai, Polonnaruwa, Anuradhapura and Puttalam.
- Zone III consists of housing units in the districts of Jaffna, Mannar, Vavuniya, Trincomalee and Batticaloa.
- Zone IV consists of housing units in the districts of Kandy, Matale, Nuwara Eliya, Badulla, Ratnapura, Kegalle and Kurunegala.
- Zone V consists of housing units in the Colombo Municipality.
- All-island is a totality of the 3 sectors or the 5 Zones.

In the case of the Socio-Economic Survey 1969/70, Zone V (Colombo Municipality) is incorporated in Zone I.

The Urban Sector consists of all housing units in the Municipal, Urban and Town Council areas.

The Estate Sector consists of all housing units in the Tea and Rubber estates of over 20 acres with more than 10 resident workers. In the Socio-Economic Survey 1969/70, coconut estates of that order are also included in the Estate sector.

The Rural Sector consists of all housing units which were not included in the Urban and Estate sectors.

The cultivation of coconut is least labour-intensive and the greater part of the land under coconut is in home gardens and in small and medium holdings owned by individuals and families rather than by joint stock

companies. Except for large estates of over about 250 acres, the number of resident labourers is few: the coconut estates draw on the labour of villagers from the surrounding villages. The coconut cultivation sector has therefore been included in the Rural Sector in the Survey of Consumer Finances although about 1.2 million acres of land are under coconut and about 40% of the production is exported.

It may however be noted that in 1973 as much as 18.21% of the land in Tea was in small holdings of 10 acres or less and 38.18% of land under Rubber was in such small holdings. The estate sector takes into account only estates of over 20 acres.

### The Households

The Survey of Consumer Finances investigated 5088 Housing Units which were later analysed for the type and quality of housing. These housing units held 5363 households or Spending Units and they held 7326 Income Receivers.

The Sector-wise and Zone-wise distribution of the households and their main characteristics are given in Table I.

The Estates fell into Zones I and IV. Of the 530 housing units examined on the Estates, 60 fell into Zone I and 470 fell into Zone IV.

## OVERALL DATA FROM THE SURVEY OF CONSUMER FINANCES - 1973

Item	ALL ISLAND	URBAN	RURAL	ESTATE
Total persons in sample	28,587	5,378	20,432	2,777
Total 2-month Income	3,333,465	812,990	2,213,895	306,580
No. of Households/Housing Units	5,088	931	3,627	530
No. of Spending Units	5,363	1,023	3,803	537
No. of Income Receivers	7,326	1,285	4,746	1,295
Average No. of Persons per Housing Unit	5.6	5.8	5.6	5.2
Average No. of persons per Spending Unit	5.33	5.25	5.37	5.17
Average No. of Income Receivers per Household	1.44	1.37	1.31	2.45
Dependents per Household	4.18	4.32	4.32	2.79
Spending Units per Household/Housing Unit	1.05	1.09	1.05	1.01
Income Receivers per Spending Unit	1.36	1.26	1.26	2.41
Income Receivers as percentage of population	25.63	23.89	23.22	46.63
Average Income per Spending Unit	621.57	794.71	582.14	570.91
Average Income per Income Receiver	445.02	632.68	446.48	236.74
Average per capita income per Spending Unit	116.62	151.37	108.41	110.43
Female Income Receiver as percentage of total income Receiver	24.97	19.46	19.91	48.96
Income Receivers below 18 years of age as percentage of Total Income Receivers	3.66	2.49	2.99	7.26

Source: Survey of Consumer Finances 1973. Table No. 4 & 6 and Tables in Vol. II on Income  
 Receivers and Spending Units.

TABLE 1b

## OVERALL DATA FROM THE SURVEY OF CONSUMER FINANCES - 1973

Item	ZONE 1	ZONE 2	ZONE 3	ZONE 4	ZONE 5
Total persons in sample	9,017	4,256	2,905	11,358	1,051
Total 2-month Income	1,275,293	462,821	333,385	1,127,007	134,959
No. of Households/Housing Units	1,641	725	531	2,028	163
No. of Spending Units	1,762	771	549	2,100	181
No. of Income Receivers	2,430	882	610	3,159	245
Average No. of persons per housing Unit	5.49	5.87	5.47	5.60	6.44
Average No. of persons per Spending Unit	5.12	5.52	5.29	5.41	5.81
Average No. of Income Receivers per Household	1.48	1.21	1.15	1.56	1.50
Dependents per Household	4.01	4.66	4.32	4.04	4.95
Spending Units per Household/Housing Unit	1.07	1.06	1.03	1.04	1.11
Income Receivers per Spending Unit	1.38	1.14	1.11	1.50	1.35
Income Receivers as percentage of population	26.94	20.72	20.99	27.81	23.31
Average Income per Spending Unit	723.78	600.29	607.26	536.67	745.63
Average Income per Income Receiver	524.81	524.74	546.53	356.76	550.85
Average per capita income per Spending Unit	141.36	108.75	114.79	99.20	128.34
Female Income Receiver as percentage of Total Income Receiver	26.21	15.30	9.51	30.14	19.18
Income Receivers below 18 years of age as percentage of Total Income Receivers	3.05	3.85	3.28	4.21	2.85

Note: The Estate Sector falls into Zone 1 and Zone 4.

Source: Survey of Consumer Finances 1973. Table No. 4 & 6 and Tables in Vol. II on Income Receivers and Spending Units.

#### 4. POVERTY AND THE HOUSEHOLDS

Poverty could be approached at two levels: at the level of income of the Individual Income Receivers and at the level of the Households as Spending Units. It is however the household or spending unit which is selected as the unit of analysis for the present study as it is through the household that the satisfaction of individual wants is carried out. Furthermore, in an economy like Sri Lanka where a large part of the economic activity is organised informally through the household or family enterprise, income receivers cannot be clearly identified. This is specially true of the rural sector where the recorded incomes of the income receivers include the value of the unrecorded inputs of other members of the household in various agricultural operations and other supporting activities. The household is the appropriate unit for other considerations as well. The income of the household is often derived from more than one income receiver, and satisfaction of wants of all the members of the household is met out of the total income. If the per capita income and availability of resources in the household is an indicator of well-being, then our unit of analysis has to be the household. The organisation of the household and its size in relation to incomes also brings with it certain "economies of scale" which are relevant in a discussion of poverty. A two-member household and a five-member household may enjoy the same per capita income, but the five-member household with a higher total income may have better capacity to provide for housing outlays, food expenditure and satisfy other wants such as recreation. These qualifications would have to be kept in mind when we proceed to make a detailed analysis of the incomes of spending units.

It will be noticed from Table I that the Spending Units in the Estate Sector have on the average 2.41 Income Receivers as against 1.26 in the Urban and in the

Rural Sectors. A picture of the all-island distribution of Households as Spending Units is presented in Table 3. The Spending Units are ranked in terms of small slabs of the average two-month income, taking the island as a whole. It should be noted that the number of persons in a Spending Unit steadily rises with the income level of the Spending Unit. The effect of this is that although the income level of the Spending Unit rises, the per capita income rises much more slowly. In this context it is important to note that it is not the household income but the per capita availability of resources that determines per capita consumption.

The distribution of the 5365 Spending Units in the sample among the slabs of 2-month incomes was as follows.

Table 2

<u>Income slab</u> <u>(2-month)</u> Rs.	<u>No. of Spending Units</u>	<u>Percentage</u>
50	6	0.1
51 - 100	50	0.93
101 - 200	314	5.85
201 - 400	1466	27.36
401 - 800	2439	45.48
801 - 1600	893	16.65
1601 - 2000	88	1.64
2001 - 3000	64	1.19
Over Rs.3000	43	0.8

A close examination of the survey disclosed that the very lowest income grouping was not significant or representative of an economic class. These households covered incompletely investigated cases, persons on strike and/or temporarily unemployed. The lowest 56 Spending Units out of the total of 5363 Spending Units do not merit investigation in detail. These 56 Spending Units covered only 94 persons out of 28,587 persons falling into the sample

and Rs.4,421 out of the total income of Rs.3,333,465 in the sample. They have a two-month income below Rs.100. The largest number of Spending Units fell into the 2-month income group Rs.401-800 and the next largest into Rs.201-400. The pattern of the ranking of per capita income in households (Table 3) reveals that for the island as a whole a steady upward movement of per capita income begins at the level of Rs.350-400 for 2 months. But we will see later that the average for the Island as a whole, mask the situation that prevails sector-wise and zone-wise.

For these different household-income slabs, the average income per household does not show much sector-wise variation. However, there are substantial variations in the per capita resources between sectors for the same income slab. Table 4 shows these variations for the lower income groups. In terms of per capita income within the Spending Units, the Estate Sector has a distinct advantage over both the Urban and Rural sectors up to the income slab of Rs.450 for two months. Here a word of caution is however necessary. The rural incomes and urban incomes in the informal sector could be easily understated in surveys of this kind particularly in respect of income in kind, produce consumed at home and similar sources of income which are not easily identifiable. In the case of the estate sector there is less chance of understatement as information on wage income which is the main source, is available more readily and with greater accuracy. The survey data may therefore tend to exaggerate the income disparities between the estate and rural incomes.

In a zone-wise analysis (Table 5) the poverty of rural households in Zone IV is not clearly revealed owing to the presence of both estates and urban areas which raise the average household incomes in the Zone. In Zone I, only 3.7% of the households belonged to the

estates but in Zone IV, as much as 23.2% of the households were on the estates. In spite of the inclusion of the estates, the per capita resources in Zone IV taken as a whole are relatively unfavourable when compared with Zones I, III and V. Zone II also shows low per capita resources particularly at the lower household-income slabs. This zone has no estate households and the urban households constituted only 8.3%. In Zone IV the urban households amounted to 6% besides the presence of estate households. In Zone I, the urban households amounted to as much as 26.8%. Zone V of course is the City of Colombo which is entirely classed as urban.

Poverty within households depends on the per capita availability of resources within the household. The examination of Tables 4 and 5, which give a sector-wise and zone-wise grouping of households, shows that poverty is suffered in households regardless of the income slab of household income. These tables give the per capita incomes for spending units in each income slab. The number of persons in the households in proportion to household income is the main determinant of household poverty. When we apply this criterion we see that there are households with low household-incomes that do not suffer serious privation. Picking out the incidence of poverty measured at any chosen poverty line of per capita resources has therefore to be done in terms of the disaggregated data relating to small slabs of household income.

In the Household Income group Rs.0-125/2 months (Table 4), it is the urban group with relatively high numbers per household that fares worst, indicating the presence of urban slums, and this is more so in Colombo Municipality (Table 5--Zone V). The fluctuating per capita income in Zone V--Colombo Municipality--suggests that poverty is caused by the large size of households

at certain levels of household income such as at the household-income level of Rs.401-450 for 2 months. The effect of high numbers constituting the household shows up in the case of the sector-wise data in Table 4. The rural sector appears to suffer considerably on this account at certain household-income levels, particularly at Rs.250-300 and Rs.300-350 when household size has increased to 4.1 and 4.6 from 3.1 in the preceding income slab of Rs.200-250.

From the data in Tables 3 and 4, in spite of certain fluctuations in per capita income, it is possible to distinguish a line of demarcation in terms of per capita income when we reach the Rs.400-450 income level for spending units. Per capita incomes remain more or less static until household incomes reach this level. There is a relatively steady rise thereafter denoting as we would perceive later, an increasing capacity of households to improve and diversify their pattern of consumption. In the next chapter we could analyse in greater detail the significance of this demarcation of income in terms of the capacity of households to satisfy their minimum requirements of food and other basic needs.

TABLE 2

## ANALYSIS OF HOUSEHOLD INCOMES - ALL ISLAND

Income Group of Household/Spending Unit Rs/2 months	No. of Spending Units/Households	Average No of Persons in Household	Income per Household/Spending Unit Rs./2 months	Per Capita Income within Household Rs./ 2 months
0- 100	56	1.7	78.94	47.53
101- 125	46	1.9	111.47	60.67
126- 150	74	2.0	139.72	69.39
151- 175	78	2.1	163.62	76.42
176- 200	116	2.6	188.49	71.69
201- 250	227	3.1	277.71	73.30
251- 300	358	4.0	276.32	69.32
301- 350	374	4.5	325.94	72.95
351- 400	457	5.0	376.40	76.15
401- 450	462	5.2	426.37	81.87
451- 500	389	5.3	477.40	90.63
501- 600	705	5.8	544.87	94.03
601- 700	504	6.2	650.05	105.55
701- 800	379	6.6	747.10	113.49
801- 900	277	6.9	848.41	123.11
901-1000	170	6.8	945.52	139.05
1001-1200	237	6.9	1093.41	158.11
1201-1400	136	6.9	1295.39	188.82
1401-1600	73	6.5	1506.30	231.98
1601-1800	55	6.6	1685.62	256.81
1801-2000	33	6.8	1896.79	276.96
2001-2500	42	7.0	2233.71	316.94
2501-3000	22	6.5	2752.14	420.47
Over 3000	43	6.8	4530.02	664.82

SOURCE: Survey of Consumer Incomes 1973, Vol. II, Table S 580

-/rc.



TABLE 5

## ZONE-WISE PATTERN OF INCOMES OF SPENDING UNITS (RS.)

Two Month Income Group of Spending Units (Rs).	Zone 1		Zone 2		Zone 3		Zone 4		Zone 5	
	Per S.U.	Per Capita								
0-100	83.82	46.1	70.90	41.71	84.66	31.75	78.69	57.05	nil	nil
101-125	113.50	72.23	115.00	40.59	115.25	65.85	113.20	78.07	108.00	19.27
126-150	138.86	75.98	140.90	50.32	143.00	143.00	139.68	67.66	143.30	143.30
151-175	164.43	99.53	162.50	65.00	163.14	81.57	163.53	68.86	165.00	82.50
176-200	187.45	96.65	187.00	81.51	192.72	69.38	188.44	56.66	185.60	103.11
201-250	226.14	82.81	231.19	75.23	228.89	62.42	226.87	70.47	229.75	70.69
251-300	272.90	76.97	275.24	65.47	279.09	77.15	278.15	65.28	275.09	69.02
301-350	325.36	75.94	323.49	75.57	329.68	74.25	326.57	70.03	324.33	92.66
351-400	375.56	75.35	377.76	70.06	378.08	99.71	376.08	75.29	377.38	65.41
401-450	426.33	85.14	428.47	79.21	426.05	101.78	425.61	78.80	430.44	59.60
451-500	477.14	98.75	477.41	81.95	477.53	99.95	477.76	85.78	474.38	94.83
501-600	542.20	103.71	541.97	90.60	551.70	99.55	545.09	88.09	556.07	87.47
601-700	650.25	117.99	648.30	97.59	649.21	102.17	651.09	99.52	646.22	97.75
701-800	745.93	119.08	742.80	113.07	751.71	111.62	749.05	108.23	746.64	114.07
801-900	845.09	136.70	848.00	111.05	852.03	116.86	849.32	119.12	857.50	114.33

SOURCE: Survey of Consumer Finances 1973. Vol. II Tables 5584 - 55 88.

Note: S.U : Spending Unit.

-/rc.

5. THE PATTERN OF FOOD CONSUMPTION AND  
THE EXPENDITURE ON FOOD

Food generally receives the highest priority in the expenditure pattern of the lower income groups and inadequacy in food is the most appropriate indicator of poverty. An overview of the island's expenditure on food in terms of income classes gives a general indication of the position of the poor (as compared with the more well-to-do) in regard to food. This overview is presented in Tables 6 and 7. The overall national averages, because of their very nature, are of limited significance. However, they serve as a measure in assessing the place of the poor.

The poor, as may be expected, are distributed mainly among the low household-income slabs of Rs.0-100 (which though poor are very few and unrepresentative), Rs.101-200 (which covers 5.85% of the households in the total sample) and Rs.201-400 which covers 27.36% of the households. Therefore, a closer scrutiny is made of these households while comparing their conditions with the next income slab of Rs.401-800 for which also much detailed data is available on food consumption. The general pattern of expenditure on food of the lower income groups, inclusive of the sector-wise and zone-wise data, is presented in Table 6. In Table 7 we see the physical quantities of food consumed by these income classes and their equivalent in calories and proteins.

A word of caution is necessary regarding comparisons of expenditures on food and their relation to levels of income. Income refers to cash income and "income in kind" and expenditures refers to items bought and values of "incomes in kind" consumed. Income in kind has been valued at the prices in proximate markets. Income in kind is important in the case of the low income households. The data on the "income in kind" as a percentage

of the total income of an Income Receiver for the lower income groups has been as follows.

Table 8

Income in kind : percentage of total income

<u>Income Receiver's Income Group 2 months income</u>	<u>Urban</u>	<u>Rural</u>	<u>Estate</u>	<u>All Island</u>
Rs.101-200	25.31	22.47	6.54	15.85
Rs.201-400	19.17	32.17	30.26	30.08
Rs.401-800	14.96	30.20	24.38	26.55

Source: Survey of Consumer Finances 1973--Table No.50

Income in kind includes free rice rations, free meals, uniforms, railway warrants, free living quarters etc. enjoyed by employees. It includes homegrown produce and free gifts.

In the Rural Sector especially, food gathered free or home grown items tended to be undervalued. Herbs, berries, roots, tubers etc. may not have had any money value at all or may have gone unrecorded. Fruits such as jak fruit, breadfruit (in season), some varieties of fruit of low or no market value in the villages would have been under-recorded in value, affecting both the level of the money value of income and money outlay on food. A comparison of money values of food consumed has therefore to be treated with caution. Money values as such are no measure of nutritional intake. The actual physical quantities consumed are more relevant. As regards physical quantities consumed too the timing of the survey (when domestic inventories and daily consumption were relatively low in the villages prior to the harvest and when breadfruit, jak fruit etc. were off-season) was such that the average daily consumption for the rural sector would have been somewhat lower than the actual annual average level of consumption. Table 6 on food expenditures shows that poor households of the Urban and

Rural Sectors have per capita outlays on food which are lower than the national average. In the Estate Sector it is higher. In Sri Lanka the households in the Estate Sector spend a higher proportion of their household income on food and they also have a higher per capita outlay on food. An examination of the physical quantities of food consumed shows that they have a higher nutritional intake than households in corresponding slabs of income in the Urban and Rural Sectors.

For the Island as a whole the expenditure on food as a percentage of total expenditure amounted to 55.17%. The all-Island household-income group Rs.101-200 for two months spent 63.65% on food and the income group Rs.201-400 spent 62.83% showing a difference of only 0.82%. This is because the average number of persons within a household rises with the level of household incomes. When we examine the average expenditure per capita on food we see that for each sector the per capita outlay in the household income slab Rs.101-200 is not very different from the per capita outlay in the household income slab Rs.201-400.

We have already noted that the per capita income for two months in the income group Rs.101-200 is Rs.70.98 and that in the income group Rs.201-400 is Rs.73.33, the difference being only Rs.2.33 for two months. There is however a notable change in the per capita income in the next slab, i.e. Rs.401-500. It is Rs.12.57 higher than in the slab Rs.201-400. The upward change begins when the household income rises above Rs.400 for two months.

Table 7 gives the physical quantities of food consumed per head over a two-month period as an overall national average, as a national average by sectors and the consumption by the income groups Rs.101-200 and Rs.201-400 which hold the poor households. Sector-wise there are differences in the choice of foods. The Urban sector has a higher consumption of bread, meat, fresh

fish and potatoes; the Rural sector of dried fish and manioc and the Estate sector of wheat flour, pulses and fresh milk. The ready availability of these items in the respective sectors is a contributory factor.

A summary of the average daily intake of calories and proteins is given in Table 9.

The per capita adequacy of calories and proteins would depend among other things on the age and sex composition of the group for which adequacy is to be determined. The data of the Survey of Consumer Finances shows that there is a wide variation in the age and sex composition of the households falling into the different income slabs (vide Survey of Consumer Finances 1973, Vol.II, Tables P4 and M6 to M9). In the income group Rs.201-400 the number of persons below 9 years of age was higher than the national average. This was also so for persons over 55 years of age. In regard to sex composition this income group had slightly more females than the national average. A norm of the minimum adequate intake of calories and proteins was worked out for the income group Rs.201-400 taking into account the age composition of the persons falling into the sample and taking sex as evenly distributed. Adequacy levels were taken in terms of the Daily Recommended Nutrient Allowances for Sri Lanka, given in Table 10 prepared by the Department of Nutrition, Medical Research Institute, Colombo. The norms and the actual intake for the critical income group is given in Table 11.

Table 11

Average Per Capita Consumption of Low-Income Group  
Survey of Consumer Finances 1973  
Household Income Group Rs.201-400 - 2 months

Sector	Per Capita Norm for actual age composition		Actual Per Capita Con- sumption		Percentage of Ade- quacy	
	Calories	Proteins	Calories	Prot.	Cal.	Prot.
All Island	1950.30	40.86	1917.03	41.5	98.29	101.57
Urban	1938.34	41.05	2217.67	63.4	114.41	154.45
Rural	1952.76	40.80	1779.03	39.3	91.10	96.32
Estate	1944.52	41.12	2469.82	57.4	127.01	139.59

Source: For age composition: Survey of Consumer Finances 1973, Vol.II, Tables P4 and M6 to M9.

It will be noticed that this income class (Rs.201-400 for 2 months) as a whole is marginally adequate in food intake. The urban sector of this income class and the estate sector are above the level of adequacy. It is the rural sector which shows some inadequacy.

The per capita income associated with these levels of nutritional intake were as follows:-

Table 12

Nutritional Adequacy and Per Capita Income

Sector	Per capita income (2 months) Rs.	Percentage Food Adequacy	
		Calories	Proteins
All Island	73.33	98.29	101.57
Urban	79.88	114.41	154.45
Rural	71.04	91.10	96.32
Estate	83.57	127.01	139.59

Adequacy is reached roughly at the per capita income level of Rs.73 for 2 months or Rs.36/50 per month. The case of the Rural Sector calls for further comment.

The figures for rural incomes took into account the returns of the annual harvests for these households and also a money value (though understated) of the home grown or gathered food. But the actual nutritional intake came to be understated because of the timing of the survey. The actual consumption of calories and proteins in the rural sector as an annual daily per capita average would have been higher than 1779.03 calories and 39.3 grams protein at the per capita income level of Rs.71.04 for 2 months. Exactly how much higher would be a matter of estimation. A five per cent higher intake per day would make it 1867.98 calories and 41.27 gm. of protein and a ten per cent higher intake would make it 1956.93 calories and 43.23 gms. of protein at the income level of Rs.71.04. Allowing for this it would be reasonable to consider Rs.73 per 2 months as the per capita income level at which the marginal households would be able to reach a bare minimum adequacy of calories and proteins per day.

This per capita income level within a household is therefore taken as the poverty line of Absolute Poverty in the Sri Lankan situation where everybody can also avail himself of certain unaccounted benefits flowing from free or subsidised goods and services.

Taking a per capita income of Rs.73 for 2 months we next examine the data on per capita household income. For this operation we examine the averages for the smallest available income slabs both sector-wise and zone-wise. As already stated, the income slabs from Rs.0-200 go up by slabs of Rs.25 for 2 months, from Rs.201-400 by slabs of Rs.50 for 2 months and Rs.400-1000 by slabs of Rs.100 for 2 months. Short of examining the per capita income in each household in the sample survey, this procedure gives an adequate identification of the poverty groups.

TABLE 3

## RELATIVE EXPENDITURE ON FOOD ITEMS - 2 MONTHS/BY SPENDING UNIT AND PER CAPITA

Sector	Average No. of persons per Spending Unit	Total Average expenditure of Spending Unit	Spending Units' Food Expenditure as % of total expenditure	Average Per Capita Expenditure on Food	
				Rs.	Rs.
<b>A. National Average</b>					
All Sectors					
All Income Groups	5.33	622.24	55.19	116.60	64.42
<b>B. National Average by Sectors</b>					
(1) Urban	5.25	836.27	47.38	151.17	75.47
(2) Rural	5.37	578.31	56.60	108.35	60.96
(3) Estate	5.17	598.12	59.56	110.40	68.91
<b>C. Income Group Rs.101-200</b>					
(1) All Sectors	2.25	183.55	63.65	70.98	51.92
(2) Urban	2.34	223.99	57.64	68.45	55.17
(3) Rural	2.27	173.76	65.08	70.08	43.81
(4) Estate	1.70	190.27	65.73	95.26	73.56
<b>D. Income Group Rs.201-400</b>					
(1) All Sectors	4.24	749.51	62.83	73.33	51.79
(2) Urban	3.82	322.04	65.42	79.89	55.15
(3) Rural	4.37	351.56	61.65	71.04	49.60
(4) Estate	3.80	370.58	68.28	83.57	66.58
<b>E. Income Group Rs.401-800</b>					
(1) All Sectors	5.8	583.79	60.47	97.43	60.87
(2) Urban	5.4	679.84	67.30	108.63	66.67
(3) Rural	5.3	501.34	61.74	94.96	58.74
(4) Estate	5.7	573.15	67.58	97.11	68.00

TABLE A.C.7  
AVERAGE QUANTITIES OF FOOD CONSUMER PER HEAD FOR 2 MONTHS  
BY INCOME GROUPS OF SPENDING UNITS

S E C T O R	I T E M S									
	Rice Rationed free (measure)	Rice Rationed paid (measure)	Rice Un-rationed paid (measure)	Wheat Flour (oz.)	Other Grains (measure)	Bread (oz.)	Meat Beef (oz.)	Meat Other (oz.)		
1. All Sectors:	7.4	4.82	3.98	102.45	1.44	101.36	8.14	1.87		
All Income Groups	6.50	5.11	3.14	61.77	0.93	163.01	18.83	2.97		
2. Urban: All Inc. Groups	7.25	4.56	4.39	74.55	1.66	94.05	5.88	1.42		
3. Rural: All Inc. Groups	7.53	6.33	2.60	386.53	0.84	35.77	4.10	2.99		
<u>INCOME GROUP -Rs.101-200</u>										
1. All Sectors:	6.65	3.58	2.45	80.67	2.93	96.93	4.54	0.45		
2. Urban:	5.62	3.93	1.75	61.71	0.11	148.76	11.44	1.19		
3. Rural:	6.84	3.28	2.64	68.53	3.82	86.07	3.07	0.29		
4. Estate:	7.76	7.00	2.22	348.35	0.06	61.18	-	0.06		
<u>INCOME GROUP - Rs.201-400</u>										
1. All Sectors:	7.32	4.96	2.90	109.82	2.22	91.82	3.26	0.79		
2. Urban:	6.49	6.15	3.70	53.01	0.29	141.15	8.68	0.58		
3. Rural:	7.42	4.70	2.83	79.64	8.60	92.75	2.68	0.59		
4. Estate:	7.45	5.58	2.58	404.29	1.44	29.84	1.71	1.41		

TABLE NO. 7 Contd.

## AVERAGE QUANTITIES OF FOOD CONSUMED PER HEAD FOR 2 MONTHS

## BY INCOME GROUPS OF SPENDING UNIT

## I T E M S

SECTOR	I T E M S						
	Fish fresh (oz).	Fish salted (oz).	Fish tinned (oz).	Fish dried (oz).	Eggs (no).	Starch foods Manioc (oz).	Starch foods Potatoes (oz).
1. All Sectors: All Inc. Groups	32.65	0.22	0.25	15.15	2.39	23.79	7.64
2. Urban: All Inc. Groups	61.16	0.36	0.33	10.44	4.14	10.21	12.74
3. Rural: All Inc. Groups	29.01	0.21	0.22	19.79	1.87	26.16	6.41
4. Estate: All Inc. Groups	4.16	0.05	0.38	12.19	2.80	17.92	6.78
<u>INCOME GROUP - Rs. 101-200</u>							
1. All Sectors:	18.36	0.11	0.20	11.71	0.93	25.10	2.70
2. Urban:	36.49	-	-	8.69	1.29	8.13	4.23
3. Rural:	14.69	0.15	0.20	12.51	0.86	29.54	2.26
4. Estate:	3.76	-	0.94	11.09	0.71	22.59	3.53
<u>INCOME GROUP - Rs. 201-400</u>							
1. All Sectors:	20.29	0.14	0.09	13.42	0.91	28.70	4.17
2. Urban:	42.63	0.27	0.05	10.09	1.67	14.14	7.50
3. Rural:	19.33	0.14	0.11	13.97	0.66	31.86	3.51
4. Estate:	2.77	-	-	12.96	2.03	20.63	5.51

Contd./-3

TABLE 10.7 Contd.

AVERAGE QUANTITIES OF FOOD CONSUMED PER HEAD FOR 2 MONTHS  
BY INCOME GROUPS OF SPENDING UNIT

SECTOR	I T E M S										
	Starch Foods Sweet Potatoes (oz).	Starch Foods Other Yams (oz).	Pulses mainly Dhal (oz).	Dried Chillies (oz).	Green Chillies (oz).	Condiments Fish Maldive Fish (oz).	Cond. Onions/ Garlic (oz).	Salt (oz).			
1. All Sectors:											
All Income Groups	4.61	3.98	20.35	3.84	16.17	0.56	12.67	13.44			
2. Urban: All Inc. Groups	3.25	1.46	19.54	4.87	11.29	0.69	15.42	18.61			
3. Rural: All Inc. Groups	5.22	4.82	18.74	3.69	16.98	0.53	11.71	19.21			
4. Estate: All Inc. Groups	2.75	2.70	33.58	2.95	19.64	0.55	14.41	22.77			
<b>INCOME GROUP Rs. 101-200</b>											
1. All Sectors:											
Urban:	5.29	4.03	17.61	2.66	17.81	0.41	10.42	24.02			
Rural:	7.53	1.88	15.57	2.25	12.29	0.36	12.79	20.71			
Estate:	4.81	4.23	16.80	2.65	18.50	0.43	9.47	24.60			
4. Estate:	3.76	9.41	38.82	3.12	28.94	0.24	15.86	28.12			
<b>INCOME GROUP Rs. 201-400</b>											
1. All Sectors:											
Urban:	4.14	3.59	18.48	2.80	17.01	0.28	9.92	20.69			
Rural:	4.28	2.89	13.9	3.25	11.52	0.44	12.00	18.26			
Estate:	4.14	3.87	17.16	2.79	17.17	0.25	9.11	20.44			
4. Estate:	3.97	2.21	33.59	2.40	21.86	0.38	13.86	25.29			

TABLE NO. 7 Contd.

AVERAGE QUANTITIES OF FOOD CONSUMED PER HEAD FOR 2 MONTHS  
BY INCOME GROUPS OF SPENDING UNIT

SECTOR	I T E M S									
	Pepper (oz).	Line (no).	Vinegar & Sauce (Bot).	Other condi- ments in list (oz).	Coconuts Palmyrah (no).	Coconut Oil (Bot).	Other oil Chec			
1. All Sectors: All Inc. Groups	2.12	6.89	0.02	13.82	13.73	0.85	0.38			
2. Urban: All Inc. Groups	2.32	8.71	0.05	14.29	12.49	1.27	0.67			
3. Rural: All Inc. Groups	2.01	6.83	0.02	12.78	14.14	0.70	0.33			
4. Estate: All Inc. Groups	2.49	3.82	0.05	20.64	13.09	1.16	0.22			
<u>INCOME GROUP Rs. 101-200</u>										
1. All Sectors:	1.98	7.63	-	14.19	15.27	0.64	0.37			
2. Urban:	2.20	8.04	0.01	14.84	10.04	0.59	0.71			
3. Rural:	1.82	7.56	-	13.07	15.72	0.61	0.30			
4. Estate:	3.53	7.06	-	21.77	28.94	1.40	0.03			
<u>INCOME GROUP Rs. 201-400</u>										
1. All Sectors:	1.88	6.36	0.04	12.61	13.25	1.09	0.18			
2. Urban:	1.69	7.74	0.07	10.92	10.90	4.37	0.24			
3. Rural:	1.79	6.47	0.02	11.70	13.51	0.54	0.17			
4. Estate:	2.77	3.98	0.07	21.34	13.76	1.16	0.11			

Contd. /-5-

## TABLE No. 7 Contd.

AVERAGE QUANTITIES OF FOOD CONSUMED PER HEAD FOR 2 MONTHS  
BY INCOME GROUPS OF SPENDING UNITS

SECTOR	I T E M S										
	Jaggery (oz).	Treacle (Bot).	Milk Bottle (oz).	Milk Tinned (oz).	Butter/ Cheese (oz).	Fruits (Nos)	Fruits tinned and dried (oz).	Sugar Ration- ed (oz).	Sugar Unrat- ioned (oz).	Tea Coffee	
1. All Sectors:											
All Income Groups	1.84	0.04	1.76	4.10	0.22	1.23	0.03	43.83	21.35	9.8	
2. Urban: All Inc. Groups	1.68	0.02	2.42	8.04	0.67	1.88	0.04	40.29	31.35	10.35	
3. Rural: All Inc. Groups	0.81	0.04	1.25	3.41	0.12	0.97	0.04	45.25	19.36	5.28	
4. Estate: All Inc. Groups	2.39	0.06	4.19	1.52	0.06	1.88	-	40.16	16.64	15.80	
<u>INCOME GROUP Rs. 101-200</u>											
1. All Sectors:											
2. Urban:	2.16	-	0.57	1.21	0.13	0.33	-	40.88	12.57	10.12	
3. Rural:	2.41	-	0.52	3.41	0.46	0.29	-	37.60	13.99	9.03	
4. Estate:	1.81	0.01	0.47	0.73	0.06	0.34	-	41.64	12.16	9.50	
4. Estate:	6.59	-	2.47	-	-	0.47	-	42.12	13.42	24.24	
<u>INCOME GROUP Rs. 201-400</u>											
1. All Sectors:											
2. Urban:	1.72	0.01	1.03	2.27	0.04	0.47	0.01	42.30	13.00	9.51	
3. Rural:	2.27	0.01	1.25	4.05	0.22	1.10	0.13	38.66	18.20	9.32	
4. Estate:	1.48	0.02	0.59	2.04	0.02	0.30	-	42.84	12.59	8.53	
4. Estate:	2.88	-	4.21	2.09	-	1.02	-	42.20	10.44	17.31	

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TABLE NO.7 Contd.

AVERAGE QUANTITIES OF FOOD CONSUMED PER HEAD FOR 2 MONTHS  
BY INCOME GROUPS OF SPENDING UNITS

SECTOR	I T E M S					Proteins (2 mths)	Daily Per Capita Calories Proteins
	Toddy (bot). (bot).	Arrack (bot).	Other Liquor (bot).	Vegeta- bles (oz).	Calories (2 mths)		
1. All Sectors: All Inc	0.69	0.10	0.07	129.57	117947.22	2642.95	1965.79
All Income Groups	0.45	0.12	0.04	109.14	114385.33	2647.62	1906.42
2. Urban: All Inc. Groups	0.72	0.08	0.04	136.12	114046.69	2529.72	1900.78
3. Rural: All Inc. Groups	0.92	0.22	0.30	120.93	142737.93	3397.79	2378.80
4. Estate: All Inc. Groups							
<u>INCOME GROUP Rs.101-200</u>							
1. All Sectors:	0.30	0.02	0.02	107.77	105732.62	2567.52	1762.21
Urban:	-	0.07	-	73.47	85494.89	1994.56	1424.91
Rural:	0.36	-	0.02	114.77	106569.81	2313.32	1776.16
Estate:	0.47	0.06	-	134.35	164218.37	3519.21	2736.97
<u>INCOME GROUP Rs.201-400</u>							
1. All sectors:	0.50	0.06	0.16	116.09	115021.91	2492.37	1917.03
Urban:	0.30	0.05	0.01	78.02	133060.40	3806.39	2217.67
Rural:	0.49	0.01	0.05	121.97	106741.99	2358.06	1779.03
Estate:	0.76	0.42	1.20	113.40	148188.96	3444.37	2469.82
Estate:							

SOURCE: Survey of Consumer Finances 1973 Vol.II - Tables S 569 to S 592.

-/rc.

TABLE 9

DAILY AVERAGE PER CAPITA INTAKE OF CALORIES  
AND PROTEINS

<u>Sector</u>		<u>Calories</u>	<u>Proteins</u>
<u>National Averages</u>			
All Sector/All Income Groups		1965.79	44.05
Urban	" " "	1906.42	44.13
Rural	" " "	1900.78	42.16
Estate	" " "	2378.80	56.63
<u>Income Groups Rs.101-200</u>			
All Sectors		1762.21	42.72
Urban		1424.91	33.24
Rural		1776.16	38.55
Estate		2736.97	58.65
<u>Income Group Rs.201-400</u>			
All Sectors		1917.03	41.5
Urban		2217.67	63.4
Rural		1779.03	39.3
Estate		2469.82	57.4

-/rc.

TABLE 10  
WORLD HEALTH ORGANIZATION LIMITED NUTRIENT ALLOWANCES FOR ALL PEOPLE

	Weight Kg.	Calo- ries	Protein	Calcium mg.	Iron mg.	Vitamin A Mcg.	Vitamin D Mcg.	Thiamine Mcg.	Mico- Flavin mcg.	Niacin mg.	Ascorbic Acid mg.
7-12 months (m&f)	7.3	818	19	550	10	300	10.0	300	500	5.4	20
1-3 yrs. (m&f)	12.0	1212	24	450	10	250	10.0	500	800	9.0	20
4-6 yrs. (m&f)	18.2	1656	31	450	10	300	10.0	700	1100	12.1	20
7-9 yrs. (m&f)	26.2	1841	35	450	10	400	2.5	900	1300	14.5	20
10-12 yrs. (m)	34.0	2414	45	650	10	575	2.5	1000	1600	17.2	20
10-12 yrs. (f)	36.0	2238	46	650	10	575	2.5	900	1400	15.5	20
13-15 yrs. (m)	49.0	2337	49	650	18	725	2.5	1200	1700	19.1	30
16-19 yrs. (m)	51.0	2500	51	550	9	750	2.5	1200	1800	20.3	30
20-35 yrs. (m)	55.0	2530	52	450	9	750	2.5	1200	1800	19.8	30
40-49 yrs. (m)		2404	52	450	9	750	2.5	1200	1800	19.8	30
50-59 yrs. (m)		2277	52	450	9	750	2.5	1200	1800	19.8	30
60-69 yrs. (m)		2024	52	450	9	750	2.5	1200	1800	19.8	30
70 yrs. (m)		1771	52	450	9	750	2.5	1000	1500	16.4	30
15-15 yrs. (f)	40.0	2300	46	650	24	725	2.5	900	1400	15.2	30
16-19 yrs. (f)	43.8	2200	42	550	28	750	2.5	900	1300	14.5	30
20-39 yrs. (f)	47.0	1900	41	450	28	750	2.5	900	1300	14.5	30
40-49 yrs. (f)		1805	41	450	28	750	2.5	900	1300	14.5	30
50-59 yrs. (f)		1710	41	450	28	750	2.5	900	1300	14.5	30
60-69 yrs. (f)		1520	41	450	24	750	2.5	900	1300	14.5	30
70 yrs. (f)		1330	41	450	24	750	2.5	900	1300	14.5	30
PREGNANCY - 1st half		+150	46	1000	40	750	10	900	1400	15.2	30
- 2nd half		+350	15	1000	40	750	10	1100	+200	+2.3	30
LACTATION		550	28	1000	40	1200	10	+200	+400	+3.7	30

1. Protein allowance on basis of chemical score of 60 for local diets.  
Reference: (1) Energy and Protein Requirements-World Health Organization Technical Report Series No. 522 (1973).  
(2) Handbook of Human Nutritional Requirements-W.H.O. Monograph Series 61 (1974)

Inst. of Nutrition, Medical Research Institute, Colombo-8, CCH/January 1976.

## 6. THE GEOGRAPHY OF POVERTY

A per capita income of Rs.73 for 3 months (i.e. Rs.36/50 per month) has been taken as the level of income a household needs in order to provide its members a marginally adequate diet. The location of households that are short of this level should ideally be done by examining the data for each household in the sample. As this is not practical, we have taken the smallest income slabs of household income for which data is available and examined the level of average per capita income within them. The disaggregated data on these households/ Spending Units are given in Appendix Tables 1A to 1K. The geographical distribution is in Table 13.

In the Survey of Consumer Finances, the households in the sample have been grouped in two ways: in Sectors and in Zones. There are certain differences in the composition of the households at the different levels of income between the three sectors. When households are grouped in zones we find that each zone has a quota of Urban households, and Zone I and Zone IV contain the Estates. Seven per cent of the households in Zone I fall into the Estates and about 23% of the households in Zone IV fall into the Estates. As a result, when households are grouped into the respective household income slabs in terms of zones and the average per capita income within them are examined, the number of households suffering absolute poverty turn out to be less in terms of zones than in terms of sectors. This is because absolute poverty (as defined above) is negligible on the Estates and it is low in the overall Urban areas. When these better-placed households are spread across geographical zones, they give an improved look to the all-island situation when viewed zone-wise.

The sector-wise examination gives a total of 1066 disadvantaged households out of a total of 5363, i.e. 19.88%. The zone-wise examination shows up only 883

households, i.e. 16.47%. When all the island's households are grouped into small income slabs and examined, the results show 19.09%. The distribution of the incidence of absolute poverty is given in Table 13 and it would be fair to say that around 19% of the households suffer absolute poverty although the data is somewhat obscured in the zone-wise analysis.

The examination of the data on the average per capita resources for very small slabs of household income shows that the slab of Household Income is no indicator of the availability of per capita resources except in the poorest household-income slab of Rs.0-100 for two months. In this layer of household income, all the households are in absolute poverty, regardless of sector or zone. They amount to only 56 households out of the island total of 5363. Sector-wise, 4% of them are in the Rural sector. Zone-wise, 29 of them are in Zone IV.

The next broad income slab adopted in the Survey of Consumer Finances is Rs.101-200 for 2 months. When households within this slab are examined for their per capita resources in terms of Rs.25 slabs of household income (vide Appendix Tables 10 to 15), 198 disadvantaged households show up in the sector-wise analysis and 174 in terms of the zone-wise analysis. The particulars are given in Table 14. Sector-wise, 177 out of the 198 are in the Rural sector. Zone-wise, 106 out of the 174 are in Zone IV.

The household income slab Rs.201-400 holds the majority of the households suffering absolute poverty whether viewed sector-wise or zone-wise. Over 70% of the disadvantaged households fall into this broad income slab.

Viewed sector-wise, there are no households in the Estate sector in this income slab suffering absolute poverty. Only 42 in the Urban sector are affected.

but 770 out of the 812 affected households are in the Rural sector.

This pattern gets reflected in the zone-wise analysis which shows up only 644 disadvantaged households in this income slab. Not a single household in Zone I (which is highly urbanised) is affected. But 472 out of the 644 affected households fall into Zone IV.

Sector-wise, all the disadvantaged households fall into households with household incomes up to Rs.400 for 2 months. However, in the zone-wise disaggregation, 9 households out of the 883 fall into the household income group Rs.401-450 for two months and they are in Zone V-- Colombo Municipality.

It is the Rural sector that holds most of the households in absolute poverty. In the sector-wise analysis, as much as 92.96% of the affected households are in the Rural sector. In the zone-wise analysis, as much as 68.74% are in Zone IV.

Absolute poverty has been defined in terms of the resources available per capita within the households. The data suggests that the disadvantaged households are the smaller households with a relatively few income earners with low incomes. The smallness of the incomes itself reduces the number that can live by them.

Within the respective broad income slabs of household income, it is the average number in the respective households that determine whether there is a sufficiency of per capita resources. Families tend to hover around the level of marginal sufficiency. An additional member getting employed can move the household out of absolute poverty. Likewise, the death or incapacitation of an earner or the addition of a non-earner may move the household into severe poverty.

Table 4 shows the weight of members within households in the respective household income slabs. It will be noticed that the members within households are relatively low in the Estate sector and they are relatively high in the Rural sector particularly in the income range of Rs.201-400. For example, in the household income slab of Rs.301-350/2 months, it is 4.6 for the Rural, 4.1 for the Estate and 3.7 for the Urban. In the slab Rs.350-400/2 months, it is 5.1 for the Rural, 4.6 for the Urban and 4.3 for the Estate. The disadvantaged households show up to be the ones with relatively few income earners and relatively high numbers.

We may next examine the incidence of the poor households in terms of the total in each sector and its significance in terms of population. Sector-wise, only 1.68% of the Estate households suffer this poverty and they constitute 0.54% of the Estate population. These households make up 0.17% of the Island's households and 0.05% of the Island's population. The Urban sector has 6.45% of the sector households affected and this covers 3.68% of the sector population. In terms of the Island as a whole, it is only 1.23% of the households and only 0.69% of the population. It is the Rural sector that manifests a considerable degree of absolute poverty. As much as 26.06% of the sector households appear to be affected, covering 17.62% of the sector population. In terms of the whole Island, it is 18.48% of the households and 12.60% of the population.

Zone-wise, in Zone I, only 1.42% of the zone households are affected and they constitute 0.47% of the Island's households. In terms of population, it is 0.47% of the zone population and 0.15% of the Island population. In Zone II, 19.84% of the households are affected but they constitute only 2.85 of the Island's households. Population-wise, it is 15.23% of the zone population but only 2.27% of the Island's population.

In Zone III, 10.02% of the households are affected but they are only 1.03% of the Island's households. In terms of population, it is 5.92% of the zone's population and only 0.60% of the Island's population. Zone IV shows the highest incidence of poverty. As much as 28.90% of the households in the zone are affected and they represent 11.32% of the Island's households. In terms of population, it means 20.07% of the zone population and as much as 7.98% of the Island's population. Finally, Zone V (Colombo Municipality) indicates the poverty in the main city of the country. As much as 23.76% of the households are affected although they represent only 0.80 of the Island's households. As much as 21.02% of the city population is affected but it represents only 0.77% of the Island's population.

In the case of all zones, care should be taken in interpretation because each zone covers a number of Administrative Districts, each of which is different in its economic viability. Subsidiary data relating to districts (such as the numbers of landless, the average yield of paddy, the extent of urbanisation and its attendant employment opportunities) have to be taken into account in locating the incidence of poverty from district to district within each zone. On the face of it, Zone I which covers 32.85% of the Island's households located in the districts of Colombo, Kalutara, Galle and Matara on the Western seaboard (but excluding Colombo Municipality) is the best off. Only 1.42% of the zone households covering 0.47% of the zone population are affected. In terms of the whole Island this is only 0.47 of the households and 0.15% of the population. This is a coastal area which is well roaded. It has trunk roads and a railway line across its length and these routes (besides other locations) are studded with townships affording employment opportunities. Numerous industries such as fibre and rope, brick and tile making, fishing, carpentry and handicrafts are well established

in the region. It has been for long years well provided with educational institutions and a good part of it constitutes the dormitory area of persons employed in the Colombo city. Nutritionally too, the area had ready access to coconut products, fish and fish products.

In the case of Zone V, Colombo Municipality, 23.76% of the zone households are affected, covering 21.02% of the zone population. However, in terms of the whole Island it is 0.80% of the households and 0.77% of the population. This picture of the city of Colombo results from the congregations of low-income workers, casual labourers, slum households and beggars and persons of no determinate employment. The chances are high that there is a considerable understatement of income in this sector. Nevertheless the data indicate that the main pocket of urban poverty is in the City of Colombo. It is the segment which as incomes fall below minimum levels, becomes particularly vulnerable in nutritional terms in the urban environment where incomes in kind such as home-grown produce available to rural households are not normally available.

Zones II, III and IV present the case of rural poverty. In the zonal grouping of households the rural households and the estate households are taken together in each zone. Because of the presence of a larger number of income receivers in the average estate household, the per capita income within households at the lower income levels is more favourable in this sector than in the villages. The worst affected is Zone IV which covers six administrative districts with different agro-climatic conditions and which holds 39.16% of the Island's households. In this zone 28.90% of its households are affected, covering 20.07% of the zone population. In terms of the Island as a whole, it is 11.32% of the households and 7.98% of the population. The situation in Zone IV calls for closer examination. In this zone, 23% of the housing

units examined were on the estates. 23% of the 2,100 households in this zone amount to 483 households. On the estates only 1.68% of the households had per capita incomes at or below the level of absolute poverty. This points to the fact that most of the 607 households in Zone IV showing absolute poverty were among the rural village households and not on the estates. It is likely that the percentage of rural households in absolute poverty is in the region of 30-35%.

Zone II which includes the Dry Zone, has 19.84% of the zone households covering 15.23% of the zone population affected by poverty. However, in terms of the whole Island this is only 2.85% of the households and 2.27% of the population. In Zone III covering the Northern and the Eastern regions, 10.02% of the zone households covering 5.92% of the zone population is affected. In terms of the Island it is only 1.03% of the Island's households and 0.60% of the Island's population.

This analysis of the location of poverty draws attention to several noteworthy features. The heaviest incidence of absolute poverty is still to be found in the rural sector. Despite the widespread programmes of social welfare which have been implemented during the last 3 decades, 26.6% of the households in this sector have a level of food consumption below the nutritional norm. The largest concentration of the rural poor are in Zone IV, and it is likely that within this zone which includes several districts with varying socio-economic and agro-climatic areas, it is the rural areas in and around the central hill region which are worst affected. The rest of rural poverty is spread less densely in Zone II, and to a lesser degree in Zone III. Another dense pocket of poverty we saw was in the urban sector in the City of Colombo. As a proportion of the city population, the number of spending units below the absolute poverty line--nearly 24%--is comparatively quite high.



Sector/Zone	Spending Units/Households			Persons/Population						
	Total in Sample	No. Show- ing In- adequacy or Zone- House- holds	% of All- Island (5363)	Total in Sample	No. Show- ing In- adequacy or Zone- House- holds	% of All- Island (28587)				
<u>BY ZONES</u>										
<u>Zone II -</u> Hambantota, Moneragala, Kappalai, Polonnaruwa, Anuradhapura & Puttalam	771	14.38	153	19.84	2.85	4256	14.89	648	15.23	2.27
<u>Zone III -</u> Jaffna, Vavuniya, Trincomalee, Batticaloa	549	10.24	55	10.02	1.03	2905	10.16	172	5.92	0.60
<u>Zone IV -</u> Kandy, Matale, Badulla, Hapapaya, Kegalle and Kurunegala	2100	39.16	607	28.90	11.32	11358	39.73	2280	20.07	7.98
<u>Zone V -</u> Colombo Metropolitanity	1051	3.37	43	23.76	0.80	1051	3.68	221	21.02	0.77
	5000	100.00	887	10.47		28587	100.00	3363		11.77

TABLE 14

## THE DISTRIBUTION OF THE POVERTY GROUP IN TERMS OF HOUSEHOLD INCOME LEVELS

2 month Income on Spend- ing Unit Rs.	Urban	Rural	Estate	Total	Sector- wise Percent- age	Zone I	Zone II	Zone III	Zone IV	Zone V	Total	Zone - wise Percent- age
0-100	6	44	6	56	5.2	11	10	6	29	nil	56	6.3
101-200	18	177	3	198	18.6	14	30	22	106	2	174	19.7
201-400	42	770	0	812	76.2	0	113	27	472	32	644	72.9
401-450	-	-	-	0	-	0	0	0	0	9	9	1.0
451-500	-	-	-	-	-	-	-	-	-	-	-	-
Total	66	991	9	1066	100.0	25	153	55	607	43	883	100.0
Percentage	6.19	92.96	0.84	100		2.83	17.32	6.23	68.74	4.87	100	
Sector Total as % of Island's Spending	Zone total as % of Island's Spending Units = 16.5											

Units=19.9

Note: The poverty group consists of Households with per capita Income of less than Rs.73/- for 2 months. The Sector-wise total differs from the Zone-wise total due to the redistribution of Estate and Urban Households in the Zones. The data is gathered from averages of small slabs (of Rs.25 & 50) of ranked household-income groups.

-/rc.

## 7. MOVING AWAY FROM POVERTY

In measuring absolute poverty in terms of a marginal sufficiency of food it was seen in the sector-wise analysis that 76.5% of the households affected were in the household income group Rs.201-400 for 2 months and most of them were in the Rural sector and none in the Estate sector. The nutritional vulnerability of this household income class is apparent in the manner in which the next higher income class (for which detailed data is available) has moved out of this position. In this ~~next~~ income class (Rs.401-800 for 2 months) the average expenditure on food increases substantially and the percentage of income spent on food stabilises itself.

Table No.15 sets out the position. On an all-island basis the average household in the Rs.401-800 group spends Rs.133.47 more on food. There is an increase of 17.5% in the per capita outlay on food. But this is the average over a broad income slab. Within this slab, the median, in the ranked spending units, falls into the income group Rs.501-600 for 2 months which on the average has 5.8 members in the household. The average number per household for the entire slab Rs.401-800 is also 5.8. The increase in per capita food consumption has taken place despite the increase in the average household size from 4.2 members in the income slab Rs.201-400.

The increased outlay also represents an improvement in the quality of per capita consumption. The examination of the per capita outlays on a selection of items confirms this and this is shown in Table No.16. It will be seen that the increases in per capita expenditure on starch foods is small. Expenditure on "other grains" has actually dropped. The expenditure on eggs has risen by 104%, on meat by 77%, on milk and milk products by 59% and on fish by 41%. A good indicator of the improvement in the children's diet is seen in the

rise in the total household expenditure on milk and milk products. For the all-island data it is a rise of 121%. In the Urban sector it is 124% and in the Rural it is 141%. In the Estate sector where the milk consumption at the household income level, Rs.201-400 was double the national average for that income group, the rise was 45% (Survey Report, Vol.II, Tables S593 to S596).

The process of moving away from poverty is not so much an improvement in the quantity and quality of the diet as it is of a change in the entire pattern of life of the people. The increases in a number of non-food items of expenditure show to what extent "felt needs" were of necessity suppressed in the poor households. The items where the increases appear are the very ones that provide the household a decent human existence, a minimum of social life and a satisfaction of "basic needs." The overall pattern of change towards satisfying basic needs is shown in Tables 17 and 18. It will be noticed that in the case of footwear and clothing, the per capita outlay rises by 119% in the all-island analysis. It moves up by 76% in the Rural sector where most of the people live. In "Recreation, Entertainment and Ceremonial" the all-island per capita change is 95% and in the Rural sector it is an increase of 107%. In Education and related expenditure--i.e. buying of reading matter--it shows a rise of 121% all-island and the same percentage rise in the Rural sector.

Another sensitive area of expenditure is that of housing. In the Urban and Rural sectors there is an increase in outlay of 74%. Even in the Estate sector there is a rise of 31%. In the Sri Lanka situation the purchase of jewellery for the female members of the household is considered a social necessity even among the poorer classes. The six-month outlay at the all-island level shows a rise of 127%. In the Rural sector it is 152%. In the case of the Estate sector where the expenditure on furniture, for example, is negligible,

partly because of poor housing, the outlay on jewellery rises by 108%.

A much more elaborate examination of data, both at the macro-level and at the micro level is necessary before one can reasonably establish levels of expenditure on the various aspects of living at which "basic needs" would be satisfied in the different socio-economic sectors. The estate sector presents problems in relation to housing and education which demand separate treatment. Variations in the consumer preferences between sectors should also be taken into account. Nevertheless, it may be generally stated that "basic needs" appear to be satisfied at some level in the household income slab Rs.401-800 for two months, in the context of Sri Lanka.

If we take the median household income in the range of Rs.501-600 for 2 months, it would roughly be the income level at which the average levels of consumption in the slab Rs.401-800 is reached. At this income slab, the all-island per capita income is Rs.94. For the Urban sector it is Rs.101/43, for the Rural Rs.91/93 and for the Estate Rs.100/61. Rs.94 may be taken as a rough and ready measure of per capita income at which the satisfaction of basic needs may be met.

The households falling short of Rs.94 per capita for 2 months is set out in Table No.19.

As in the case of the table on absolute poverty (Table 13), the regrouping of households (inclusive of Urban and Estate households) in the zones gives a zone-wise picture which is a little different from the sector-wise picture. Sector-wise, 60.77% of the Island's households are short of "basic needs": zone-wise it is 52.34%. As much as 78% of the total households in the Island thus disadvantaged were in the Rural sector.

In the Urban sector only 6.45% of the Urban households suffer absolute poverty but as much as 42.42% were short of basic needs. In the Rural sector 26.06% of the households suffered absolute poverty but as much as 66.78% were short of basic needs. The Estate sector which did not suffer severe nutritional deficiency in 1973 had only 1.68% of their households in absolute poverty but by our measure of basic needs as much as 53.07% of the Estate sector households fell short of basic needs.

Zone-wise it is again Zone IV that is most disadvantaged: as much as 70.85% of the Zone IV households are affected.

TABLE 12

## FOOD EXPENDITURES OF HOUSEHOLD INCOME GROUPS

Rs.201 - 400 and Rs. 401 - 800 for 2 Months ( Rs. )

Sector	Average Household Expenditure on Food Rs.201-400 Rs.401-800	% Rise	Percentage of Income spent on Food Rs.201-400 Rs.401-800	Average Per Capita Expenditure on Food Rs.201-400 Rs.401-800	% Rise
	All Island	219.60	60.78	62.8	51.79
Urban	210.68	69.73	65.5	55.15	20.07
Rural	216.74	59.90	61.7	49.00	18.42
Setate	253.04	53.19	68.3	66.58	2.13

TABLE 16

AVERAGE PER CAPITA EXPENDITURE ON SELECTED FOOD ITEMS  
HOUSEHOLD INCOME GROUP Rs.201-400 AND Rs.401-800 FOR TWO MONTHS

<u>ITEM</u>	<u>INCOME GROUP Rs.201-400</u> Rs.	<u>INCOME GROUP Rs.401-800</u> Rs.
Rice	15.01	17.43
Wheat flour	2.75	2.78
Other grains	0.46	0.28
Meat	0.44	0.78
Fish	3.30	4.65
Eggs	0.25	0.51
Pulses	0.87	1.02
Vegetables	4.05	4.60
Milk and milk products	0.95	1.51
Sugar	3.18	3.85
Other food items	1.95	2.88

Note: The selected items are from a list of 24 items from Table S.715, Survey of Consumer Finances 1973, Vol.II.

RELATIVE PER CAPITA EXPENDITURES WITHIN SPENDING UNITS ON  
SELECTED ITEMS (RS.)

Sector	Total average expenditure of spending unit	Non-Food outlays as % of total expenditure	Foot-wear, clothing & linen	Housing	Fuel and Light	Transport & Communication	Education	Medical	Recreation Entertainment, Ceremonial
<b>A. All Sectors</b>									
1. All Income Groups	622.24	44.82	8.85	7.92	4.88	3.96	2.54	1.88	3.53
2. Rs. 101-200	183.55	36.35	3.19	5.82	4.60	1.32	0.62	0.82	0.96
3. Rs. 201-400	349.51	37.17	3.07	4.96	4.42	1.60	0.80	1.12	1.15
4. Rs. 401-800	583.79	39.53	6.75	6.30	4.52	2.65	1.77	1.56	2.25
<b>B. Urban</b>									
1. All Income Groups	836.27	52.62	11.79	13.43	5.71	5.98	3.92	2.30	4.17
2. Rs. 101-200	223.99	42.36	2.41	6.51	3.90	1.33	1.23	0.57	1.12
3. Rs. 201-400	322.04	34.58	4.25	7.06	4.21	2.02	0.98	0.71	1.15
4. Rs. 401-800	679.84	47.40	6.72	8.76	5.06	3.10	1.89	1.62	1.99
<b>C. Rural</b>									
1. All Income Groups	578.31	42.40	7.74	6.94	4.64	3.65	2.31	1.90	3.23
2. Rs. 101-200	173.36	34.92	3.22	5.55	4.58	1.32	0.51	0.91	0.83
3. Rs. 201-400	351.56	38.35	3.60	4.80	4.31	1.56	0.87	1.24	1.13
4. Rs. 401-800	561.34	38.26	6.35	6.21	4.34	2.68	1.92	1.68	2.34
<b>D. Estates</b>									
1. All Income Groups	598.12	40.44	10.98	4.34	4.96	2.15	1.58	0.92	4.43
2. Rs. 101-200	190.27	34.27	6.01	7.73	7.40	1.18	0.00	0.77	2.18
3. Rs. 201-400	370.58	31.72	7.55	3.78	5.39	1.40	0.24	0.72	1.27
4. Rs. 401-800	573.45	32.42	9.11	3.28	4.83	1.67	0.61	0.67	2.01

Source: Survey of Consumer Finances 1973, Vol. II, Tables B.715 to B.737.

TABLE 13

HOUSEHOLD EXPENDITURES (NON-FOOD) OF INCOME GROUP  
Rs. 201-400 AND INCOME GROUP Rs. 401-800 ( Rs. )

Item	Household income Rs. 201-400 - 2 months - (1)	Household income Rs. 401-800 - 2 months - (2)	2 → 1 x 100
<u>Housing for 2 months</u>			
All Island	21.07	36.51	173.3
Urban	26.96	46.96	174.2
Rural	21.09	36.63	173.7
Estate	14.35	18.74	130.6
	-	-	-
<u>Furniture for 6 months</u>			
All Island	0.83	2.32	279
Urban	0.14	1.12	800
Rural	1.07	2.95	275
Estate	-	0.10	-
<u>Jewellery for 6 months</u>			
All Island	3.58	8.13	227
Urban	2.67	5.54	207
Rural	2.41	6.07	252
Estate	12.37	25.79	208

TABLE 14

HOUSEHOLDS FALLING SHORT OF BASIC NEEDS  
(AT PER CAPITA INCOME OF Rs. 94 FOR 2 MONTHS)

<u>SECTOR/ZONE</u>	Total Households	<u>SPENDING UNITS/HOUSEHOLDS</u>		% of Island's Households
		Number showing Inadequacy	% of Zone or Sector	
All Island	(5363)	2687	50.10	50.10
Urban	(1023)	434	42.42	8.09
Rural	(3803)	2540	66.78	47.36
Estate	(537)	285	53.07	5.31
		<u>3259</u>		<u>60.77</u>
Zone 1	(1762)	598	33.94	11.15
Zone 2	(771)	492	63.81	9.17
Zone 3	(549)	164	29.87	3.06
Zone 4	(2100)	1488	70.85	27.75
Zone 5	(181)	65	35.91	1.21
		<u>2807</u>		<u>52.34</u>

Reference: Appendix Tables 1A to 1K

8. POVERTY AND THE INCOME RECEIVERS

In the Survey of Consumer Finances 1973, the analysis done in terms of Spending Units does not indicate the earning opportunities and income patterns in terms of sex and of communities. Some data on this is however available in terms of the Income Receivers including their sector-wise position. The level of income of an income receiver, however, is not by itself any indicator of poverty or prosperity within a household. While this level of income contributes to prosperity, the number of income receivers within a household and the number of dependants turn out to be critically important for determining the economic status of the low income households.

The average incomes per Household and per Income Receiver in the respective sectors is given in Table 29. Income-wise, the Urban sector is best off. In this sector, there is a concentration of secondary and tertiary stages of production and there is also a wide spectrum of activities that provide opportunities for employment. There is, however, a similarity between the Rural sector

and the Estate sector in regard to the average income per Spending Unit and the average per capita income within spending units, but the number of Income Receivers per Spending Unit is 2.41 for the Estate sector and only 1.26 for the Urban and Rural sectors respectively.

The average income per income receiver is lowest in the Estate sector. This is partly because the women employees in the Estate sector constitute 48.96% of the Income Receivers whereas it is around 19% in the Urban and Rural sectors. Women are generally paid less than the men and in the Estate sector the legally controlled wages of women (and of children) also show this difference.

Table 20

Average incomes per Household/Spending Unit and per Income Receivers

<u>All Income Groups</u>	<u>All Island</u>	<u>Urban</u>	<u>Rural</u>	<u>Estate</u>
1. Average income per spending unit	621.57	794.71	582.14	570.91
2. Average per capita income per spending unit	116.60	111.37	108.41	110.43
3. Average income per income receiver	445.01	632.68	446.48	236.71
4. Average No. of Income Receivers per spending unit	1.36	1.26	1.26	2.41
5. Average No. of dependants per household	4.18	4.32	4.32	2.79

The Survey of Consumer Finances 1973 shows that as much as 85.65% of the women income receivers on the Estates earn less than Rs.200 for two months. The corresponding figures for the Rural sector is 52.49% and for the Urban sector 37.60%. Many of the women may not be in regular full-time employment (Reference. Survey of Consumer Finances 1973, Vol.II, Tables I-10 to I-13).

Income Receivers who are children are another feature to be noted. Only 3.66% of the income receivers in the Island are aged 13 years or below. In the Estate sector, 7.26% of the income receivers in the sector are of this age as against 2.99 in the Rural sector and 2.49 in the Urban sector. In terms of earning-power, as much as 91.49% of this age-group in the Estate sector earn less than Rs.200 for two months. The corresponding figures for the Rural and Urban sectors are 73.94% and 65.63% respectively (Reference: Survey of Consumer Finances 1973, Vol.II, Tables I-10 to I-13).

The sector-wise and zone-wise pattern of the average 2-month income of the island's Income Receivers is given in Table 22. It will be noticed that the mean income and the median income of both male and female Income Receivers are lowest in the Estate sector. The female income receivers fare relatively well in the Urban sector where professions and skilled jobs are considerable. Their favourable position in Zone II may be accounted for by the presence of skilled crafts (in weaving and the textile industry in particular) in parts of this zone such as Jaffna. But they constitute only 6.88% of the Income Receivers in the Zone.

As already stated in this study, the income accrued by an Income Receiver is both income in cash and income in kind. The sources of income may be numerous and of various kinds such as profits, interest and dividends, professional earnings, salaries, wages etc. For example, the income of an Estate labourer (who owns no land or equipment) is purely a wage for labour whereas the income of a farmer is a return for his labour plus an element of interest on his owned equipment--ploughs, buffaloes and other auxiliaries of cultivation--an element of rent on his owned land, if any, an element of profit on his enterprise and risk-bearing and also a benefit accruing from the unpaid services of his

household in the agricultural operations. For this reason, a direct comparison between income of Income Receivers between sectors has to be done with caution and not treated as wage rates.

The next aspect is the geographical distribution of Income Receivers in terms of the different communities in the country. At the Census of 1971, the ethnic distribution of the population was determined. In Table No.21, we present the ethnic distribution together with the percentage-wise distribution of Income Receivers.

Table 21

Ethnic Distribution of Income Receivers

<u>Ethnic group</u>	<u>% of population</u>	<u>% of income</u>
Low Country Sinhalese	42.8	41.07
Kandyan Sinhalese	29.2	25.78
Ceylon Tamils	11.2	10.77
Indian Tamils	9.3	15.77
Moors	6.7	5.77
Malays	0.3	0.26
Burghers	0.4	0.41
Others	0.1	0.16

In the case of the Indian Tamils, because the women and children contributing to production are recorded as separate Income Receivers, the numbers of income receivers are more than in proportion to the population.

The broad sector-wise distribution of the ethnic groups show certain characteristics. As much as 55.87% of the Urban Income Receivers are Low Country Sinhalese and only 7.78% are Kandyan Sinhalese, whereas 15.87% of them are Ceylon Tamils and 12.06% Moors. In the case of the Rural sector, 47.51% of the Income Receivers are Low Country Sinhalese and 36.62% are Kandyan Sinhalese. In the Estate sector, 80.39% are Indian Tamils.

Zone-wise, as much as 69.92% of the low country Sinhalese are in prosperous Zone I and they constitute 86.58% of the Zone I Income Receivers. As much as 81.84% of the Kandyan Income Receivers are in Zone IV which had the highest incidence of absolute poverty. They constituted 48.94% of the Zone's Income Receivers. Another 31.54% of Zone IV Income Receivers were Indian Tamils. In the case of the Ceylon Tamils, 58.17% of the income receivers were in Zone III and they constituted 75.24% of Zone III income receivers. The Moors are well represented in each zone but 30.49% are in Zone II and 23.16% in Zone IV. As much as 17.96% of them are in Zone I. The Income Receivers in Colombo city are predominantly low country Sinhalese and they account for 43.27%. The Kandyan Sinhalese constituted only 5.31%, the Moors 18.78% and Ceylon Tamils 16.33%. The overall zone-wise picture is given in Tables 23 and 24.

The different zones and sectors have their distinctive characteristics in regard to the social and industrial capital, rainfall, quality of land, government infrastructures, advantages of situation (e.g. Colombo Port and the government and mercantile establishments in Zone 5) etc. Communities that are concentrated in the well-appointed sectors or zones generally enjoy these locational benefits which are in addition to their opportunities for earning a money income and the actual money income earned.

**TABLE 22**  
**AVERAGE TWO MONTH INCOME OF INCOME RECEIVERS**

	M A L E		F E M A L E		
	Mean Income Rs.	Median Income Rs.	Mean Income Rs.	Median Income Rs.	As % of Total Income Receivers
All Island	523.20	421.81	250.09	165.24	22.97
Urban	693.91	562.91	379.17	289.47	17.25
Rural	512.62	432.25	280.86	188.70	17.00
Estate	316.73	244.27	153.34	142.17	48.98
Zone 1	602.61	471.19	305.82	186.19	23.86
Zone 2	569.01	485.93	279.75	221.66	13.58
Zone 3	565.38	406.66	367.12	300.00	6.88
Zone 4	425.42	346.93	197.60	149.03	28.56
Zone 5	603.60	480.00	328.64	243.75	17.12

Note: The Estate Sector falls in Zones 1 and 4

Source: Survey of Consumer Finances 1973 - Tables No.57 and 58

TABLE 23

INCOME RECEIVERS BY COMMUNITY AND SECTORS

(Total Income Receiver= 7326)

	Urban	Rural	Estate	Total	%
Kandyan Sinhalese	100	1738	51	1889	25.78
Low-Country Sinhalese	718	2255	36	3009	41.07
Ceylon Tamils	204	441	144	789	10.77
Indian Tamils	62	52	1041	1155	15.77
Moors	155	251	17	423	5.77
Malays	17	-	2	19	0.26
Burghers	24	5	1	30	0.41
Others	5	4	3	12	0.16
<b>Total</b>	<b>1285</b>	<b>4746</b>	<b>1295</b>	<b>7326</b>	<b>100.00</b>
<b>Percentage</b>	<b>17.68</b>	<b>64.78</b>	<b>17.68</b>	<b>100</b>	

TABLE 24

INCOME RECEIVERS BY COMMUNITY AND ZONE

(Total Income Receiver= 7326)

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Total
Kandyan Sinhalese	66	254	10	1546	13	1889
Low-Country Sinhalese	2104	437	38	324	106	3009
Ceylon Tamils	56	53	459	181	40	789
Indian Tamils	107	7	20	998	23	1155
Moors	76	129	74	98	46	423
Malays	5	-	-	1	13	19
Burghers	16	-	7	4	3	30
Others	-	2	2	7	1	12
<b>Total</b>	<b>2430</b>	<b>882</b>	<b>610</b>	<b>3159</b>	<b>245</b>	<b>7326</b>
<b>% of total</b>	<b>33.17</b>	<b>12.04</b>	<b>8.33</b>	<b>43.12</b>	<b>3.34</b>	<b>100</b>

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9. THE CHANGES BETWEEN 1963 AND 1973

The data of the Survey of Consumer Finances 1973 may be compared with the data of the Survey of Consumer Finances 1963.

The changes in the average incomes between 1963 and 1973 are given in Table 25. Total mean income in 1973 at 1963 prices had risen by 10.74% but in terms of industries the change has been varied. There has been a 46.56% rise in the mean incomes in the section "Electricity, gas, steam, water and sanitary services" and a 24.17% rise in the section "Hunting and Fishery" which is almost entirely 'Fishing'. In the general "Services" section there was a drop of 26.30% and a drop of 23.58% in the section "Mining, quarrying, clay and sand."

The 10-year change is also reflected in the average 2-month Income of Income Receivers and of Spending Units as presented in Table No.26.

Table No.26

Consumer Finance Estimate of Average Two-Month  
Income of Income Receivers & Spending Units (Rs)

<u>Average</u>	<u>Years</u>	
	<u>1963</u>	<u>1973</u>
1. Mean income per income receiver	267	455 (299)
2. Median income per income receiver	166	360 (237)
3. Mean income per Spending Unit	385	622 (409)
4. Median income per Spending Unit	260	500 (329)

NOTE: The figures at 1963 constant prices are given within brackets.

Source: Survey of Consumer Finances 1973, Tables 42 and 44.

As an indicator of the average level of income, the median income is more meaningful than the mean income. When the median is taken as an indicator the increase in the average level of income of the Income Receivers

from 1963 to 1973 is substantial; when viewed in terms of constant 1963 prices, the increase in the average real income per Income Receiver during the decade was 43% for median income as against 12% for mean income. For the mean income and median income of Spending Units, the changes were 6% and 27% respectively.

The large difference in the two rates was due to the reduction in the inequality of income between 1963 and 1973.

The deflator used in the Colombo Consumers' Price Index which despite its defects is the best available. "Income-group specific" cost of living indices are not available for evaluating the change for specific income groups or for specific sectors.

At the level of prices and wages prevailing in 1963 and in 1973, the comparative income status of Spending Units also shows the trend towards the elimination of vast disparities of incomes between the rich and the poor. Table 27 gives the comparative sector-wise changes during the decade.

The distribution of the Spending Units among the different groupings of their incomes reveals the extent of the relative gains of the lowest income groups. The gains in the income groupings up to Rs.201-400 for two months are considerable. The income group Rs.401-800 has increased in size and the increase in the group Rs.801-1600 is also noteworthy.

The change over the period 1963 to 1973 in the case of Income Receivers, at current prices, comes out very sharply when the income receivers are ranked from the lowest to the highest in income and the deciles juxtaposed. Despite changes in the cost of living, the gains are noteworthy. The changes for the lowest four deciles of Income Receivers are given in Table No.28. The income more than doubles in each instance.

Table No.28

Incomes per Income Receiver: All Island Changes  
in lowest four deciles

Deciles	Year	Income range Rs/2 months	Per Capita Income of Income Receivers Rs.
1 (Lowest)	1963	0-75	31.40
	1973	0-125	82.15
2	1963	51-75 to 76-100	71.86
	1973	101 to 151-175	144.21
3	1963	76-100 to 101-125	94.98
	1973	151-175 to 201-250	200.00
4	1963	101-125 to 126-150	120.49
	1973	201-250 to 300	259.67

1963 Decile = 778 Income Receivers

1973 Decile = 733 Income Receivers

Source: Survey of Consumer Finances 1963 and 1973.

TABLE 25

## CHANGES IN AVERAGE INCOME FOR TWO MONTHS BY MAIN INDUSTRY 1963 - 1973 - ALL ISLAND

I N D U S T R Y	Percent of Total	Average Income 1963 Rs.	Arithmetic mean		Real Income 1973 (at 1963 prices) Rs.	Changes from 1963 to 1973 (percent) + increase - decrease
			Average Income 1973 Rs.			
1. Agriculture Forestry & Logging	43.05	203.95	370.58	243.80	+ 19.54	
2. Fishing (Hunting & Fishing-1963)	1.23	276.73	522.38	343.67	+ 24.17	
3. Mining Quarrying Clay & Sand	.22	249.70	290.04	190.82	- 23.58	
4. Mfg. & Industry	9.14	268.82	459.29	302.17	+ 12.41	
5. Construction	1.66	301.97	424.61	279.35	- 7.49	
6. Electricity, Gas Steam, Water and Sanitary Services	.46	286.38	637.95	419.71	+ 46.56	
7. Commerce	11.15	457.30	702.80	462.37	+ 1.11	
8. Transp. & Commun.	6.17	384.35	664.18	436.96	+ 13.69	
9. Services	26.77	500.08	560.20	368.56	- 26.30	
10. Activities not adequately described	.15	170.60	222.55	146.42	- 14.17	
Total/Grand	100.00	273.28	459.99	302.63	+ 10.74	

SOURCE: Survey of Consumer Finances 1973. Table - 77.

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## COMPARATIVE INCOME STATUS OF SPENDING UNITS 1963 &amp; 1973

## DISTRIBUTION OF SPENDING UNITS AS GROUPED INTO INCOME GROUPS

Total Spending Units	All Island	Urban	Rural	Estate
1963	5,399	930	3,913	556
1973	5,363	1023	3,803	537

Percentages of Spending Units falling into various Income Groups  
(Percentages for the All-Island Total & Percentages of Sector Total)

	INCOME GROUPS (In Rupees/2 months)										All Income Groups
	0-100	101-200	201-400	401-800	801-1600	1600-2000	2000-3000	Over 3000			
All Island	12.6	24.4	35.2	19.0	6.8	0.8	0.6	0.6	0.6	0.6	100
1973	1.04	5.85	27.34	45.49	16.65	1.64	1.19	1.19	1.19	0.80	100
Urban	8.5	17.1	28.9	22.4	15.3	3.0	2.4	2.4	2.4	2.4	100
1973	0.59	5.67	18.08	42.33	25.32	3.42	2.54	2.54	2.54	2.05	100
Rural	14.9	27.2	34.1	17.4	5.4	0.4	0.3	0.3	0.3	0.3	100
1973	1.15	6.21	29.29	45.75	14.86	1.34	0.87	0.87	0.87	0.53	100
Estate	2.8	17.0	52.7	24.6	2.5	0.2	0.2	0.2	0.2	0.2	100
1973	1.12	3.72	31.10	49.53	12.85	0.37	0.93	0.93	0.93	0.38	100

SOURCE: 1973 - All Island Data. Survey of Consumer Finances 1973 Table 43 Vol.II Tables S594 to S596.  
Other data - do -

1963 - Survey of Consumer Finances 1963 - Vol.II Tables SUE 1.00 to SUE 1.03.

## 10. PRIVATION IN EDUCATION

In the world today the lack of at least some primary education is a serious privation of basic needs and it limits one's capacity to participate adequately in the social and political life of the community. In many developing countries this problem presents itself in a radical form as a lack of literacy. In the case of Sri Lanka illiteracy is not a serious problem and it is on the way out. In the Socio-Economic Survey 1969/70 where data was sought for literacy (i.e. the ability to read and write with understanding a short paragraph in any language) it was found that for persons over 10 years of age (in respect of whom data was sought) 82.1% were literate. Among the males over 90% were literate while among the females it was around 75%. The highest rate of literacy (91%) was in respect of persons in the age group 10-24 years and they have had the benefit of free education which in Sri Lanka includes University education. Sector-wise, in the Urban sector nearly 89% over 10 years of age were literate. It was 84% in the Rural sector and only 65% in the Estate sector where facilities for schooling are still very limited. Zone-wise the literacy rate was highest in Zone I inclusive of Colombo Municipality. Many parts of this Zone have had the benefit, for many years, of government, denominational and other private schools. The literacy rate was lowest in Zone IV. For the island as a whole the position has considerably improved over the years.

The 17.9% illiteracy shown up in the Socio-Economic Survey 1969/70 is not directly related to poverty as such. Large numbers of the oldest age groups and of the females particularly of the older age groups belong to all income classes; but this is not to deny that there is a hard residue of illiteracy among the poorest.

What is found today among the poorest is not so much illiteracy as a low level of primary education. Micro-studies have revealed that except in parts of the Estate sector access to adequate primary education is universally present and the non-use or limited use of these facilities for primary education by the households in absolute poverty are no more than it is among the somewhat better-off people in their neighbourhood. The ability to read and write is valued even among the poorest and the younger generation is as a whole acquiring it. Among the poor there is however some scepticism about the economic gains of pursuing secondary education. The poorest households would no doubt feel the effect of providing the children with clothes, books, cost of transport etc. to keep them in school for longer years. The presence around them of unemployed youths with secondary education would inhibit their making sacrifices for going beyond primary education. In these circumstances the pressure to add one more earning member or a person contributing to the family's production activities becomes more important.

The relationship of Education to Unemployment was examined by the Socio-Economic Survey 1969/70 in the age group 15-59 years. The all-island results are as follows:

Unemployed Population (15-59 Years) by Level of Education--All-Island

<u>Level of Education</u>	<u>Percentage of Total Unemployed</u>
No Schooling	5.5
Primary	22.5
Middle School	44.6
Passed G.C.E. (O.L.)	24.1
Passed G.C.E. (A.L.) and over	<u>3.3</u>
	<u>100.0</u>

As a result of about three decades of free education the majority of the unemployed are in the age groups around 19-25 years and those with middle school education. Unemployment of this kind is spread over all income classes and the middle class households carry a fair burden of unemployment among children with secondary or higher education. There is the vexed question of matching the educational skills turned out in the country and the job vacancies that prevail. There are longer periods of waiting from the time a youth leaves school and secures a job. The poor as such suffer more from underemployment than unemployment. There is an inadequacy of assets and resources for self-employment. Despite their willingness to accept semi-skilled or unskilled jobs they experience difficulties in securing steady employment.

In this context it may be mentioned that in the last three decades education has provided an upward social mobility from among the poorer classes and in this process employment has been secured by some in the public and private sectors as well as the professions. The changes in the pattern of income-classes from which students have entered the University during the last three decades is itself a pointer towards the general trend.

In 1973 the Survey of Consumer Finances also examined the general educational pattern in the country. Some of the relevant findings are presented in Tables 29-31.

They give the percentage distribution of the population with a particular education, by sectors and zones, the change between 1953 and 1973 and Education classified by Community. In these tables it should be noted that "no schooling" also includes children too young to attend school.

The progress shown is noteworthy. Despite this, the Estate Sector still lags behind. The shortcomings within the Estates become apparent when we compare the situation (Table 29) between the Estate sector and Zone IV where most of the Estates are located. In Zone IV 32.29% are graded as "no schooling--illiterate" whereas in the Estate sector it is 44.11%. In secondary education Zone IV as a whole has 20.41%. In the Estate sector it is only 6.25%. The villagers in Zone IV though disadvantaged in food are not as disadvantaged in Education.

TABLE 29

PERCENTAGE OF POPULATION WITH A PARTICULAR EDUCATION  
BY SECTORS AND ZONES

Educational Status	Urban	Rural	Estate	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	All-Island
No Schooling (illiterate)	23.56	28.31	44.11	24.11	30.69	30.05	32.29	24.45	28.95
No Schooling (literate)	3.05	2.66	7.60	2.10	2.03	2.75	4.39	3.71	3.21
Primary	33.73	38.69	40.55	35.36	40.46	43.62	38.03	33.11	37.93
Secondary	30.96	24.44	6.15	29.74	21.12	20.14	20.41	32.92	23.89
Passed G.S.C/G.C.E.	7.62	5.23	1.51	7.57	4.61	2.93	4.46	4.76	5.33
Passed G.C.E (Adv)	0.47	0.42	0.04	0.69	0.21	0.17	0.26	0.38	0.39
Passed Degree	0.26	0.13	0.00	0.25	0.09	0.10	0.08	0.19	0.14
Other	0.35	0.12	0.04	0.18	0.19	0.24	0.08	0.48	0.16
<b>Total</b>	<b>100.00</b>								

SOURCE: Survey of Consumer Finances 1973 Table 12.

TABLE 30

PERCENTAGE DISTRIBUTION OF POPULATION BY EDUCATION 1953-1973

BY SECTORS

Educational Status	Estate Sector		Non-Estate Sector		All Island				
	1953	1973	1953	1973	1953	1973			
No Schooling	61.2	57.1	51.7	38.5	34.0	30.1	41.6	36.6	32.2
Primary	35.8	34.9	40.6	48.5	39.8	37.6	46.8	39.3	37.9
Secondary	2.8	7.2	6.2	10.9	21.2	25.8	9.8	19.6	23.9
Passed GCE/SSC	0.2	0.6	1.5	1.1	3.8	5.7	0.9	3.4	5.3
Passed GCE (Adv).	- )	- )	0 )	- )	- )	0.4 )	- )	- )	0.4 )
Passed Degree	- )	0.2	- )	1.0	1.2	0.2 )	0.9	1.1	0.1
Other	- )	- )	0 )	- )	- )	0.2 )	- )	- )	0.2 )
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

SOURCE: Survey of Consumer Finances 1973 - Table 14

TABLE 31

## EDUCATION CLASSIFIED BY COMMUNITY - ALL ISLAND

COMMUNITY	No Schooling Illiterate	No Schooling Literate	Pri- mary	Second- ary	GCE/ SSC	GCE/ (Adv)	Degree	Other	Total
Kandyan Sinhalese	30.2	3.4	38.2	23.0	4.7	0.3	0.1	0.1	100.0
Low Country Sinhalese	23.8	2.1	35.8	29.9	7.4	0.6	0.2	0.2	100.0
Ceylon Tamils	29.8	3.7	41.3	20.8	3.8	0.2	0.2	0.2	100.0
Indian Tamils	44.5	7.0	42.1	5.6	0.8	-	-	-	100.0
Moors	33.7	3.7	40.4	18.5	3.3	0.2	0.1	0.1	100.0
Malays	20.2	2.2	21.4	47.2	9.0	-	-	-	100.0
Burghers	13.5	0.9	15.3	51.4	15.3	0.9	-	2.7	100.0
Other	22.7	2.3	34.1	34.1	4.5	2.3	-	-	100.0
All Communities	29.0	3.2	37.9	23.9	5.3	0.4	0.1	0.2	100.0

SOURCE: Survey of Consumer Finances 1973 - Table 15.

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11. HOUSING DEFICIENCIES OF LOW-INCOME HOUSEHOLDS

It is a truism that the poor are ill-housed. It is the poor who invariably carry the greater part of the burden of deficiencies revealed in the national data on housing. Nevertheless the incidence of these privations is not uniform in the different sectors and zones. The main complaints made by households of the lower income groups at the different surveys were the shortage of space and the lack of privacy. The sectoral and zonal analysis of housing conditions which follows attempts to depict some of these sectoral and zonal variations. The analysis also provides a framework within which some of the findings of the micro-studies would be more clearly interpreted and understood.

The Consumer Finance Survey of 1973 collected data in terms of Sectors and Zones on housing, sanitation and the availability of amenities and equipment. In the survey, 5088 houses were examined and they were occupied by 5363 spending units. There were instances where more than one spending unit occupied a house and shared the facilities and amenities. The distribution of these amenities in terms of Income Groups of Spending Units is not available. However, the sector-wise and zone-wise

picture indicates the extent to which the poor in the respective sectors and zones are deprived of these amenities.

In assessing adequacy we may, however, take into account the following:

- (a) durability and type of materials of construction--particularly of the walls, roof and floor. In the case of the poor where a majority sleep on the ground on mats, a cemented floor is a "felt need";
- (b) space per person. A low figure of space approaching 50 sq.ft. per person may be taken as a measure of adequacy for low income households when taking into account the living rooms. For these households, room-wise adequacy would demand a minimum of 2 rooms;
- (c) access to toilet facilities;
- (d) access to drinking water.

As household income level rises, particularly in the Urban areas, space-wise advantages are often discounted for other gains such as availability of electricity, water on tap, toilet facilities and installed household equipment or other amenities.

Families also tend to discount one or more of the elements of adequacy in favour of living in their owned premises, nearness to schools and work places and advantages of various amenities and of location.

Nevertheless, it is a combination of these four features mentioned above that predominantly influence the choice of housing units by households as they go up in the household-income scale from a level of absolute poverty. Once the struggle for shelter and bare physical space is overcome, the demand emerges for

houses of better materials, amenities and a better organisation of space.

The poor households that suffer absolute poverty are the ones most exposed to suffer housing deficiencies but one or more of these deficiencies continue to be associated with households somewhat above absolute poverty.

#### Inadequacies noted in the Survey

In collecting the data on housing, the Survey of Consumer Finances counted as a "room" the living rooms, store rooms, bedrooms, kitchen and enclosed verandahs but not the bathroom, latrine or open verandahs.

In the country as a whole, in terms of the above definition, two-roomed houses were most common. In the urban and rural sectors three-roomed houses were the commonest while in the Estate sector they were two-roomed houses.

The report brings out the fact that the average number of persons per room was 1.72 in both Urban and Rural sectors while it was as much as 2.4 in the Estate sector. In the Urban and Estate sectors the average crowding in the single-roomed houses was 4.23 and 4.54 persons respectively and in the Rural sector the crowding in such houses was a little less at 3.81 (vide Table 32).

It is the one-roomed house which is the most acute manifestation of poverty. It is a bare shelter in which men, women and children have to live without any specialised use of space. It is the absolute poverty line for housing. By this measure the Estate sector is the most deprived with 30.57% of the houses in that state and an average occupancy rate of 4.54 persons. As against this (vide Table 32) the other two sectors are much better placed. The Rural sector which suffered privations in diet comes off best with only 10.2 per cent

of the houses being of the one-roomed type. Taking one-roomed and two-roomed houses together, we find that in the Estate sector it accounted for as much as 74.9% of the Estate housing: in the Urban sector it was 34.91% and in the Rural sector it was 36.92%.

If we take a house with more than two persons per room as overcrowded, then, roughly 40% of the houses were overcrowded.

Sector-wise, for the Urban, Rural and Estate sectors, the overcrowded houses were 35%, 37% and 75% respectively.

This data shows the inadequacy of housing in the Island as a whole. It is in this context that we have to view the housing conditions of the poor. Furthermore, in the estate sector, the householders do not have a choice in regard to housing. The houses are provided by the proprietors.

According to the Survey of Consumer Finances 1973 (Vol. II, Tables P101 and P102) some of the main housing deficiencies were as follows:

Table 33

Shortcomings in Housing Facilities

	<u>Urban</u>	<u>Rural</u>	<u>Estate</u>
1. One-roomed houses	11.60%	10.20%	30.57%
2. Overcrowding (room-wise)	35%	37%	75%
3. Housing without cement floors	26.32%	57.24%	90%
4. Without tiled or asbestos roof	48.98%	55.99%	82.45% *
5. Without latrines	39.1%	43.6%	29.4%
6. Without pipe-borne water inside or outside house	51.9%	96.0%	12.4%

\* Most Estate line rooms have roofs of G.I. Sheeting.

With regard to flooring, as much as 44.87% of the Island's houses have clay flooring. Together with pressed earth flooring it adds up to 53.95%. Flooring is important in the case of low-income households in

the Island because most of these people sleep on the ground on mats. The distribution of cement-floored houses is given in Table 34.

Table 34

Houses with Cement Flooring

	Total houses in sample	With cement floor- ing	With cement floor as percentage of sector/ zone	With cement floors as percentage of Island's Houses 5088
Urban	931	686	73.68	13.48
Rural	3627	1551	42.76	30.48
Estate	530	53	10.00	0.20
<hr/>				
Zone I	1641	1030	62.76	20.24
Zone II	725	332	45.79	6.53
Zone III	531	251	47.27	4.93
Zone IV	2028	550	27.12	10.81
Zone V	163	127	77.91	2.50
<hr/>				
All Island	5088	2290	45.01	45.01

Source: Survey of Consumer Finance, Vol.II, Table P101, P90.

In regard to water supply, the availability of pipe-borne water inside or outside the house is not a measure of adequacy in regard to drinking water. A good well serves the purpose, but the quality of water from Tanks, Rivers and Streams is highly variable. The Socio-Economic Survey 1969/70 gave the overall picture of water supply in a more adequate form. This is given in Table No.35.

6% of the housing units in the Island depend on tanks, rivers and streams for their water supply. It is made up of 7.3% of the Rural Households and 6.4% of the Estate households. Zone-wise, it is 11.9% for Zone II (Hambantota, Moneragala, Amparai, Polonnaruwa,

Anuradhapura and Puttalam) and 10.5% in Zone IV (Kandy, Matale, Nuwara Eliya, Badulla, Ratnapura, Kegalle and Kurunegala).

Ownership pattern, type of houses  
and housing space

At the Socio-Economic Survey of 1969/70 there were 2,096,737 housing units. Of these, 16.4% were in the Urban sector, 71.8% in the Rural sector and 11.8% in the Estate sector.

For the Island as a whole, 68.7% of the houses were owner-occupied, but sector-wise, it was 85% for the Rural sector and only 3% for the Estate sector, where the living quarters are generally provided free of rent by the proprietors and located within the estates. As much as 97.1% of the Estate Housing fell into this category.

For the Island as a whole, 74.4% were single houses and 18.4% attached houses--the rest being flats, annexes etc. including 1.9% comprising "improvised structures." In the Rural sector, 88.8% were single houses and in the Estate sector only 6.4% were single houses. As much as 89.6% were attached houses, generally called "line rooms." In the Urban sector, single houses comprised 61.1%.

The estates had only 0.2% "improvised structures" but it was 2.5% and 2.1% for the Urban and Rural sectors respectively. These are invariably occupied by the poverty group.

At the Census of Housing done in 1971, there were houses with the outer walls of cadjan, palmyrah or straw. They constituted 5.3% of the Urban houses, 5.7% of the Rural and 0.2% of the Estate.

As a measure of minimum adequacy, we may take it that a house should have at least two rooms. By this measure, according to the definition of a room used by the Socio-Economic Survey 1969/70, as much as 17.7% of the Urban, 16.9% of the Rural and 50.1% of the Estate

houses had only one room. By the definition of the Census of Housing in 1971 which refers to living rooms, 31% of the Urban houses, 28.5% of the Rural and as much as 70.9% of the Estate houses had only one living room. We have already noted (Table 32) that by the definition used by the Survey of Consumer Finances it was Urban 11.6%, Rural 10.2% and Estate 30.57%.

Space-wise, one may take an area approaching 50 sq.ft. per head as minimally adequate.

In this regard we notice that numbers in a household increase with the income of the household. If we take all income groups and the all-island picture, housing is marginally adequate, space-wise, at about 250 sq.ft. per household. This is also so for the average household of the income group below Rs.200 per month. However, the all-island income group Rs.200-399 per month shows some inadequacy at 249 sq.ft. because of the higher occupancy rate. This is so even though the quality of housing is better at higher income levels.

We have already seen that the distribution of households suffering acute poverty are located in households with income slabs up to Rs.400 for 2 months or Rs.200 per month. The average number in households in terms of income slabs was given in the Survey of Consumer Finances and was set out in Table 3. Space-wise, adequacy for these groups at 50 sq.ft. per head would mean 100 sq.ft. up to households with incomes of Rs.150 for 2 months. Such households were very few. It was 200 sq.ft. up to Rs.300 for 2 months and 250 sq.ft. for household incomes at Rs.400 for 2 months.

Data on the housing conditions (including the space occupied) is not available for small slabs of household income. However, the Socio-Economic Survey of 1969/70 gives data on the floor area of houses of households with income "below Rs.200 per month" (i.e. for the classification of Rs.400 for 2 months in the Survey of Consumer Finances).

The relevant data from the Socio-Economic Survey 1969/70 for the low income households are given in Tables 36 and 37.

The income slab "below Rs.200 per month" is a large one with considerable variations in household sizes for the different household income layers. The occupancy rates given in the Socio-Economic Survey are a little higher than what is suggested in the Survey of Consumer Finances for the low income household groups.

If we go by magnitudes, it is possible that up to about 50% of the Urban households in the income group "below Rs.200 per month" suffer space-wise inadequacy. It is up to about 35% for the Rural and about 75% for the Estate sector for the household income class below Rs.200 per month.

Not all in this income class suffer absolute poverty, but all the households (sector-wise) that suffer absolute poverty are of the household income class below Rs.200 per month.

In terms of floor space, as much as 79.1% of the Estate housing was less than 249 sq.ft. (Table 37) for the household income class below Rs.200 per month. It was 50.7% for the income class Rs.200-399. These two income classes constitute 94.9% of the Estate households.

The Estate housing units which constitute 11.8% of the Island's housing units provide for a captive labour force resident on the plantations. A willingness to pay higher rents cannot alter their housing position.

The Estate sector has therefore to be treated as a special situation in regard to housing. In the Urban and Rural sectors, the ability and willingness to make a higher outlay on housing has some meaning. It is only these two sectors that should be taken into account in

TABLE 32  
HOUSING AND OCCUPANCY RATE BY SECTORS

Size of House No. of Rooms	U R B A N			R U R A L			E S T A T E			A L L I S L A N D		
	Percent of Houses		Average Persons per Room	Percent of Houses		Average Persons per Room	Percent of Houses		Average Persons per Room	Percent of Houses		Average Persons per Room
	Per-sons	Per-sons	Room									
1	11.60	8.50	4.23	10.20	6.91	3.81	30.57	26.47	4.54	12.58	9.11	4.07
2	23.31	22.20	2.75	26.72	24.71	2.60	44.34	44.36	2.62	27.93	26.14	2.63
3	25.56	26.48	1.99	27.60	28.05	1.91	16.03	18.22	1.98	26.03	26.80	1.93
4	17.83	18.31	1.48	17.09	18.55	1.53	4.53	6.27	1.81	15.92	17.32	1.53
5	11.39	12.68	1.29	8.46	9.70	1.29	1.32	1.15	0.91	8.25	9.43	1.28
6	4.30	4.33	0.97	4.96	5.70	1.08	1.51	1.69	0.98	4.48	5.05	1.06
7	3.54	4.22	0.98	2.32	2.99	1.04	0.38	0.50	1.00	2.34	2.98	1.02
8 - 10	2.04	2.57	0.84	2.29	2.65	0.83	0.75	1.01	0.78	2.08	2.62	0.83
11 - 14	0.43	0.71	0.78	0.30	0.45	0.71	0.38	0.29	0.36	0.33	0.48	0.69
Over 14	0.0	0.0	0.0	0.06	0.09	0.50	0.19	0.04	0.05	0.06	0.07	0.34
Not Seated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.00	100.00	1.72	100.00	100.00	1.72	100.00	100.00	2.40	100.00	100.00	1.77

SOURCE: Survey of Consumer Finance Table 39 1973.

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assessing the average household income level at which adequate housing is possible for a household even though it may discount some element of this for other gains.

Sector-wise, different groups are poor in relation to different needs. The Estate sector, for example, with its high preference for food and a better choice of foods is not as deprived in relation to food as the other sectors at the same household income level. Likewise, the Rural sector shows less space-wise privation in regard to housing though the quality of the building materials may be inferior to that of the Urban sector which is governed by local government regulations. Nevertheless, the Urban sector has its quota of improvised shacks in the slum areas which present an almost insoluble problem to the local authorities.

The overall picture of the housing deficiencies has been outlined and generally the poor households are the ones that bear most of the burden of these shortcomings.

TABLE 35

HOUSING UNITS AND THE SUPPLY OF DRINKING WATER  
PERCENTAGE OF HOUSING UNITS WITH SPECIFIED TYPE OF SUPPLY

Source	All Island	Urban	Rural	Estate	Zone 1	Zone 2	Zone 3	Zone 4
Pipe-borne within premises	8.5	23.7	1.1	32.4	9.2	3.2	2.0	11.5
Pipe-borne Outside premises	12.7	33.7	2.8	43.6	10.1	4.4	8.0	19.2
Well	72.8	42.5	88.8	17.6	80.0	80.5	89.6	58.8
Tank	0.9	0.1	1.2	0.3	0.3	2.9	0.4	1.0
Rivers/Streams	5.1	0.0	6.1	6.1	0.5	9.0	-	9.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: Socio - Economic Survey of Sri Lanka 1969/70  
Statistical Tables Vol.1 Table 60.0 and 60.1.

TABLE 32

PERCENTAGE OF TOTAL HOUSING UNITS GROUPS IN TERMS OF FLOOR SPACE OCCUPIED

All Island data for Income Groups "Below Rs.200/- per month" and Rs.200-399 per month

Floor Space Sq. ft.	Total All Income Groups	Household Income below Rs.200/- per month (Rs.400 for 2 months)	Household income Rs.200-399 per month
Below 100	1.5	2.4	1.0
100 - 249	29.2	42.3	25.8
250 - 499	36.1	37.7	38.6
500 & over	33.2	17.6	34.6
Total:	100.00	100.00	100.00

SOURCE: Socio-Economic Survey 1969/70  
Statistical Tables Vol.I Table 58.0

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TABLE 3/

HOUSEHOLDS WITH INCOMES BELOW RS.200/- PER MONTH

Housing Units by Floor Space and Number of Occupants as Occupied by Households of the Income Class Below Rs.200/- per month

Area of Housing Unit Sq.ft.	URBAN		RURAL		ESTATE		ZONE 1		ZONE 2		ZONE 3		ZONE 4	
	Average % of Occupants Occupied													
Below 100	3.5	4.3	2.1	3.1	3.8	1.8	3.4	2.0	2.0	4.2	6.4	2.8	2.1	4.2
100 - 249	48.2	4.7	53.9	4.6	76.0	4.2	37.5	4.6	31.0	4.4	46.1	4.1	46.4	4.5
250 - 499	55.7	5.0	42.4	5.0	18.5	5.0	339.4	5.0	41.1	4.9	32.9	4.0	36.9	5.2
Upto 499	85.4		78.4		97.6	78.7		74.1		85.4		85.4		

Note: The Colombo Municipality is included in Zone I. The Estates fall mainly into Zone 1 and Zone IV.

SOURCE: Socio-economic Survey 1969/70. Statistical Tables Vol.I Table Nos. 38.1 to 38.7

12. POVERTY AND THE AGRICULTURAL SITUATION

We have seen that the condition of poverty depended on the per capita resources within a Household or Spending Unit. We have also seen the pattern of distribution of households below the poverty line in terms of Sectors and Zones regardless of the sources of income of these households. In a general way, we also know that the agricultural activity in Sri Lanka fall either into the Rural sector which holds 70.91% of the total Spending Units in the sample or into the Estate sector which holds 10.01% of the households. But the data available in the Survey of Consumer Finances is insufficient to examine the condition of poverty or prosperity within households which are dependent on agricultural activities for their income.

Data are however available in terms of Income Receivers who are dependent on agriculture as their main source of income but in any Spending Unit incomes may be contributed by more than one income receiver, On the average, there are 1.26 Income Receivers per Spending Unit in the Urban and Rural sectors but there are 2.4 Income Receivers per Spending Unit in the Estate sector. With this in mind, we may first look at the general distribution of Income Receivers whose source of income is Agriculture and then look at their income levels.

Of the total of 7326 Income Receivers falling into the sample in the Survey of Consumer Finances as much as 3654 or 49.88% were classified under the main categories of agricultural occupations (Vide Survey of Consumer Finances 1973 Vol. II Tables p. 54 to P. 71) and their zone-wise and sector-wise distribution in the different agricultural operations is presented in Table 38. Of this total of 3654 Income Receivers as much as 42.45% were

scheduled as Farmers and 33.77% as Tea Estate Workers. The Rubber Estate workers were 7.53%. Another 15.46% were classified under the three other categories of General Farm Workers, Fidd Crop and Vegetable Farm Workers and "Other Agricultural Workers". Sector-wise, of this 3654 Income Receivers in agricultural operations, 64.72% were in the Rural sector and 33.22% in the Estate sector.

The comparative levels of the mean income of these categories of agricultural Income Receivers show that the independent Farmers are best off and the Estate workers are the worst off. This is largely because 48.96% of the Estate Income Receivers are women (who are paid at lower rates and may not receive regular employment) as against 19.91% in the Rural sector. Furthermore, while the women on the estates are recorded as independent workers the women in the village contributing to the agricultural production of the family are not recorded as independent income receivers. The comparative position of the main classes of agricultural income receivers is given in Table 39.

The Survey of Consumer Finances also classified the island's Income Receivers by Type of Industry. Under the classification "Type of Industry - Agriculture", there were 3682 agricultural Income Receivers in the sample. In this classification detailed information was given on the two-month incomes of the income receivers for different income slabs. The information in terms of income slabs up to the slab Rs 201-400 for 2 months is given in Table 40. For the Urban and Rural sectors where, on the average, there were 1.26 Income Receivers per Spending Unit, this income distribution is a slightly understated position of the Household income of households dependent on agricultural activities. For the Estate sector where on the average there are 2.41 income receivers per household, this distribution does not indicate the household economic status. Neverthe-

less, the data shows that, of the agricultural income receivers in the Rural sector, as much as 53.49% receive incomes below Rs 400 for 2 months. In the Estate Sector it is as high as 93.2%. In Zone II and Zone III where Estates are absent, 39.96% of the total agricultural Income Receivers and 41.76% respectively receive incomes below Rs 400 for 2 months.

Zone IV calls for closer examination. As much as 67.83% of the income receivers in this zone are in agriculture and the zone holds 58.93% of the island's agricultural income receivers. They are in both Estate and non-estate agriculture. As much as 23% of the households in this sector fall into the estates. Over 90% of the Tea estate workers of the island are in this zone. At the same time, it holds 43.6% of the independent 'Farmers' of the island and 49.6% of the non-estate agricultural workers.

A little more than half the agricultural workers (54.8%) in the zone are Estate workers and the balance in non-estate agriculture. In this situation, as much as 76.2% of the total agricultural Income Receivers get 2-month incomes below Rs 400/-.

Zone I like Zone IV is relatively large and it holds 20.86% of the island's agricultural income receivers and they constitute 31% of the total Income Receivers in the Zone. Seven per cent of the households in this sector fall into the Estates. In this sector too, as much as 64.9% of the agricultural income receivers receive 2 month incomes below Rs 400/-.

The data suggests that a large proportion of the income receivers in Agriculture receive low incomes and for the villages it also indicates low household income. This view is strengthened when we examine the mean and median incomes of agricultural income receivers in comparison with that of other occupations in the Rural and Estate sectors. The position is presented in Table 4.1.

But for the few factory operatives and clerks, the level of income of Estate workers is low. However, the estate workers who live in the village and come to work on the Estates earn higher total incomes. This is mainly in Zone I. In Zone IV the estate workers are mainly resident labourers of Indian origin and villagers in the neighbourhood do not find employment opportunities in the estates.

TABLE 41

Mean and Median Incomes from all sources for two months in selected occupations (Rs)

<u>Main occupation of income receiver</u>	<u>Rural sector</u>		<u>Estate sector</u>	
	Mean	Median	Mean	Median
Clerical and related workers	681.55	631.48	887.31	750.00
Farmers	523.90	462.41	284.40	225.00
Farm workers	277.91	265.77	227.00	219.00
Estate workers	266.10	225.00	199.20	168.00
Fishermen/Hunters	545.16	483.33	-	-
Industrial workers	456.71	401.74	664.93	500.00

Note : The above data excludes the Urban Sector.

Source : Survey of Consumer Finances 1973 - Table 74.

The information relating to Zone IV in particular shows that the income receivers concentrated in agricultural occupations are poor as a class. In Zone I the Rural sector agricultural worker is better placed in that this zone is studded with townships, superior facilities for transport and also a different organisation of plantation labour which provides some labour market for villagers labour. Better prices can be fetched for surplus produce. The workers have access to employment on the estates and alternative employment in the slack periods. In Zone IV, the rural agriculturist is very dependent on his own agricultural resources which are a combination of paddy land and highland. His special skills are in relation to paddy

cultivation which, in this zone, is largely rain fed. Unlike in parts of Zone III, (Jaffna) there is no developed and traditional system of intensive cultivation of high priced items such as chillies and onions. The introduction of systematic cultivation of tobacco and vegetables in some areas in Zone IV for the city markets is of relatively recent origin and an optimum output from the highland has not yet been reached. Generally, the resources available per worker in village agriculture in Zone IV is relatively lower than in the other zones. This is seen when we work out an index of resource availability which is done later.

The position of the agricultural workers has also been examined in the Socio-Economic Survey 1969/70. While we know that the total income of an agricultural worker is both in kind and in cash, the agricultural workers are frequently ill-placed in earning cash incomes. The relatively disadvantaged position of agricultural workers in earning cash incomes in Zone IV is revealed in the Socio-Economic Survey. The position was as follows : (Table 42).

TABLE 42

Average money incomes of Income Receivers  
classified by major occupational groups  
(Rs per month)

<u>Occupation</u>	<u>Zone I</u>	<u>Zone II</u>	<u>Zone III</u>	<u>Zone IV</u>
1. Cultivators (food crops, paddy, vegetables, fruits etc).	122	153	173	184
2. Cultivators. other/cotton, cinnamon, citronella etc.	263	225	220	180
3. Livestock Farmers	222	94	-	89
4. Rubber tappers and rubber estate labourers	85	-	-	37
5. Tea pluckers & Tea Estate labourers	58	54	-	60
6. Coconut plantation labourers and Toddy Tappers	169	95	163	88
7. Other agricultural labourers	95	84	128	88

Source : Socio-Economic Survey 1969/70.  
Statistical Tables Vol. II Table 12.

In interpreting this table it should be noted that, in the Estate sector, there are on the average 2.41 income receivers per household as against 1.26 in the Urban and Rural Sectors. Coconut cultivation is carried out only in one out of the seven districts in Zone IV and the cultivation of cotton and cinnamon is not done in this zone.

Finally, there is the question of the accessibility to resources per worker in non-estate agriculture in Zone IV.

If we take the non-estate agricultural land (both in general and in terms of Paddy land and highland separately) and match it with the numbers in the sample in each zone whose occupation is in Non-estate agriculture, we get a rough and ready index of relative resource availability from zone to zone. This has been done in Tables 43 and 44. The index of acreage available per worker is lowest in Zone IV. It is also the lowest if paddy land and highland are taken separately. In good measure it accounts for the rural poverty in Zone IV.

Table 20B  
**DISTRIBUTION OF INCOME RECEIVERS IN AGRICULTURE AND FORESTRY/1973/ CLASSIFIED BY INDUSTRIES AND OCCUPATION**

(Total Income Receivers in Island = 7326)  
 (Total Farm and Agricultural Income Receivers = 3654)

Sector/Zone	Total Income Receivers in Sector/Zone	Farm Managers & Supervisors	Farmers	General Farm Workers	Field Crops/ Vegetable Farm Workers	Tee Estate Workers
All-Island	7326 (100)	18	1551	1	8	1234
Urban	1285 (17.54)	-	39	1	7	8
Rural	4746 (64.78)	9	1507	-	-	162
Estate	1295 (17.77)	9	5	-	1	1064
Zone 1	2430 (33.17)	10	235	-	7	117
Zone 2	682 (9.31)	4	430	-	-	1
Zone 3	610 (8.33)	-	210	-	-	-
Zone 4	3159 (43.12)	4	676	-	1	1115
Zone 5	245 (3.34)	-	-	1	-	1
Percentage of Class of worker to All-Island Agriculture Workers and Farmers	3654	0.49	42.45	0.03	0.22	33.77

SOURCE: Survey of Consumer Finances 1973, Vol. II, Table p.54 to p.71.

TABLE 23b

DISTRIBUTION OF INCOME RECEIVERS IN AGRICULTURE AND FORESTRY/1973/ CLASSIFIED BY INDUSTRIES

AND OCCUPATION

(Total Income Receivers in Island = 7326)  
(Total Farm and Agricultural Income Receivers = 3654)

Sector/Zone	Rubber Estate Workers	Coconut Estate Workers	Other Agriculture Workers	Forestry Workers	Total in Farming & Agriculture including Estates	Agriculture Workers as % of Total Income Receivers in Sector or Zone	Zone on Sector's Agric/Farm Workers as % of Island's Income Receivers
All-Island	275	5	556	6	3654	49.88	49.88
Urban	1	-	19	-	75	5.84	1.02
Rural	203	5	473	6	2365	49.83	32.28
Estate	71	-	64	-	1214	93.74	16.57
Zone 1	15	2	167	1	754	31.02	10.29
Zone 2	-	2	51	-	488	55.33	6.66
Zone 3	1	-	50	4	265	43.44	3.62
Zone 4	59	1	286	1	2143	67.84	29.25
Zone 5	-	-	2	-	4	1.63	0.05
Percentage of class of worker to All-Island Agriculture Workers and Farmers	7.53	0.14	15.22	0.16	100	-	-

SOURCE: Survey of Consumer Finances 1973, Vol.II, Table p.54 to p.71.

TABLE 39

TWO-MONTH INCOME FROM MAIN OCCUPATION

Main Occupation of Income Receiver	Number of Income Receivers	Mean Income from all Sources (Rs.) (3)	Main Income from main occupation only (Rs.) (4)	$\frac{4}{3} \times 100$
(1)	(2)			
Farmers	1551	530.16	288.74	54.53
Farm workers	565	282.84	175.15	62.19
Estate Workers	1514	216.28	155.09	71.76
All Island Total	7326	455.02	299.28	65.77

Source: Survey of Consumer Finances 1973, Table 72

TABLE 10

## LOW-INCOME GROUPS IN AGRICULTURE

## INCOME RECEIVERS/DISTRIBUTION OF INCOME FOR TWO MONTHS - BY TYPE OF INDUSTRY/BY SECTORS

Income Receivers in Agriculture Income Group	U R B A I N		R U R A L		E S T A T E		A L L - I S L A N D	
	No. of Inc. Receivers in Agric.	% of Sector	No. of Inc. Receivers in Agric.	% of Sector	No. of Inc. Receivers in Agric.	% of Sector	No. of Inc. Receivers in Agric.	% of Sector
2 Month Income								
Rs.								
0 - 100	4	5.63	153	6.43	143	11.58	300	8.15
101 - 200	8	11.27	300	12.63	605	48.99	913	24.80
201 - 400	15	21.13	818	34.43	403	32.63	1236	33.57
0 - 400	27	38.03	1271	53.49	1151	93.20	2449	66.51
All Inc. Groups/ All-Island in Agriculture	71	1.93	2376	64.53	1235	33.54	3682	100.00

## INCOME RECEIVERS/DISTRIBUTION OF INCOME FOR 2 MONTHS - IN AGRICULTURE/BY ZONES

Inc. Receivers in Agriculture Income Group 2 Month Inc.	Z O N E 1		Z O N E 2		Z O N E 3		Z O N E 4		Z O N E 5		A L L - I S L A N D	
	No.	% of Zone	No.	% of Zone								
Rs.												
0 - 100	81	10.53	15	3.04	6	2.30	198	9.19	-	-	300	8.15
101 - 200	158	20.55	36	7.30	22	8.43	696	32.30	1	25	913	24.80
201 - 400	260	33.81	146	29.61	81	31.03	749	34.76	-	-	1236	33.57
0 - 400	499	64.89	197	39.96	109	41.76	1643	76.24	1	25	2449	66.51
All Inc. Groups All Island in Agriculture	769	20.86	493	13.33	261	7.09	2155	58.53	4	0.11	3682	100.00

Note: The industrial categorisation has been based on an adaptation of the "Standard International Classification". Each Income Receiver is classified according to the industrial group in which his main occupation was categorised. The listates fall into Zone I and Zone IV

SOURCE: Survey of Consumer Finances 1973, Vol. II, Tables I-154 to I-202.

## NON-ESTATE AGRICULTURE: INDEX OF RESOURCE AVAILABILITY

(1)	(2) Total Income Receivers in Sample	(3) Total in Agri- culture in Sample	(4) Total in Non-Estate Agri. Total % of (3)	(5) Total Non- Estate Acreage	(6) Total Non- Estate Holdings	(7) Index of Acreage per worker 5 - 4	
All Island	7326	3654	2140	58.57	3,887,287	1,646,461	1816.49
Urban	1285	75	66	86.00			
Rural	4746	2365	1995	84.36			
Estate	1295	1214	79	6.51			
Zone 1 + 5	2675	758	423	55.80	941,076	565,533	2224.77
2	662	468	485	99.39	984,764	283,283	2030.44
3	610	265	264	99.62	445,322	195,560	1686.83
4	3159	2143	968	45.17	1,516,125	602,085	1566.24
Total	7326	3654	2140	58.57	3,887,287	1,646,461	1816.49

SOURCE: Survey of Consumer Finances 1973 for sample of workers in agriculture.  
The Agriculture Census of Agriculture 1973 -  
preliminary release for acreages. Also vide Table A1 of this study.

TABLE 44  
NON ESTATE AGRICULTURE: INDEX OF AVAILABILITY OF RESOURCES.

(1) Zone	(2) Total in Agri- culture in sample	(3) Total in Non- Estate agri- culture in Sample	(4) Acreege of asked/undisid paddy land	(5) 4 2 3 Index of Acer Acreege per Worker	(6) Acreege of Home Gardens & Highland	(7) 6 2 3 Index of Acreege per Worker
All Island	3654	2140	1,089,075	555.64	1,955,133	943.64
Zone 1 + 5	758	423	185,608	438.93	563,282	1,331.64
2	488	485	298,251	614.95	428,017	862.51
3	265	264	261,739	991.44	714,285	1,705.63
4	2143	968	343,415	354.77	821,138	948.28

SOURCE: Survey of Consumer Finances 1973 for agricultural Workers  
in sample. Census of Agriculture 1973, Small Holdings,  
Final Tables Stage I for data on acreeges.  
Also vide Table A1 of this study.

A P P E N D I X T A B L E S

1A - 1K

APPENDIX TABLE

TABLE 1A

ANALYSIS OF PER CAPITA INCOME

A Income Group of Spending Units Rs.0-Rs.100 for 2 months

SECTOR	ALL ISLAND / SECTORS / ZONES				INCOME PER S.U Rs.	INCOME PER CAPITA Rs.
	NO OF S.U	NO OF I.R.	NO OF PERSONS	TOTAL INCOME Rs.		
All Island						
All sectors	56(1.04)	56	93(0.33)	4421(0.13)	78.94	47.53
Rs.0-100						
<u>BY SECTORS</u>						
URBAN	6 (0.11)	6	11(0.04)	495(0.01)	82.50	45.00
RURAL	44 (0.82)	44	74(0.26)	3444(0.10)	78.27	46.54
ESTATE	6 (0.11)	6	8(0.03)	472(0.01)	80.33	60.25
	<u>56</u>					
<u>BY ZONES</u>						
ZONE I	11 (0.20)	11	20(0.07)	922(0.03)	83.82	46.1
ZONE II	10 (0.19)	10	17(0.06)	709(0.02)	70.90	41.71
ZONE III	6 (0.11)	6	16(0.06)	508(0.01)	84.66	31.75
ZONE IV	29 (0.54)	29	40(0.14)	2282(0.07)	78.69	57.05
ZONE V	Nil(-)	Nil	Nil(-)	Nil(-)	Nil	Nil
All Island/ All Income Groups	5363	7326	28,587	3,333,465	621.57	116.60

Note: Figures in brackets are percentages of Spending Units, Persons and Income in relation to total in the sample for the whole Island  
Income Receiver

Source: Survey of Consumer Finances 1973 Vol II Table B580 to B 588

TABLE 1B

## ANALYSIS OF PER CAPITA INCOMES/ALL ISLAND

## INCOME GROUPS OF SPENDING UNITS Rs. 101-200 AND Rs. 201-400 FOR 2 MONTHS

Income Group	No of S.U	No of I.R	No of Persons	Total Income Rs.	Income Per S.U.Rs.	Income Per Capita Rs.
101-125	46	47	86	5218	113.43	60.67
126-150	74	78	149	10339	139.72	69.39
151-175	78	82	167	12762	163.62	76.42
176-200	116	122	305	21865	188.49	71.69
101-200	314(5.85)	329	707(2.47)	50184(1.5)	159.82	70.98
201-250	277	305	860	63041	227.58	73.30
251-300	358	407	1427	98924	276.32	69.32
301-350	374	457	1671	121903	325.94	72.95
351-400	457	584	2259	172016	376.40	76.15
201-400	1466(27.34)	1753	6217(21.75)	455884(13.68)	310.97	73.33
All Island All Income Groups	5365	7326	28587	3,333,465	621.57	116.60

Note Figures in brackets are percentages of Spending Units, persons and Income in relation to the total in the sample for the whole island.

S.U. = Spending Unit. I.R. = Income Receiver.

Source: Survey of Consumer Finances 1973 Vol II Table S 580

TABLE 10

## INCOME GROUPS OF SPENDING UNITS Rs. 101-200 and Rs. 201-400

## C. URBAN SECTOR

Income Group	No. of S.U.	No. of I.R.	No. of Persons	Tot. Income		Income Per S.U. Rs.	Income Per Capita Rs.
				Rs.	Rs.		
101-125	8	9	24	872		109.00	36.33
126-150	15	15	28	2098		139.87	74.93
151-175	10	11	27	1646		164.60	60.96
175-200	25	26	57	4697		187.72	82.40
101-200	58(1.01)	61	136(0.48)	9313(0.28)		160.56	68.47
201-250	42	47	136	9523		226.74	70.02
251-300	48	50	173	13244		275.92	76.55
301-350	40	43	146	13005		325.13	89.08
351-400	55	62	252	20704		376.44	82.16
201-400	185(3.45)	202	707(2.47)	56475(1.69)		305.27	79.88
All Island All Income Groups	5363	7326	28,587	3,333,465		621.57	116.60
Urban/ All Income Groups	1023	1285	5,378	812,990		794.71	151.17

Note: Figures in brackets are percentages of Spending Units, Persons and Income in relation to the total in the sample for the whole island. S.U.-Spending Unit I.R.- Income Receiver

Source: Survey of Consumer Finances 1973 - Vol. II Table S 581.

TABLE 1D  
ANALYSIS OF PER CAPITA INCOME  
INCOME GROUPS OF SPENDING UNITS Rs.101-200 and Rs. 201-400

D. RURAL SECTOR

Income Group	No. of S.U.	No. of I.R.	No. of Persons	Total Income		Income Per S.U.		Per Capita Income
				Rs.	Rs.	Rs.	Rs.	
101-125	35	35	55	3993		114.09		72.60
126-150	57	61	119	7964		139.72		66.92
151-175	59	60	127	9651		163.58		75.99
176-200	85	90	236	16024		188.52		67.90
101-200	236(4.40)	246	537(1.88)	37632(1.13)		159.46		70.08
201-250	212	228	666	48362		228.12		72.61
251-300	272	297	1123	75233		276.59		66.99
301-350	286	325	1328	93116		325.58		70.12
351-400	344	405	1757	129545		376.58		73.73
201-400	1114(20.77)	1255	4874(17.05)	346,256(10.39)		310.82		71.04
All Island Income Groups	5363	7326	28587	3,333,465		621.27		116.60
Rural All Income Groups	3803	4746	20432	2,213,895		582.14		108.35

Source: Table No. S 582

-/rc.

**TABLE I.E**  
**ANALYSIS OF PER CAPITA INCOMES**  
**INCOME GROUPS OF SPENDING UNITS Rs.101-200 and Rs.201-400**  
**E.ESTATE SECTOR**

Income Group	No. of S.U.	No. of I.R.	No. of Persons	Total Inc. Rs.	Income Per S.U. Rs.	Income Per Capita Rs.
101-125	3	3	2	353	117.67	50.42
126-150	2	2	2	277	138.50	138.50
151-175	9	11	13	1465	162.78	112.69
176-200	6	6	12	1144	190.67	95.33
101-200	20(0.37)	22	34(0.19)	3239(0.10)	161.95	95.26
201-250	23	30	58	5156	224.17	23.90
251-300	38	60	131	10447	274.92	79.70
301-350	48	89	197	15782	238.79	30.11
351-400	58	117	250	21767	375.29	87.07
201-400	167(3.11)	295	636(2.22)	53152(1.59)	318.78	83.57
All Island All Income Groups	5363	7326	28587	3,333,465	621.57	116.60
Estate All Income Groups	537	1295	2777	306,580	570.91	110.40

Source: Table No.8 583.

-/rc.

TABLE I.F.

ANALYSIS OF PER CAPITA INCOMES      F. ZONE I  
INCOME GROUPS OF SPENDING UNITS Rs.101-200 and Rs.201-400

Income Groups	No. of S.U.	No. of I.R.	No. of Persons	Total Inc. Rs.	Income Per Sector Rs.	Per Capita Income Rs.
101-125	14	14	22	1589	113.50	72.23
126-150	29	32	53	4027	138.86	75.98
151-175	23	24	38	3782	164.43	99.53
176-200	33	34	64	6186	187.45	96.65
101-200	99(1.85)	104	177(0.62)	15584(0.47)	157.41	88.05
201-250	78	86	213	17639	226.14	82.81
251-300	99	113	351	27017	272.90	76.97
301-350	102	127	437	33187	325.36	75.94
351-400	128	170	638	48072	375.56	75.35
201-400	407(7.59)	496	1639(5.73)	125915(3.78)	309.37	76.82
All Island All Income Groups	5363	7326	28587	3,333,465	621.57	116.60
Zone Total	1762	2430	9017	1,275,293	723.78	141.43

Note: Figures in brackets are percentages of Spending Units, Persons and Income in relation to the total in the sample for the whole Island. SU=Spending Unit; IR= Income Receivers.

Source: Survey of Consumer Finances 1973 - Vol.II Table S 584.

TABLE I.G.

ANALYSIS OF PER CAPITA INCOMES G.ZONE II  
INCOME GROUPS OF SPENDING UNITS Rs.101-200 and Rs. 201-400

Income Group	No. of S.U.	No. of I.R.	No. of Persons	Total Inc. Rs.	Income Per Sector Rs.	Per Capita Income Rs.
101-125	6	6	17	690	115.00	40.59
126-150	10	10	28	1409	140.90	50.32
151-175	14	15	35	2275	162.50	65.00
176-200	17	18	39	3179	187.00	81.51
101-200	47(0.88)	49	119(0.42)	7553(0.23)	160.70	63.47
201-250	41	42	126	9479	231.19	75.23
251-300	49	50	206	13487	275.24	65.47
301-350	57	60	244	18439	323.49	75.57
350-400	64	65	345	24170	377.76	70.06
201-400	211(3.93)	217	921(3.22)	65575(1.97)	310.78	71.20
All Island All Income Groups	5363	7326	28587	3,333,465	621.57	116.60
Zone Total	771	882	4256	462,821	600.29	108.75

Note: Figures in brackets are percentages of Spending Units, Persons and Income in relation to the total in the sample for the whole Island. SU-Spending Unit, IR=Income Receiver.

Source: Survey of Consumer Finances 1973 - Vol.II Table S 585.

TABLE I.H  
ANALYSIS OF PER CAPITA INCOME      H.ZONE III

INCOME GROUPS, SPENDING UNITS RS.101-200 AND RS.201-400

Income Group	No. of S.U.	No. of I.R.	No. of Persons	Total Inc.		Income Per		Per Capita Income Rs.
				Rs.	S.U.	S.U.	Rs.	
101-125	4	4	7	461	115.25	115.25	65.85	
126-150	1	1	1	143	143.00	143.00	143.00	
151-175	7	7	14	1142	163.14	163.14	81.57	
176-200	18	18	50	3469	192.72	192.72	69.38	
101-200	30(0.56)	30	72(0.25)	5215(0.16)	173.83	173.83	72.43	
201-250	27	28	99	6180	228.89	228.89	62.42	
251-300	34	34	123	9489	279.09	279.09	77.15	
301-350	25	25	111	8242	329.68	329.68	74.25	
351-400	48	50	182	18148	378.08	378.08	99.71	
201-400	134(2.50)	137	515(1.80)	42059(1.26)	313.87	313.87	81.66	
All Island All Income groups	5363	7326	28587	3,333,465	621.57	621.57	116.60	
Zone Total	549	610	2905	333,385	607.25	607.25	114.76	

Note: Figures in brackets are percentages of Spending Units, Persons and Income in relation to the total in the sample for the whole Island. SU= Spending Unit, IR= Income Receiver.

Source: Survey of Consumer Finances 1973 - Vol. II Table S 586.

TABLE III

ANALYSIS OF PER CAPITA INCOME      I. ZONE IV

INCOME GROUPS OF SPENDING UNITS RS.101-200 AND RS.201-400

Income Group	No. of S.U.	No. of I.R.	No. of Persons	Total Inc.		Income Per S.U.		Per Capita Income Rs.
				Rs.	(S.U.)	Rs.	(S.U.)	
101-125	20	20	29	2264	113.20	78.07		
126-150	31	32	64	4330	139.68	67.66		
151-175	32	33	76	5233	163.53	68.86		
176-200	43	46	143	8103	188.44	56.66		
101-200	126(2.34)	131	312(1.09)	19,930(0.60)	158.17	63.87		
201-250	123	138	396	27,905	226.87	70.47		
251-300	165	199	703	45,894	278.15	65.28		
301-350	194	839	858	60,089	326.57	70.03		
350-400	204	284	1019	76,720	376.08	75.29		
201-400	676(12.59)	860	2976(10.41)	210,608(6.32)	312.01	70.77		
All Island/All Income Group	5363	7326	28587	3,333,465	621.57	116.60		
Zone Total	2100	3159	11358	1,127,007	536.67	99.23		

Source: Survey of Consumer Finances 1973 - Vol.II Table S587.

-/rc.



TABLE I. K  
ANALYSIS OF PER CAPITA INCOMES

Income Group	All Island	Urban	Rural	Estate	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
<b>Rs. 401-450</b>									
Number of S. U.	462	75	330	57	137	66	43	207	9
Number of I. R.	594	88	388	118	175	69	45	294	11
Number of Persons	2406	366	780	260	686	357	180	1118	65
Total Income	196,982	32,012	140,777	24,193	58,407	28,279	18,320	88,102	3,874
Income Per S. U.	426.37	426.83	426.60	424.44	426.33	428.47	426.05	425.61	430.44
Income Per Capita	81.87	87.46	79.09	93.05	85.14	79.21	101.78	78.80	59.60
<b>Income Group Rs. 451-500</b>									
Number of S. U.	589	53	284	52	113	46	45	172	13
Number of I. R.	510	57	340	113	153	50	49	245	13
Number of Persons	2049	250	1525	274	546	268	215	958	65
Total Income	185,710	25,329	135,678	24,703	53,917	21,963	21,489	82,174	6,167
Income Per S. U.	477.40	477.91	477.74	475.06	477.14	477.46	477.53	477.76	474.38
Income Per Capita	90.63	101.32	88.97	90.16	98.75	81.95	99.95	85.78	94.88
<b>Income Group Rs. 501-600</b>									
Number of S. U.	705	110	532	63	206	112	96	277	14
Number of I. R.	941	138	649	154	284	120	106	403	22
Number of Persons	3085	386	2450	329	1077	670	335	1744	89
Total Income	84,122	60,450	269,576	34,165	111,694	60,704	38,962	150,269	7,785
Income Per S. U.	119.32	549.55	504.87	514.37	537.34	531.97	551.70	545.69	556.07
Income Per Capita	27.10	101.67	94.93	106.54	113.74	78.00	73.50	88.69	87.47

TABLE I-II (Contd.)

ANALYSIS OF PER CAPITA INCOMES

Income Group	All Island	Urban	Rural	Estate	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
<u>Rs. 601-700</u>									
No. of Spending Units	504	110	333	61	178	70	48	190	18
No. of Income Receivers	742	124	429	189	237	77	56	348	24
No. of Persons	3104	856	2125	393	981	465	305	1243	119
Total Income	327527	71436	216418	39773	115744	45381	31162	123708	11632
Inc. Per Sp. Unit	650.05	649.42	649.90	652.02	650.25	648.30	649.21	651.09	646.22
Inc. Per Capita	105.54	83.45	101.84	101.20	117.99	97.59	102.17	99.52	97.75
<u>Rs. 701-800</u>									
No. of Sp. Units	379	85	261	33	140	65	49	114	11
No. of Inc. Receivers	560	106	338	116	193	74	57	219	17
No. of Persons	2495	529	1712	254	877	427	330	789	72
Total Income	283152	63475	194848	24829	104430	48282	36834	85393	8213
Inc. Per Sp. Unit	747.10	746.76	746.54	752.39	745.93	742.80	751.71	749.05	746.64
Income Per Capita	113.49	119.99	113.81	97.75	119.08	113.07	111.62	108.23	114.07
<u>Rs. 801-900</u>									
No. of Sp. Units	277	67	184	26	99	33	29	100	16
No. of Inc. Receivers	462	87	279	96	146	47	33	214	22
No. of Persons	1909	439	1278	192	612	252	212	713	120
Total Income	225009	57117	155849	22043	83664	27984	24709	84932	13720
Inc. Per Sp. Unit	848.40	852.49	847.01	847.81	845.09	848.00	852.03	819.32	857.50
Inc. Per Capita	123.10	130.11	121.95	114.81	136.70	111.05	116.55	119.12	114.33

## PART II

### NON URBAN POVERTY - A STUDY OF SIX SITUATIONS

#### INTRODUCTION

The Rural Studies Division of the Marga Institute has an ongoing program of village studies under which an intensive study is being made of a set of villages representative of the cultural-ecological zones of Sri Lanka.

The specific characteristics of poverty in the six non-urban communities are presented in this part of the study portraying the diversity in the nature and circumstances of poverty as well as their common features.

The six studies cover five villages and an Estate situation. They fall into different administrative districts and into several zones as demarcated in the Socio-Economic Survey of 1969/70 and the Survey of Consumer Finance 1973.

The selected areas are as follows:

1. Mirissa South - a fishing village - Matara District Zone I.
2. Horape - a suburban village - Colombo District Zone I.
3. Henegama - an area of tea, rubber and peasant agriculture - Matara District Zone I.
4. Walgampaya - a plantation-cum-paddy area - Kandy District Zone IV.
5. Paranagama - in the intermediate rainfall zone with coconut plantations - Kurunegala District Zone IV.
6. An Estate situation - a tea area - Nuwara Eliya District Zone IV.

## 1. MIRISSA SOUTH

Mirissa South is a fishing village on the south coast in Matara district. It is on the trunk road between Weligama town and the provincial town of Matara about five miles away from this town itself.

The village has about 535 households with 96% of the Karawe caste engaged in fishing and 3% of the Durawe caste, the balance being of Goigama (farmer) and Salagama castes. The resource system of the village is totally dominated by the majority caste, which is also politically powerful in the village. These families are knit by kinship. They are also powerful in the entrepreneurial activities in the village.

The general distribution of the income levels and activities of the village is given in Table I.

Almost 10% of the families earn Rs.1,000/- per month or more and they constitute the large scale entrepreneurs, large scale fish traders, the boat and beach seine net owners who own several vessels, the tradesmen who own mills and shops and boutiques, the big land-owners who own land both inside and outside the village, families with more than one employee in government service and who have subsidiary sources of income and families with a combination of the interests already mentioned.

Another 22% have a household income of Rs.600 to Rs.1,000 per month and their activities are similar to the affluent group but on a smaller scale. A further 41% have household incomes in the range of Rs.300 to Rs.600 per month and are not considered poor in the community.

Below this group come a wide range of activities and a blurred margin of household incomes around and generally above Rs.200 per month. Their occupations

include fishing in small (un-mechanical) boats and using less efficient methods, smaller fish traders, other small traders, some crew men and others assisting the big operators.

In terms of household income, the poverty group is associated with household incomes at or below Rs.200 per month. There are households whose main occupations are coir spinning (rope making), sub-line fishing without ownership of equipment, beach seine crew men, cadjan thatch makers, lace makers and such occupations combined with casual labour.

The external resources of the village are largely confined to government and commercial employment outside the village. The external trade and business is linked with the village in terms of ownership or the type of goods. The magnitude of the numbers coming into the village from outside for trading and other activities connected with fishing is higher than the village people seeking lucrative employment outside the village.

Excluding children under 5 years of age, the illiterate are only about 2.8% of the people. About 45.7% have had 1 to 5 years of schooling. About 27.4% have had 6 to 9 years of schooling and 25% have had 10 years or more of schooling.

The general pattern of housing in the village also presents a picture of the level of prosperity. About 7.4% of the houses have tiled roofs, cemented floors, brick walls, well maintained (most with electricity) and with 4 to 5 living rooms. Another 26.1% have the same quality of housing but with 2 to 4 living rooms. A further 44.7% are good houses of permanent material but with one to two living rooms. Below this level are about 15.8% of the houses of wattle and daub and thatched roofs but fairly well maintained. The obviously

poor houses are the thatched cadjan houses that constitute about 5.6% - 30 households in all. The general conclusion of the continuing study of this village is that about 50 households (about 9.3%) suffer from poverty as evidenced by the level of household income and the condition of their housing and life style. They fall into the income group of Rs.200 per month and below. These households suffer a less harmonious pattern of relationships with the community in the village.

Of these 50 households a sample of 13 have been chosen at random for closer study.

The general characteristics of the poor households enable them to be classified as follows:

- (a) The poorer non-fishermen who are out of fishing due to caste constraints.
- (b) Those with no caste constraints (and belonging to the Karawe caste) and associated with fishing operations and connected activities.
- (c) Fishermen who operate less desirable technologies and have low incomes.
- (d) Fishermen who operate adequate technologies but suffer family pressures, unavoidable expenditures and household subject to some calamity such as the death of the chief earner.

TABLE I

MIRISSA - PATTERN OF EMPLOYMENT

Annual Family Income	Main income groups (i.e. occupations & positions etc.)	No. of families engaged
Rs.12,000 and over (first category)	<ol style="list-style-type: none"> <li>1. Large-scale entrepreneurs (other than in fish)</li> <li>2. Large-scale fish traders.</li> <li>3. Boat owners who own more than 1</li> <li>4. Tradesmen who own mills and shops in the village</li> <li>5. Big land-owners (coconut etc., outside the village as well as inside the village)</li> <li>6. Families of more than one government employee + other income sources.</li> <li>7. Families engaged in more than one of the activities in the second and first categories.</li> </ol>	50
Rs.7,200-12,000 (second category)	<ol style="list-style-type: none"> <li>1. Boat owners at one boat each.</li> <li>2. Boat owners with other avenues of income.</li> <li>3. Madal owners with other avenues of income.</li> <li>4. Car owner (for hire)</li> <li>5. Bookies</li> <li>6. Government employees such as graduate teachers.</li> <li>7. Other government employees with additional resources.</li> <li>8. Small land-owners.</li> <li>9. Families engaged in more than one of the activities in the category</li> </ol>	110
Rs.3,600-7,200 (third category)	<ol style="list-style-type: none"> <li>1. Boat crewmen.</li> <li>2. Madal owners/big shareholders.</li> <li>3. Elanadal owners (big shareholders).</li> <li>4. Dalpati owners.</li> <li>5. Dynamitors.</li> <li>6. Fish sellers on bicycles.</li> <li>7. Commission traders of fish.</li> <li>8. Bookie collectors.</li> <li>9. Illicit sellers of arrach etc (few only).</li> <li>10. Blue collar workers etc., with additional incomes.</li> <li>11. Kuda Oru owners with additional income.</li> <li>12. Small-scale fishing gear sellers.</li> </ol>	210

Annual Family Income	Main Income groups (i.e. occupations & positions etc)	No. of families engaged
Rs.2,400-3,600 (fourth category)	<ol style="list-style-type: none"> <li>1. Elanadal and Dalpatti crewmen.</li> <li>2. Kuda Oru owners with less desirable additional incomes.</li> <li>3. Pingo carrier (fish) with other income.</li> <li>4. Fish-mongers with other income.</li> <li>5. Trades in village fair with additional income.</li> <li>6. Madal owners with less shares.</li> <li>7. Elanadal owners with less shares.</li> <li>8. Shareholders in Dalpatis.</li> <li>9. Gamblers and illicit sellers of arrack.</li> </ol>	90
Blurred Margin	In terms of per capita income little difference could be seen in this group and the last group.	25
Rs.2,400 and below (Fifth category)	<ol style="list-style-type: none"> <li>1. Subline fishermen who do not own equipment.</li> <li>2. Coir spinners.</li> <li>3. Lace makers (as an income source)</li> <li>4. Cadjan-making as sole occupation</li> <li>5. Madal crewmen who do not own any other source of incomes.</li> <li>6. Families of less income due to lack of employment, old age, death of income earner etc. and rely on kinsmen.</li> </ol>	50

Characteristics of the Poverty Group :

Thirteen poor houses selected at random from among the poor households which came to be known in the continuing study of this village, have been chosen for closer study. The general pattern of their occupations and their incomes is given in Table II. The household incomes ranged from Rs.70.83 per month to Rs.250/- per month and the per capita income in the households ranged from Rs.19.69 to Rs.47.22 per month. Ten out of the 13 houses had a per capita income below the poverty line of Rs.36.50 per capita per month as determined after a study of the Survey of Consumer Finances 1973.

Seven out of the 13 households received their incomes from coir-spinning supported by thatch-making, lace-making and manual labour. Five households had sub-line fishing as the main occupation, using Kuda Oru (small boats) combined with work as boat crewmen. In one instance, it was work only as a crewman.

Subsidiary resources were very limited with 3 houses having 6, 16 and 20 coconut trees respectively. The house with the 20 trees also had a few jak and plantain trees. Land, as an income-earning asset, was available only to 4 households and at best was a share ownership of half an acre.

While lace-making and cadjan-thatch-making are subsidiary occupations in many households, it is a major occupation in the poor households.

Generally, if a woman is fully engaged in the activity of coir-spinning, an approximate sum of Rs.6/- can be earned in a day. Lace is sold at prices ranging from Rs.2.50 to 15/- a yard, depending on the quality. A skilled woman, if fully engaged in this occupation, can make about 2 yards a day, but this type of activity is seldom carried out continuously during the day.

Most of the income from these activities is spent on daily food consumption.

The menfolk too have diverse subsidiary occupations. In Household No. 2, the head is also engaged in selling vegetables at the fair. Others also assist in shops and vegetable stalls outside the village. Most of them are youngsters and do not make a regular contribution to the family income.

Most of the people working as wage labourers are from the Durawe caste as caste restraints keep them out of fishing and the Karawe people of this village avoid menial labour.

The fishermen in the poverty group who are engaged in sub-line fishing belong to the older age group. Their sons, if any, are employed as boat crewmen or as Dalpati fishermen earning a better income. The sub-line fishermen earn Rs.5/- to Rs.10/- per fishing day while the Dalpati fishermen earn about Rs.10/- to Rs.20/-, but they have to spend a part of their earnings on the repair and replacement of equipment.

The males predominate among the economically active members. The number of dependents are high in family No.3 and No.11 who also have the lowest per capita incomes.

Food consumption and other expenditure :

On the average, 79% of the cash income of the 13 households was spent on food and the percentage varied from 71% in House No.4 to 85% in House No.9. However, all except Houses 1 and 13 had a small supplementary intake of food not bought for cash - i.e. coconuts mainly and jak, yams, fruits in Houses No.4 to 6 inclusive and fish in Houses 7 to 12 inclusive.

TABLE II

## MIRISSA : 13 POOR HOUSEHOLDS

Serial No.	Numbers in Household		Main	Dependents	Income Per capita Annual (Rs)	Sources of Income Cash and Non-cash	
	Total	Over 60 yrs or below					economically active members
1	2	X	2	X	850	34.41	Coir spinning plus cash from friends and relatives.
2	7	3	X	4	2540	30.23	Coir spinning. Sales Assistant at Fairs. Income from 6 coconut trees
3	11	4	1	8	2600	19.69	Thatch-making, coir spinning, shop Asst. Assistant to Mason. Income from 20 coconut trees, Jak trees and plantain trees.
4	6	X	2	4	2240	31.11	Coir spinning and manual labour.
5	6	X	2	4	1590	20.08	Coir spinning, thatch-making, manual labour.
6	8	3	1	5	2300	23.95	Coir spinning, lace-making, thatch making, sewing and 16 coconut trees.
7	6	X	2	2	2700	37.50	Subline fishing, crewmen.
8	8	1	1	2	2300	23.95	Subline fishing, fish salesman.
9	6	3	X	5	2500	34.72	Kuda Oru fishing.
10	11	4	X	9	2600	19.69	Kuda Oru fishing/subline. Temporary crewman.
11	7	1	X	3	2800	33.33	Subline fishing, temporary crewman.
12	11	4	X	6	3000	22.72	Crewmen
13	3	1	X	1	1700	47.32	Coir spinning, fish salesman.
Total	90	24	11	20	54		

All houses had at least one meal, generally the lunch, with rice and curries including fish on most days. The other main meal was bread and curry or sambol (coconut/onions/condiments). House No.1 sometimes skipped dinner. Most dinner meals were of bread and sambol.

All except House No.1 had no solid food for the adults for breakfast. The children were given a little bread. Others had only a cup of tea.

Food was generally bought on a daily basis from the cooperative boutique or from the village fair. A number of houses also bought their provisions on credit from boutiques.

The consumption of eggs or meat is extremely rare. The vegetables are of the cheapest varieties, green leaves and jak and breadfruit in season. Food consumption increases with gains in income. The infants are breast-fed.

Of the non-food items, clothing was generally bought once a year at Sinhala New Year. Kerosene and firewood were regular items of purchase. All families spend small sums (Rs.10/- to Rs.50/-) per year on medicine. but they make use of the Government Medical Services when necessary. Four of the families (Nos.1, 4, 6, 9) spent nothing on entertainment. The others spent Rs.25/- to Rs.100/- (House No.2) per year on this. All but House No.1 spent about Rs.25/- per year on religious ceremonies.

The households, Nos.7 to 12, provided about Rs.50/- per year for fishing gear.

Housing :

Nine out of the 13 houses had solid brick walls and one other (No.11) was partly of brick and partly wattle and daub. Nine houses also had cemented floors and one other partly cemented. One house was entirely of wattle and daub (No.1) and two houses (Nos.4 and 9) were of cadjan. All these three had clay floors. The partly brick house, the wattle and daub house and the cadjan houses had thatched roofs; the others had tiled roofs and one had asbestos roofing sheets. The wattle and daub, the three cadjan houses and two of the brick houses (Nos.5 and 12) had no toilet of their own. Houses No.1, 4, 5, 7, 8, 10 and 11 had no wells of their own. They use the wells of the others. No house had water on tap. The toilets of other houses are generally accessible to those without.

All the houses had kitchen space or separately built kitchens of wattle and daub or thatch.

House No.8 has 5 rooms and Nos.10 and 6 have 4 rooms. House No.1 has only 1 room and House No.9 has 2 living rooms. All the rest have 3 living rooms each. Thus House Nos.1 and 9 are the worst provided in terms of rooms but House No.1 has only two occupants and 225 sq. ft. per person. House No.9, however, is a cadjan house with no facilities and it houses six people at 33 sq. ft. per person. In addition to the rooms, House Nos.2, 3, 5 and 6 also had a verandah.

In terms of per capita space, the available space varied from 33 sq. ft. per person to 225 sq. ft. House Nos.1, 2, 3, 4, 5, 7, 11 and 12 had over 100 sq. ft. per person. Only House Nos.10 and 9 had less than 50 sq. ft. and 33 sq. ft. per head respectively.

The houses had very little furniture and durable equipment. The three occupants of house No.13 are temporary occupants who do not own the furniture which, however, is not much different from that of the other houses.

The 12 houses (excluding No.13) had altogether 33 beds for their total population of 89. Of these, 5 were in House No.4 and 4 in House No.8. All the houses together had 44 straight-back chairs and arm chairs. Of these, House No.6 had 4 straight-back chairs and 3 arm chairs. House No.8 had 5 straight-back chairs and House No.11 had 5 arm chairs. The houses had 17 tables with House No.2 having 3 tables and houses 6, 8, 11 and 12 having 2 each. There were, altogether, 6 almirahs, two in House No.6 and one each in House Nos.3, 5, 8 and 9. Two houses had traditional boxes for their clothes and two had a cupboard each. One house, No.6, had a wall clock and five had wall mirrors.

One house, No.3, owned a coir spinning machine and two houses, Nos.6 and 7, had a lace-making device.

Lighting was by kerosene oil lamps, but 3 houses, Nos.7, 8 and 12, had kerosene 'Petronax' lamps which gave a bright light.

In terms of its 8 occupants, House No.6 was best equipped.

#### Education :

The effect of free education and the establishment of schools throughout the country has made secondary education available to all. Most people born after the war have had at least 6 to 8 years of schooling.

In examining a single village, the pattern of education beyond the 10th Grade may not be significant

because of the smallness of numbers and some migration out of the villages to the towns for pursuing higher education. The general pattern of education among the poor group in comparison to the entire village was as follows:

<u>Education Years of schooling</u>	<u>Village</u>	<u>Poverty Group</u>
Illiterate	2.8	3.84
1-5 years	45.7	39.68
6-9 years	27.4	41.01

Employment opportunities and the use of resources do not make higher education a necessity. In the village as a whole, about 90% of the youth who have obtained the General School Certificates at Grade 12 or had further education have not obtained any position by virtue of being educated.

The poor too read newspapers and are informed about affairs in the country and the main world news. They read various publications and election manifestos and they understand the accounting done by their employees. They can fill various administrative forms and they write their own letters when necessary.

Condition of Health among the Poor :

The medical facilities in the village is fairly adequate. Besides the village health centre (a Government concern) where there is a qualified Western physician, children's clinic, outward treatment for patients, maternity clinic, a visiting dentist etc., there is in the village a homeopathy doctor (a private practitioner), a Western physician (MBBS/Private Practitioner), four indigenous physicians, a PHI (Government appointed Public Health Inspector) and a nurse for family planning (Government appointment). Besides these facilities

available in the village, the hospital services in both Urban centres of Matara (7 miles away) and Weligama (3 miles away) are accessible to the village.

The patients in the poverty group usually go for free medicine given in the village health centre. For grave illnesses, they go to the hospital either in Matara or Weligama. For mild treatment, they prefer the indigenous physicians. The pattern of preference to treatment in the poverty group does not vary very much from the general village pattern.

The indicators of negative conditions of health such as incidents of immature deaths, major illnesses etc. are not much evident in the poverty group. Infant deaths have occurred in two families only (one in an accident and the other at birth). In two other families where the male head is dead, the deaths occurred ages of 72 and 54. In Family No.8, the wife died at 65 and in Family No.9, the first wife of the household had died at 36 at child-birth.

Every child in these households are immunised at the village medical centre which is a rule rather than a normal, customary procedure. For confinements, now, everybody goes to the hospital in the town and for periodic examinations, to the village clinic.

#### The Process of Marginalisation :

In the case of Mirissa, the village as a whole cannot be considered poor. However, the socio-economic changes that took place during the last twenty-five years have marginalised persons in certain occupations and some of them have still not adapted themselves adequately to the changed conditions.

The main forces of change are associated with the policy of the government in the 1950's in the field of

small-scale fisheries. The government, acting in the interests of the operating fishermen, introduced the use of inboard and outboard motors with the existing fishing crafts. It also introduced the  $3\frac{1}{2}$  ton 28-32 foot mechanised boat and also the use of nylon nets. This was done not through prosperous owners of the traditional large boats and beach seine nets, but through the more enterprising fishermen and later through groups of fishermen organised in cooperative societies. The new technology led to the utilisation of a wider area of fishing operations and to a rapid increase in the catch. The traditional craft also operated simultaneously with the new craft. The monsoon period ceased to be a period of inactivity. The technological change also led to a shift in the relative position of the parties engaged in fishing. Deep-sea fishing emerged as the dominant operation and beach seine (Madal) fishing suffered a relative decline in its position.

The traditional systems of fishing seemed to be more inter-connected and integrated and was subject to the influence of the bigger owners of boats and nets. Different locations had groups of fishermen using the same traditional technology. As a result of the innovations and new technology, there developed a greater specialisation in specific types of fishing and also a new competition among parties using different technologies but operating simultaneously in the same locations.

The rise of new technologies associated with mechanisation and nylon nets also brought in new economic functions and new centres of activity associated with the harbours, repair shops, fuel supplies, cold rooms etc., and the growth of boutiques and tea kiosks associated with these new centres of activity.

The new mechanised boats operated by certain groups competed with the traditional rural (sail) boats and Dalpati and the different groups tended to devise techniques to exploit different species of fish. In the case of beach seine too, competition exists between the Madal (traditional beach seine with large nets), Elanadal and Dalpati. In the greater inshore area, there developed a competition between Kuda Oru (small boats), Dalpati and also the illegal dynamiters of fish:

In this process of change, those who were most adversely affected were the parties that were auxiliaries to the traditional non-mechanised fishing and beach seine operations. The use of coir rope and coir materials declined and the opportunities to work as labourers and crew-men in traditional fishing grew less. Traditional boat-building also felt the effect of the changes.

There was no doubt a process of adaptation throughout the economy. The more powerful Madal owners took up interest in large-scale fish trading and in general transport and trading activities. The smaller shareholders in Madal found adjustment more difficult. The surplus labour in traditional fishing got distributed in the field of mechanised fishing and its attendant economic functions. Some of the boat-building carpenters took to house-building and furniture-making for an expanding market. Some of the labourers and crew-men of the old regime found adjustment difficult. The worst affected were those in the auxiliary coir industry. Some of them joined in actual fishing operations, but those who were of the Durawa (a non-fishing caste) did not have this as a venue for change.

One alternative for those whose main occupation was coir spinning was to widen their scope of coir work

and to cater to a wider market outside the village itself. However, their operations had been on a small scale. Their economic resources and skills were such that they could not affect the change satisfactorily.

The government's programme of introducing the new technologies created a new class of successful fishermen who ceased to be dependent on the traditional power holders and the traditional elite of the village. The fishermen had also forged links with parties outside the village who provided training, spare-parts, mechanical skills for carrying out repairs and servicing of engines etc.

In the case of the economic groups that are currently marginalised (as shown in the previous section) there is no reason to believe that their condition would continue indefinitely unless physical and mental limitations inhibit their taking up alternative employment or reorganising their activities in an economy which is obviously expanding.

## 2. H O R A P E

Horape is a suburban village 8½ miles from Colombo, on the main rail track to the City. It has a total population of about 3000 people in 520 households. The area of the village is about 1 square mile.

The village has two distinct land masses called 'Ihala Horape' (meaning 'upper' by elevation) and Horape Thuduwe.

Horape which was a paddy cultivating village has undergone a number of socio-economic changes during the past 3½ decades. Up to about 1940, paddy cultivation was the dominating resource of the village but the expansion of the City of Colombo during and after the war led to the arrival of migrant families that added to the natural increase of the village population. The newly-established industries in the City led to many job opportunities outside Horape itself. At present, 46% of the population of Horape are migrant settlers from other parts of the country and as much as 93% of the workforce commute daily to their workplace outside Horape.

The extension of amenities such as electricity and telephone facilities and the expansion of the network of motorable roads together with an increase in rail traffic led to an increase in the volume of economic activities within the village. Two small industries were also started within Horape itself, namely, aluminium pot casting employing 7 persons and textile weaving employing 25 girls. Both enterprises are associated with one family - two brothers. As a result of these changes, many people preferred to accept the more stable and often more lucrative employment opportunities outside agriculture either within or outside the village itself. Although agriculture declined in relative importance, the

overall economic opportunities available to the village greatly improved.

Horape Thuduwe

The area chosen for closer study and for an examination of the condition of poverty is Horape Thuduwe which has a population of 871 in 147 households. Of these households, 80 are of the older residents and the rest are of later migrants. The average family size is 5.9.

Caste-wise, all the older resident families are of the Govigama (farmer) caste. Today, 84% of the people are of this caste, with about 10% of the Salagama caste and 6% of the Karawe caste. However, caste does not seem to matter in the use of employment opportunities within or without the village.

The agricultural land consists of 45 acres of highland in 79 holdings and 53 acres of paddy land in 41 holdings. None of the 15 of the highland holdings of over  $\frac{3}{4}$  acre in extent are owned by the migrant households. Of the 11 holdings of highland between  $\frac{1}{2}$  acre and  $\frac{3}{4}$  acre, only one is held by a migrant household.

In the case of paddy land too, of the 17 holdings of 1 to 3 acres (which is the largest size in holdings), only one is held by a migrant household. Of the 13 holdings of  $\frac{1}{2}$  to 1 acre, only 3 are held by migrants. Of the 41 paddy holdings, as much as 35 are owner-cultivated. Six are operated by share-croppers who are migrants.

Of the 53 acres of paddy land, only about 25 acres are regularly cultivated as much of the land is too marshy for regular and profitable cultivation.

The older resident families still control the land resources of the village.

While land holdings is in the hands of a minority (and that too in small parcels), there are only 30 persons who own a surplus house given on rent.

Only 11 households own cattle and the village has 40 head of cattle of which 27 are milk cows.

Most of the households in Horape Tuduwe depend on monthly earned incomes from jobs outside the village.

The general housing conditions in the village are good. About 6% of the houses are of wattle and daub with cadjan roofs and the rest are of brick and mortar with tiled roofs. Space-wise, there is no overcrowding; 46% of the wattle and daub houses had 4 rooms. About 55% of the houses in the village have 4 or more rooms. The smaller houses had 2 to 4 living rooms.

A sample study revealed that 35% of the people had one to six years of schooling and the rest had seven or more years of schooling. About 1% were University graduates.

Income-wise, 5.3% of the households had incomes of Rs.250/- per month or less. 23.6% had incomes in the range of Rs.250-450 per month and 61.8% between Rs.450 and Rs.750. The rest had higher incomes.

The selection of the Poverty Group :

The selection of the poverty group in Horape Tuduwe was made from the intimate knowledge of the households as a result of the continuing study of this village over three years. Four of the poorest households from the long resident group and four of

the poorest households from the later migrants were chosen for closer study. They constitute 5.4% of the households in Horape Tuduwe.

A number of factors were taken into consideration in selecting these households among which were the visible living conditions and the type of houses occupied and its state of repair. The level of household income and the pattern of expenditure on food and other essentials were also taken into consideration.

Eight of the poor households, which were in the lowest position in the income distribution, were taken for close examination.

#### The Poor Households

A general picture of the poor households can be had from Table I. The average family size of the poor group is 5.5 as against the village average of 5.9.

Families number (1), (2) and (8) have six or more members with a large number of dependents. In family No. (1) there are four persons aged 14 or below. In family No. (2), which has 12 members, there are six persons aged 14 years or below. In family number (8) there are 4 such young persons out of their total of 6.

Family No. (3) has one aged dependent and family No. (5) is dependent on the pension of an aged female member. There are no other aged persons (over 50 years) in these families.

Only 4 of the poor families have any land at all but the land is of poor quality and cannot be intensively cultivated. Families No. (1), (2) and (4) get a meagre supplementary income from jak and coconut trees, plantain

TABLE I

HORAPE - THE EIGHT POOR HOUSEHOLDS

Household Serial No.	Number in House- hold	Males	Econo- mically active (M & F)	Depend- ents	Monthly		Land held (Per- ches)	Occupations
					House- hold Income	Per Capita		
					Rs.	Rs.		
1	6	3	1	5	340	56	13	Hospital attendant
2	12	5	3	9	450	50	40	1 Anti-Malaria Supervisor, 2 Toy-making appren- tices, 3 Agricultural Labourers.
3	5	3	2	3	180	36	13	3 Labourers
4	5	3	2	3	190	38	10	2 Agricultural Labourers
5	2	1	-	2	112	56	-	1 General labourer
6	4	2	2	2	180	45	-	1 Male aged 25 years and unemployed and 1 Pensioner over 65 yrs. old - female/mother.
7	4	3	1	3	300	75	-	1 Batik apprentico 1 Vendor at fair
8	6	4	1	5	500	83	-	1 Knife-maker 1 Compositor
<b>Total</b>	<b>44</b>	<b>24</b>	<b>12</b>	<b>32</b>				

Fig. 20. Urban Poor in 1950. Sample of 8 Households.

-trees and yams. Any other subsidiary incomes (mainly non-cash) earned by family members are too small and uncertain to be of any account.

Generally, the unskilled labourers with unstable employment suffer poverty. Families No. 3, 4, 5, 6 and 7 get the lowest household incomes in the village, but by way of per capita income, families No. 3, 4 and 6 are the worst off and they show a lack of skills that might be employed within or without the village to improve their economic condition. The poor labourers also do not have permanent employment.

On closer examination, we find that in Family No. 5, the pensioner is the mother aged 65 years and the son who has offers of employment outside the village is unable to accept these offers as he has to look after the aged mother.

In the case of families 3 and 4, the chief income earner is addicted to alcohol and is unable to hold a permanent job. However, they are physically fit and can undertake unskilled work.

How the Poor Live :

(a) Housing :

One of the visible aspects of poverty is the poor condition of housing in relation to that of those who in the village are not considered to be poor. This is seen in terms of the materials of construction, the per capita space, the design of housing space, the state of repair and amenities.

The condition of the 8 houses in the poverty group are as follows:

Of the 8 houses, 5 had cadjan roofs and 4 had earthen floors. Only 2 had burnt brick walls. The

poorest were houses No. 2 and 3. They also had less than 30 sq. ft. of space per head. House No. 2 had three small rooms and a kitchen. House No. 3 had only two small rooms and a kitchen; while in House No. 2 the premises and the clothing were clean, it was not so in House No. 3 which was the poorest of the lot.

All the houses had two or more living rooms inclusive of the verandah which is invariably used as a living room.

Furniture and durable goods in the poor houses were a few chairs, benches, an almirah (in 4 houses), boxes and tables and kitchen utensils. They were old and of poor quality. Two houses (Nos. 3 and 4) had no beds. In all the houses taken together, there were 9 beds for a population of 44. The people generally slept on mats on the floor.

Six of the households had toilets and 3 had their own wells but there was ready access to the wells and toilets of the neighbours in the case of houses not adequately provided.

The four migrant families lived in rented houses with three of them paying rents ranging from 7 to 10% of the income. Family No. 5 paid a higher rent for a solid brick and tiled house but was running seriously into debt.

(b) General Expenditures :

In running their households, the units 2, 3, 4 and 5 were running into debt ranging from 5 to Rs.10 per month with house No. 5 having more than double that figure. Only households 1 and 8 had any savings at all.

The percentage of income spent on food varied from 65% to 100%. The worst off being households No. 3, 4, 5 and 6 where the percentages were 89, 100, 89 and 83 respectively.

TABLE II

Serial No.	Walls		Floors		R o o f			Space		Condition
	Wattle and daub	Burnt Brick(B) Unburnt (UB)	Lath	Cement	Cadjan	Tile	G. Tron	Sq. ft.	Capita Sq.ft.	
1	-	UB	-	X	-	X	-	475	79.2	Dilapidated
2	X	-	X	-	X	-	-	350	29.2	No lockable doors
3	X	-	X	-	X	-	-	130	26	Mostly cadjan/poor
4	-	UB	X	-	X	-	-	350	70	Unplastered
5	-	B	-	X	-	-	X	250	12.5	Good condition and soil
6	X	-	X	-	X	-	-	200	50.0	Rough walls/poor
7	-	B	-	X	-	X	-	450	112.5	Dilapidated
8	X	-	-	X	X	-	-	375	62.5	Good condition

The amount of income spent on clothing varied from 3 to 8%. All but houses 5 and 6 spent a little on education and all but No. 4 spent on travelling. However, it may be noted that houses No. 1, 2 and 8 spent 7%, 13% and 17% of their incomes on education and travelling taken together.

Only house No. 4 (which was also in debt) spent anything at all on recreation.

Medicine does not seem to be a problem as they resort to home remedies. If these fail, they go for the free treatment at the Government Hospital half a mile away.

(c) Food :

The poor households have three meals a day, i.e. breakfast, lunch and supper. The breakfast is generally of bread or starch foods (rotti or hoppers) with sarbol (of coconut or onions with condiments).

For lunch and supper they generally eat rice with the alternative of bread or rotti or breadfruit or jak or jams. The diet is mainly of starch foods, together with the cheaper vegetables and green leaves (pala) which is very cheap or available free. Fish was eaten once or twice a week by households No. 1, 4 and 7 and less frequently by others. Milk and eggs were not items of the diet and meat was very rarely eaten.

The only household with an infant was No. 8 and it was breastfed.

(d) Education :

Of the 11 adult males in the poverty group, 5 had eight years or more of education. The other 6 had four to seven years of education. Of the 11

adult females, two had eight or more years of education, 6 had five to seven years and 3 had four years of education.

The children under 18 years are attending school, except for the following instance:

House No. 2 : one of the sons dropped out at 13 years from the 5th Grade as he refused to study in spite of parental persuasion.

House No. 4 : the son dropped out at 10 years from Grade 4 and the parents had not pressed him further.

House No. 7 : the two boys aged 6 and 8 are not yet attending school. The father gives the excuse that he has not been able to obtain the necessary admission papers for this. This may not be the real reason in the case of the 8-year-old.

The incidence of drop-outs in the poor group is not much different from the rest of the village.

General Observations :

The social life is limited to relationships with the neighbours and close relations who may drop in. As space in the houses is not rigidly separated for different functions, the verandah is used both for entertaining visitors and for sleeping, generally of the male members of the household.

Poverty is not an obstacle to keeping the premises clean or for the occupants wearing clean clothing.

Except household No. 7, all households make use of their literacy and education by reading newspapers and periodicals often borrowed from their neighbours. Only two houses buy the week-end newspaper. The children

too read the illustrated children's papers avidly. In two households, some members read novels and serious books, generally borrowed from friends or from libraries. Three of the households do not write or receive letters.

The health of the poor group is good and they are free of any serious ailments. For common colds or fever they take home remedies. For boils, sprains or rheumatism they prefer ayurvedic treatment. For anything more serious, they go to the Ragama Town Government Hospital for free treatment. Immunisation against smallpox, polio, T.B., and diphtheria has been carried out in the case of four out of six households with small children. The households show adequate knowledge of health care. Waste disposal is carefully attended to by almost every family.

The Circumstances of Poverty :

Horape is neither a town nor a typical village. Located on the commuter belt, it shares a bit of both characteristics.

While agricultural resources were adequate for the traditional village families, the post-war expansion of the city of Colombo both brought in outsiders for residence (mainly city workers) but also drew away the old residents to jobs in the city at Colombo Port, in the railway and bus services and health and mercantile services in the city. These jobs were both stable and had attractive incomes and benefits.

The major flood of 1947 disorganised paddy cultivation and the irrigation system for some time. This too made people look for jobs outside Horape and outside agriculture.

With the growth of the residential population, the highland came to be used almost exclusively for

residential purposes with perhaps small homegardens attached.

Both highland and paddy land continue to be cultivated, but land plays a smaller role in asset utilisation. Only 10 people own over 1 acre of paddy land and only 15 own over 3/4 acre of highland.

The poverty of the marginalised group is very much related to their access to the labour market within and outside the village and the skills the people possess.

The earners of households 1 and 2 are employed outside Horape and 3 and 4 are unskilled workers who seek work within Horape and in the neighbouring villages. All four families are old residents and not landless. Their poverty is also not for lack of adequate education or physical incapacity. Two of the labourers, however, are addicted to excessive drinking of alcohol.

Family No. 1 (a household of 6) has 4 children under 15 years and family No. 2 (a household of 12) has 6 children under 15 years. Family No. 8 (a household of 6) also has 4 children under 10 years of age. This is a migrant family.

Before the war, when agriculture was more important, the agricultural labourers enjoyed a patron-client relationship with the landlords. After the war, there was both a decline in the role of agriculture and also a change in the social relationships. The labourers who did not move into other jobs had to hunt for work and fend for themselves.

In the case of household Nos. 5 to 8, which are of migrants into Horape, the marginalisation had taken place in their original villages and they have found greater adaptation living in Horape.

The worst is household No. 5, living on the pension of the aged female member. The male member, the son, has had offers of employment which he was unable to accept because he had to run house and look after his mother. He is looking for a suitable job for which he can travel from home daily.

None of the migrant families own land or houses and they have hardly any subsidiary incomes. They cannot move up the occupational ladder for want of further education or higher skills. Household No. 7, the knife-maker, says he cannot secure more capital to expand his business which could bring him a higher income. Household No. 6 had been well-to-do but had been dis-possessed by his family on account of his marriage. Subsequently, he had held the job as a caretaker of a property. When he lost this job, the household moved into Horape and he took up whatever employment was available with his limited education up to Grade 7. His income is supplemented by that of his child, a Batik apprentice, whose income is expected to rise with further training.

The householder (No. 8) is permanently employed at a job outside Horape and he draws the highest household income in the poverty group and his economic difficulties (as in household Nos. 1 and 2) are because he has 5 dependents.

### 3. HENEGAMA

Henegama is an inland agricultural village 17½ miles from the coastal Provincial town of Matara in the Southern Province. The nearest township is Akuressa which is 3 miles away. The principal highway of Galle-Akuressa-Deniyaya passes through this village. In terms of agro-climatic zones, it falls into Zone I.

The village is made up of 179 households with a population of 1074 (1976 data) and consists almost exclusively of Sinhala Buddhists.

Land is the chief asset and both plantation and peasant agriculture prevail side by side. Paddy cultivation and work on the plantations of Tea, Rubber and Cinnamon in the village and its neighbourhood are the chief occupations of the villagers.

Caste-wise, 151 out of the 179 households are of Govigama (farmer) caste. Berawa caste (drummers) account for 15 and Navandenne (goldsmith) account for 10 of the other households.

The total acreage of the village is 844 acres of which 389 acres is a tea estate with its own factory and which has now been taken over by the Land Reform Commission under the Land Reform. The estate area held 11 acres of paddy as well.

Of the balance 444 acres, 97 are under paddy and 347 under highland cultivation. The distribution of land holdings is as follows :

TABLE I  
LAND HOLDINGS IN HENEGAMA

<u>Size of holding</u>	<u>A c r e s</u>		<u>Household</u>	
	<u>Highland</u>	<u>Paddy</u>	<u>No.</u>	<u>percentage</u>
Medium over 5 acres	151	20	6	3
Small 1 - 5 acres	143	55	68	38
Fragmented	53	22	105	59
	<u>347</u>	<u>97</u>	<u>176</u>	<u>100</u>

Exclusive of the estate land, 105 households hold 75 acres in fragmented holdings, but not all these families with low land holdings are badly off as many families earn incomes out of self-employment other than on the land, trade and by employment outside the village itself.

The 176 households had been studied more closely through a random sample of 62 households. The pattern of incomes that manifested itself in the sample was as follows :

TABLE II  
INCOME CLASS OF SAMPLE OF 62 HOUSEHOLDS

<u>Income per month</u>	<u>Number</u>
<u>Rs</u>	
0 - 49	7
50 - 99	14
100 - 199	15
200 - 299	12
300 - 399	5
400 - 499	2
500 - 599	2
600 - 699	1
Over 700	4
<hr/>	
All Income Groups	62

Altogether 36 households (i.e. 58.1%) had an income less than Rs.200/- per month. However, the incomes of this low income group tended to differ from time to time with changes in the seasons and the general level of economic activity in the village and its neighbourhood.

In the entire population of 1074, there were 387 (36%) persons in the workforce and 43% of them are females. There are 687 dependents who are either too

old, too young or those unable to find adequate work. As much as 69% of the dependents are children. Those seeking work (156) amount to 23% of the dependents. However, these people are not altogether idle. They contribute to the work of the household and take up casual work if and when available.

The village as a whole has 179 houses; of these, 47% are of wattle and daub with cadjan thatch roofs. The others are of brick and tile. Six of the houses are old traditional bungalows.

In regard to education, the sample of 62 households showed that 15% including 3 graduates had an education up to at least passing the GCE (ordinary level) which completes secondary education. All the others had at least a primary education of some years. Those seeking employment had not completed their secondary education but 52% of those who had passed the GCE were also still seeking work.

As a result of the ongoing study of this village, it was easy to note the relatively poor households which were those living on the fragmented lands. Among these 105 families, there were 36 that, for all appearances (housing, clothing, life style etc.), were regarded as poor. From among these, 15 families were chosen for closer study.

#### The Fifteen Poor Households :

The 15 poor households consisted of 77 persons of which there were 27 (i.e. 25%) of 14 years of age or younger and 6 over the age of 60 years. The population was evenly distributed in regard to sex. The average family size was 5.1 as against the average of 6 for the whole village.

It was found that all these families depended on casual labour or work of a temporary nature. Those who worked as casual labourers on the estates (tea, rubber and cinnamon) were not sure of more than about 15 days work and the days themselves were uncertain. A boom in export prices may provide more work days for this class of worker. They also find work readily available in the paddy cultivation and harvesting times.

Casual work also includes work at house construction, land clearing, digging drains and tasks of fetching and carrying. There is a patron-client relationship between these people and the well-to-do households. Some members of the poor families help at the richer households and get paid by free meals and also gifts in kind.

Casual sources of earnings include gathering vegetables and green leaves (pala) for sale at the market, selling of karunka (from arecanut gathered from village gardens), collection and sale of cinnamon seed, mat weaving etc.

The income of the poor families consists of receipts in cash and in kind. Receipts in kind may be under-stated in value. Table III gives a general picture of the occupations of the chief earners in these households and the monthly cash income of the households. The average cash income per capita was 23.87. However, the incomes in kind i.e. home-produced items plus gifts alter the picture. The poorest families may be receiving more as free gifts than is recorded.

Altogether 12 out of the 15 families receive per capita incomes below Rs.36.50 per month. Family size appears to be a drag on their economic condition. Families, Nos. 4, 5, 6, 9, 13, 14 and 15 have six or more members.

Only one family, No. 15 has any owned land and only 30 perches at that. Six families, Nos. 1, 2, 3, 8, 9 and 10 have shared land amounting to 5 perches to half an acre. Of these, families No. 1, 9 and 10 have no other land. Land on lease (of varying quality) and from 1/4 acre to 1 acre is held by family Nos. 2, 4, 5, 6, 7, 11, 12, 13 and 14. Almost all the land held by these families were under mixed cultivation around their homesteads.

Pattern of Expenditure :

By far, the greater part (65 to 80%) of the expenditure is on food. A number of essential items are bought from the cooperative store or from boutiques which also provide credit. The diet draws heavily on freely available 'pala' (green leaves) and home-grown vegetables. The landlords with jak trees provide the poor villagers with jak for sundry services. Sometimes, they also give rice.

Most families take three meals a day. Working men sometimes take breakfast at the boutiques. The morning meal is generally bread and sambol with tea without milk in it. Sometimes, it is rice leftover from the previous night's meal with sambol. Rotti made of wheat flour and manioc are also commonly taken.

There is a habit of taking plain tea (called kahata) at about 10 a.m.

The midday meal is of rice and curry. Green leaves (pala), manioc, sweet potatoes and cheap vegetables are commonly consumed. Fish is taken two or three times a week but meat is rarely consumed as is the practice in most Buddhist villages.

Dinner is frequently of rice and curry but bread is consumed on some days.

TABLE III

## THE FIFTEEN POOR HOUSEHOLDS - HENEGAMA

House No.	Total No. in household	Age up to 14 yrs. or over 60 yrs.	No. of working members	Main occupation	Monthly Household income (cash only) Rs.	Per capita income cash and kind per month Rs.	Source of income in kind*
1	4	2	2	Estate labour	85.00	22.91	Coconut & green vegetables
2	4	2	1	- do -	115.00	35.00	Paddy/Coconut/mixed
3	3	2	1	- do -	95.00	37.77	Coconut/Pala/Jak
4	8	2	1	Work outside village	100.00	14.89	Jak/Pala/Coconut
5	6	4	1	Casual labour	73.00	14.38	Paddy (little) coconut
6	6	2	2	- do -	95.00	18.05	Pala/mixed cultivation
7	3	1	1	Work outside village	125.00	44.44	Mixed cultivation
8	4	1	1	Estate labour	115.00	31.25	Coconut/Pala
9	6	4	1	Estate labour	131.00	22.87	Jak/Coconut/little paddy
10	4	2	1	Agriculture	153.00	44.50	Coconut/Jak/Paddy
11	5	2	1	Agriculture & casual	95.00	22.83	Little paddy/Coconut
12	4	2	1	Manual labour	100.00	32.29	Paddy/Jak/Coconut
13	7	4	1	Work outside village	120.00	21.30	Coconut and Pala
14	7	2	3	Crafts & estate labour	140.00	24.17	Coconut and Jak
15	6	1	2	Estate labour	170.00	31.25	Jak/Coconut/Vegetables
	77	33	20				

Note: Income in kind is variable. It excludes some meals received free by some members of the poor households who work part-time at richer households.

The housewives of some of the poor households assist in the daily chores of wealthier households and get their lunch at their work place. The poor also derive benefits by assisting at various ceremonies at the richer households.

Clothing is the next most important item of expenditure and this is bought generally at the time of Sinhala New Year (April 13th). The men wear sarongs and banians or shirts. The women wear cloth and jacket. The difference in economic status is seen in the quality of the materials. The poor generally have two changes of clothes and the women may wear a saree for an occasion. Among the poor, the clothes are generally not very clean as they do not have enough changes of clothes. From 6% to 9% of the annual income goes on clothes. There is a tendency for the male members to use any additional income they happen to receive to buy themselves expensive shirts rather than spend on the family.

Household equipment is sparse, but two in the poverty group have radios, one a sewing machine and three have petromax lamps for lighting. Most of the women possess ear-rings of gold of low quality but they may mortgage this in times of need.

Housing and amenities :

The houses of the poor are generally made from local materials and of wattle and daub with thatched roofs. In the poor group of 15 houses, six of them were of brick and tile with cemented floors. Others had mud floors.

The square area was generally around 120 sq. ft. and all suffer inadequacy of space. Many had separate kitchens outside, but some had a kitchen in a corner of the house. There is no specialised use of space.

Almost every house has a small verandah which is used for entertaining visitors and also for sleeping.

All but three houses have a pit-type latrine but not well maintained. Seven houses had their own wells for drinking water, five had common wells and three had none.

#### Educational levels in the Poor Group :

There is a primary school in the village and children go to Akuressa (3½ miles away) for secondary education. The nearest Central College is 5½ miles away. Twenty-two out of the twenty-eight children over 6 years are attending school. Most children stop schooling after primary school.

Among the parents, there is one who cannot write at all. Most of the elders get their writing work done by the school teachers, the Grama Sevaka or another educated member of the family. Letters are written very rarely. The male adults and the youths read the newspapers at the boutiques. The illustrated children's paper sittara is popular among children. They borrow and read this paper.

No one in the poor group in this village buys or borrows magazines or any books; but all the people are informed about their religion.

One or two families buy a newspaper when they go to Akuressa town. The Dinamina and Dawasa paper are popular.

#### Conditions of Health :

Health conditions are fairly satisfactory but the rate of physical development of the children is slow. In the families with several children, the personal cleanliness of the children and of their

clothes is deficient. Some of the poor adults too wear untidy clothes. There is room for improvement in the waste disposal around the poor houses.

There is no dispensary in the village but a medical officer visits it once a week to attend to the needs of mothers and children. Health-care practices are poor among the poor group.

The people visit the hospital at Akuressa, 3½ miles away, for medical attention when necessary.

The village Veda Mahathmaya is also patronised and ceremonies are performed to ward off or cure ailments.

#### Causes and Circumstances of Poverty :

The causes and circumstances of poverty in Henegama are both historical and contemporary.

Henegama was originally a small village with plenty of land, both under cultivation by the villagers and by way of commons and waste, accessible to them. After the Waste Lands Ordinance of 1840, all untenanted land was vested in the Crown and thereafter sold for plantation agriculture. Land was bought by influential families and brought under tea and also citronella and cinnamon.

In the 1930s, land was leased out to the landless by the Government under the Land Development Ordinances in small parcels and outsiders too settled in Henegama. As the population grew, the older settlements too became fragmented, adding to the number of small holdings. Fragmentation proceeded further, leading to the emergence of "havul idam" or properties with numerous owners and owned in common and on which the various owners built

their cottages. Six out of the fifteen poor households had some such land from a few perches up to 1/2 an acre in extent. The small parcels of paddy-land came to be cultivated under the "thattu maru" system where the co-owners take turns in cultivation from season to season. Sometimes, the "havul idam" are hogged by the most influential co-owner.

The village, as a whole, has 105 households with fragmented land amounting to a total of 75 acres. Of these households, 36 are badly affected because of their limited access to other sources of income. Only one of the 15 poor households studied has enough land to make agriculture the main source of income.

Alternative employment outside agriculture is crucially important for the 105 households on fragmented land. The poor group depend on work on the estates - general work as casual labourers in agricultural or non-agricultural work and three of the fifteen depend also on crafts.

Work as casual labour does not give steady employment and it does not pay to travel out in search of work beyond the immediately neighbouring villages. The limited education and skills of the poor group limit their choice of jobs.

New problems were created for the poor group as a result of the Land Reforms of 1972. The proprietors of the tea estate were their chief patrons and their role was greatly diminished with the vesting of the estate in the Land Reform Commission. The tea land was handed over by the LRC to the Multi-purpose Cooperative, based in Akuressa, which put the management in the hands of a Management Council which included political personalities. Party supporters had favoured treatment in employment.

As the estate development work flagged, the volume of employment also dropped. The previous owners provided enough work not only for the villagers, but also for outsiders. At the time of the study, only factory work (and not field work) was available and only for 10-15 days in the month. Ten families of the 15 poor families worked at the factory. Tea-field development had stopped, and with it the demand for male casual labour had dropped.

Casual labour in paddy cultivation in the paddy lands of the village is, of course, seasonal.

In the case of poor families with growing children, the mothers are unable to seek work to supplement the household income.

Under-employment is a major cause of the poverty of persons without adequate agricultural land and, for the adults, the chances of overcoming their difficulties are very limited. However, a boom in tea prices and an intense development of the tea land of 389 acres can rapidly lift them out of their marginalisation.

#### 4. WALGAMPAYA

Walgampaya is a traditional Kandyan village situated in the Kandy District (Zone IV), nine miles from Kandy town, along the Alakolanga-Pottapitiya Road. It is in the wet zone with an annual average rainfall of 130 inches.

The village covers 254 acres holding 271 households with a population of 1780. Land is the chief asset and, as in Henegama, plantation agriculture (tea) exists side by side with peasant agriculture.

Caste-wise, 45% are of the Govigama caste, 20% Padhu, 10% Berawa, 10% Badahala caste.

This village is an ancient one with royal patronage from the time of King Walagamba and, in the Dambadeniya period (13th century), the Walagamba Raja Maha Vihara in the village was further endowed with land.

Although in the ancient tradition the different castes had performed their caste-associated functions, the economic activities of the people are now diverse. They are mainly cultivating paddy lands including those owned by the Temple and they also perform various tasks for the Temple. In the social hierarchy, the Govigama are dominant and enjoy some special privileges in the village.

#### Resources :

Land is the chief resource and of the 254 acres, 193 is highland and approximately 61 acres is under paddy.

40 acres of the highland, within the village, is under tea. This is a part of a 115-acre tea

estate called Kotagala Tea Estate. Besides this, there are two other tea blocks of 3 acres and of 2 acres maintained by the Land Reform Commission. The 40 acres of Kotagala Estate have been divided, after Land Reform, and given to landless villagers first in  $\frac{1}{2}$  acre blocks and later in  $\frac{1}{4}$  acre blocks. Altogether, 120 persons received these blocks.

The paddy land of 61 acres is owned by 129 persons. Fifty persons hold blocks of less than 1 rood, sixty-four persons have holdings of 1 to 2 roods and ten persons of  $\frac{1}{2}$  to 1 acre. The Temple now holds a block approaching 2 acres in extent. The largest holdings are between 2 to 5 acres and only four families have such paddy holdings. Two of the holders of the large paddy lands are of Govigama caste and the other two are of Padhu caste.

The 193 acres of highland is now owned by 333 people. As much as 20% of these holdings are of 20 perches or less. Another 25.5% are between 20 and 40 perches. As much as 40% of them are between 40 perches and  $\frac{1}{2}$  acre in extent.

Of the rest, another 1.8% are from  $\frac{1}{2}$  to 1 acre and 3% of them 1 to 2 acres.

There are today, only 3 holdings around 2 to 5 acres each and they belong to the Danture School, to the Temple and to a merchant (mudalali). The only party with a higher interest in land is a single other family with a property approaching 10 acres.

#### Incomes and Occupations :

Land is the main economic resource of this village but only a few of the 271 households live by it today. There are six relatively big land-owners

and thirty-one smaller ones, and they are owner-cultivators. There are also seven share-croppers. Altogether, they make up 16.2% of the households. Labourers in permanent and casual work constitute 23.6%. The others are dispersed in a variety of occupations such as Teachers (12), Clerks (6), Boutique-keepers (5), Services - Army, Navy, Police (4), Carpenters (4), Masons (3) and two each as executives, ritualists, washermen and others in sundry occupations such as brick-makers, baker, potter etc., and persons without any specialised skills.

Income-wise, 4.4% of the households get incomes over Rs.8,000/- per annum and 7.4% get between Rs.6,000/- and Rs.8,000/- per annum. Another 14.51% receive incomes ranging from Rs.4,000/- to Rs.6,000/- per annum. The rest get lower incomes.

The poor group of the village, as a whole, have variable incomes ranging from Rs.1,000/- per annum to around Rs.2,000/- and they make up almost 30% of the households. They are the landless or they hold negligible parcels of land. They are casual wage-labourers.

The village as a whole is not wealthy. Some of the assets, other than land, give a general picture of the level of prosperity. There are 3 cars, 1 lorry, 22 bicycles, 26 sewing machines, 140 radios, 20 cows and 7 buffaloes in the village. The 3 cars belong to the (Govigama caste) three aristocratic families of the village and the lorry to a household of lower caste but all belonging to the high income-strata. The cattle too belong to the members of the high income group.

The literacy rate of the village as a whole is high and it has 5 graduates, 2 under-graduates and 348 school-going children in primary and secondary education.

Identification of the Poverty Group :

As a result of a general study of the village, the broad pattern of annual income is known. The poverty group of 20 families were picked from among the lower income groupings, taking into account their housing, clothing, other visible living conditions and access to land. About 122 families, from the 271, could be broadly termed poor. The sample of 20 households picked for close study were from among the worse-off out of the 122.

Characteristics of the Poverty Group:

- Walgampaya :

Table I gives the general characteristics of the poor group of 20 households consisting of 149 persons. They included a Carpenter, a Barber, a Mechanic, a Harbour worker, a labourer in permanent employment and casual labourers. Twenty one of the casual labourers worked for village landlords, seven in public works and twenty-two in tea estates.

The size of the households ranged from 5 to 10 persons; ten of the households had 8 or 9 persons each. Two families had 5 or more children 14 years old or younger. The average household size at 7.45 was much higher than the average for the village. In the total of 149 persons, there were only 5 persons aged 55 or over.

Four of the families depended only on cash incomes. All others had small non-cash receipts. Three of the persons depending only on cash income had no land at all.

In 8 out of the 20 families, there was only one income earner. In one family, there were 7 economically active members. In two, there were 6 such members and in another, there were 5 members (Vide Table I).

TABLE 4.

POVERTY GROUP - WALGANAFYA

<u>House-</u> <u>hold</u> <u>Nos.</u>	<u>14-yr old</u> <u>or</u> <u>younger</u>	<u>Over</u> <u>60</u>	<u>Econo-</u> <u>mically</u> <u>active</u>	<u>Cash</u> <u>income</u> <u>per yr.</u>	<u>Total</u> <u>income</u>	<u>Per</u> <u>capita</u> <u>per mmoth</u>	<u>Occupation</u>	<u>Total</u> <u>land</u> <u>held</u>
1	6	-	1	1,900	2,080	21.65	Carpenter	1/2 acre
2	0	-	6	3,960	4,960	51.66	Casual labourers	1/2 acre
3	6	-	5	4,800	5,000	46.29	Mechanic + casual labourer	1/2 acre
4	2	-	3	3,600	3,635	50.48	Casual labour	6 perches
5	5	-	1	4,080	4,080	37.77	Harbour worker	nil
6	4	-	1	1,920	1,990	23.69	Casual labourer	1/2 acre
7	2	-	4	2,544	3,184	37.90	Labourers	1/2 acre
8	1	-	3	2,520	2,700	45.00	Labourers	1/2 acre
9	3	-	1	2,400	2,400	40.00	Barber	1/2 acre
10	3	-	3	2,400	2,680	27.92	Casual labourers	3 perches
11	6	-	1	2,160	2,410	25.10	Casual labourers	1/2 acre
12	7	-	1	2,280	2,350	19.58	Casual labourers	1/2 acre
13	0	-	2	2,700	2,800	38.88	Casual labourers	1/2 acre
14	2	-	7	3,600	3,710	34.35	Casual labourers	1/2 acre
15	4	-	1	1,320	1,380	19.16	Casual labourers	1/2 acre
16	3	-	2	2,400	2,800	38.88	Casual labourers	1/2 acre
17	0	-	3	2,400	2,430	33.75	Permanent labourers/casual lab.	16 p'ches
18	4	-	6	3,000	3,040	25.33	Casual labourers	1/2 acre
19	1	3	3	2,270	2,270	21.02	Casual labourers	nil
20	2	1	1	3,000	3,000	35.71	Casual labourers	nil

B. Total income excludes some items of food gathered or received by the poor households.

Of the 20 poor households, 11 had a per capita income of less than 36.50 per month. Five others had per capita incomes between Rs.36.50 and Rs.40.00 per month and 4 above Rs.40.00 per month. It should, however, be noted that, among the poor, there are unaccounted items of food, gathered or received free from time to time, not included in total income.

The worst off was household No. 15, casual labourer (Rs.19.16 per capita), who was the sole earner in a family of 6 persons. The next was household No.12 (Rs.19.58 per capita), also a casual labourer, the sole earner in a family of 10 persons; and there was household No. 19 also a casual labourer (Rs. 21.02 per capita) with no land but with 3 economically active householders. Householder No. 1, the carpenter, came next (Rs. 21.65 per capita) and he was the sole earner in a family of 8 members.

The best off in the poverty group was household No. 2 (Rs 51.66 per capita) of casual labourers with  $\frac{1}{2}$  acre of land but with 6 economically active members in a household of 8 persons.

Pattern of expenditure of the Poverty Group :

The expenditure on food varied from 80% to 90% of the total income. On clothing (per annum) it varied from 3% to 10%, depending both on income status and the numbers in the households. All but 5 households had small outlays on education. Three of them had no school-going children. One had 2 children in the age group 10-14 years not going to school and the other had 2 children of the age group 4-9 years. All but 5 families spent per annum Rs.50 to 100 on medicines which included ritual practices although they had access to Government medical establishments for any ailments. The Government facilities have also been used. Only one

family (No. 17), the permanently employed labourer with a household of 6 persons was able to have any savings at all. Almost all carried small debts, generally to the employer or boutique-keepers. Fourteen of the 20 families had negligible or no expenditures on recreation.

The households generally had three meals a day, consisting of bread or rotti (from wheat flour) or yams in the morning, mainly bread or rotti for lunch and, almost invariably, rice and curry for dinner. The meal included greens (pala) and cheap vegetables some of which was obtained free. Beef and eggs are not eaten and fish rarely, if at all. The children show signs of malnutrition.

Housing and Amenities :

Seven out of the twenty households lived in brick-built houses: the others were of wattle and daub but for one which was of timber. One house had a cemented floor, one was partly cemented and all the rest had clay floors. Ten of the houses had 2 rooms and a verandah each. Five had 2 rooms without a verandah and the rest had one room and a verandah. Eleven of the houses had attached kitchens and the rest had separate kitchens. All the houses had pit latrines generally of wattle and daub and thatch. Two of them were entirely of cadjan thatch. Generally, the houses were small, old and in a poor state of repair.

Drinking water supplies were from common wells and the majority of them were not cement-built.

The furniture in the houses of the poor group was sparse, old and in poor condition. No house had more than 2 beds but one house had 3 camp-beds. There was a total of 26 beds for 149 persons including children in the poverty group. The chairs totalled 45.

The other furniture consisted of tables, cupboards and boxes. Six of the houses had no tables at all.

The houses in the poor group had no sewing machines, bicycles or wall clocks, but two houses (Nos. 2 and 14) had a transistor radio. The utensils used were generally very old and some were damaged.

Health and Education :

Most of the families of the poor group do not eat a sufficient quantity of food and the quality of the food is itself poor - being mainly starch foods and greens. They also suffer from stomach ailments from time to time and the children sometimes develop skin rashes. The uncovered and uncemented drinking water wells are also used for washing and this water supply for drinking is unsatisfactory. The poor group has been indifferent to immunisation practices as also to sanitation and waste disposal. Ten of the families have patients suffering from asthma. The people are generally under-nourished.

In this poverty group, 3 to 4 persons in each household can read and write. The literacy standard is high, but 17 children of school-going age are not attending school. The others are at primary or secondary school, but they tend to drop out and seek work at about 12 years of age.

The people read newspapers available at Danture, the market centre for this village. The younger people also read novels and other books borrowed from the school library or the one at Pilimatalawa. Only two of the families seek assistance from their neighbours to write letters.

Generally, the unskilled labourers do not have time for any intellectual activity or even to utilise fully the land around their homesteads. They begin their day early, going in search of work and often return home late.

The Causes and Circumstances of Poverty :

Walgampaya is an ancient royal village structured round the ancient Walagamba Raja Maha Vihara which, in the 13th century, was further endowed with 130 acres of land for its support. People of various castes had been settled on these lands in order to provide the rajakariya services, as also independent Govi caste farmers and persons of lower caste rank.

Changes in land law and associated practices began in the British period when, under the Waste Lands Ordinance of 1840, all untenanted and uncultivated land (which was utilised according to custom by the villagers) was vested in the Crown. Lands were then sold for the early coffee plantations and later for tea.

Some of the Temple land and lands of the Kandyan Chiefs had documentary title but much of the land held by or actively used by the common farmers had only customary rights (or were acquisitions by inheritance) which could not be established under the terms of the new land legislation. Land holdings contracted. Rights in the commons and wastes disappeared and a new era of land sales began. In this process, three aristocratic Govi families became the large landholders and the tea estates acquired an important place in the village scene.

Government sales of land continued up to the 1880s and the pernicious Grain Tax Ordinances and their harsh administration led to further land sales

for non-payment of Grain Tax, particularly in the economic depression that came with the failure of coffee. Ownership tended to be further redistributed and the size of holdings declined. The land problem was further aggravated by the subsequent growth of population without any reserves for village expansion.

The Land Reforms of 1972 have attempted to correct this land-hunger. Nine out of the poverty group of 20 households recently received about  $\frac{1}{2}$  acre each out of lands vested in the Land Reform Commission. Four other families received about  $\frac{1}{4}$  acre each. However, these people who were poor and were landless, do not have the capital or the capacity to raise the same output from these lands as was done when these lands were part of a big estate.

Poverty today, in Walgampaya, is suffered by persons of all castes and particularly by the landless or those with too small parcels of land. These people, without specialised skills and not much more than a low primary education, have to seek work as casual labourers. Most of the economic small-holdings in paddy are operated by the owners themselves and they need a little outside labour only at the peak of the busy season. The unskilled labourers, therefore, have to seek employment on the estates in the neighbourhood or at the township or construction sites close to the village. The estates are now run at a low tempo and require casual labour only for about 3 or 4 days in a week.

Meanwhile, the poor of the village have almost lost their patron-client relationship with the influential families whilst the contractual labour market can offer them little. They are not able to migrate out of the village for want of skills and education. Some of the educated youth from the better-off families have done so.

The children of the poor families are too poor to pursue higher education. They tend to drop out of school at around 12 years of age in order to seek work themselves. Schooling is only a matter of acquiring reading and writing ability.

The rice rations, the other Government subsidies and the free health services provide considerable relief to the poor group. Some members of the poor households even receive a charitable allowance.

The lack or shortage of land, the lack of special skills, the limitations in education, the lack of capital, the limits to work on the estates, the lack of subsidiary employment in crafts and a relatively lower level of physical vitality are among the circumstances that contribute to perpetuate poverty in Walganpaya today.

## 5. PARANAGAMA

Paranagama is a Sinhala Buddhist village in Kurunegala District which is part of the Agro-climatic Zone IV.

Climatically, it is in the intermediate zone between the wet and the dry and Paranagama gets between 75" and 100" of rainfall per annum. The village is located in the northern border of the wet zone approximately 40 miles north-east of Colombo. The average temperature is 80°C and the soil is mainly of laterite loams.

Paranagama is the biggest of a group of six villages and today it has a population of about 1200 persons in 170 households located in an area of about one square mile. The village is situated on the secondary roadway between the market towns of Giriulla and Alawwa.

At the turn of the century, Paranagama was composed of a few wattle and daub houses strewn alongside an tertiary gravel road. It had about five acres of paddy and coconut was grown on the compounds of the houses as a subsistence crop.

In 1930, about 35 acres were cleared by the Government and persons from Paranagama and surrounding villages were settled on this land. In 1948, another 50 acres were so settled with people from more distant villages.

The Census of 1953 showed a population of only 500 which, by 1963, had reached the 850 mark. At the 1971 Census, Paranagama had 1050 persons. The paddy land had risen to 30 acres and the remaining uninhabited

land of 300 acres had been converted into coconut estates ranging from 10 to 50 acres in extent.

With the growth of population, the original one acre holdings were sub-divided and the 300 acres of coconut land had become 7 blocks owned by absentee landlords. Following Land Reform, the largest of the 7 blocks became divided into 50-acre units and the properties continue to be held by ten absentee landlords.

About 65% of the people of Paranagama are of the farmer caste and about 30% belong to the Padhu, a menial labour caste. The next belong to various occupational groups such as blacksmiths, carpenters, masons, ritualists etc. The Govi or farmer caste people were originally paddy cultivators as owner-cultivators or share croppers, but, today, many of them are working as manual labourers.

Resources :

Paranagama falls within the region termed the "coconut triangle". Most villages in the district are surrounded by a few hundred acres of coconut belonging mainly to absentee landlords. Paranagama itself has, at present (after Land Reform), ten holdings of coconut ranging in size from 5 to 50 acres.

The home gardens in the region also have varying numbers of coconut trees and the people with home gardens cultivate banana, manioc, betel, pepper, turmeric, ginger, jak, papaw and other fruit trees, yams and vegetables. The produce is used both for home consumption and for sale where there is a surplus.

About 3% of the people own highland ranging from 5 to 10 acres and another 2% from 2 to 5 acres. The rest of the highland is in smaller blocks.

The coconut blocks provide employment to both men and women but with land reform, the tempo of work on these lands has dropped. Clearing the land which is now done two or three times a year employs both men and women. Clearing five acres gives employment for about a week for two men and two women. Manuring, done twice a year, is often done by the same workers and it takes about twice the time as for clearing. Picking of nuts is done six times a year and may give two days work for a worker on five acres. Other tasks involve stacking of nuts and attendant chores which are performed by women. Carts are used for the transport of nuts and five men find such employment in the village.

There is fierce competition among the labourers for the employment opportunities on the coconut lands.

Paranagama has a small-scale fibre mill, two small copra-producing units (owned by two Muslim entrepreneurs) and there is a dewatering and coconut oil mill in the adjoining village.

Self-employment in cottage industries based on fibre have not developed in the village. However, there is some employment for women in beedi rolling and labelling and in weaving.

Paddy holdings have been sub-divided into  $\frac{1}{4}$  to  $\frac{1}{2}$  acre plots. Twenty-nine per cent of the paddy holdings are still held by the original land-holding class. Thirty-four per cent have passed on to the washermen caste who were among the original settlers. About 32% are held by the newer settlers who had savings with which to buy land.

Most owners tend to their land with the aid of kinship groups. Some of the villagers now work as sharecroppers with related families in neighbouring villages.

TABLE I

GENERAL OCCUPATIONAL PATTERN OF EMPLOYED PERSONS - PARANAGAMA

Occupation	Head of Households	Other Males over 18 yrs.	Females Over 18 yrs.	Total
Farmers and Share-croppers	34	9	-	43
Sporadic wage labour (paddy, coconut)	21	30	22	73
Dessicating mill labour	15	30	11	56
Miscellaneous occupations in and outside village	45	10	10	65
Blue and white-collar workers	35	30	-	65
Teachers	-	-	9	9
Handloom Weavers	-	-	20	20
Unemployed	-	25	-	25
Total	150	134	72	356

About 10% of the land-owning class are employed as teachers in schools within a radius of 10 miles and another 10% as clerks. A few are employed as C.T.B. Drivers and watchers at Thulhiriya Textile Mill 7 miles away.

A CTB Driver may earn around Rs.700/- per month, a teacher around Rs.500/- and a Clerk around Rs.400/-. The "blue collar" workers can earn around Rs.350/- per month. Textile weaving (by women) may bring in Rs.100/- a month and a woman may earn about Rs.50/- a month from beedi-rolling.

The general pattern of occupations in Paranagama is given in Table I.

The people of Paranagama have access to a Cinema, Post Office and retail shops within the distance of a mile. The village itself has its tea boutique, cafe-cum-sundry goods store, a school, a cooperative society and a Grama Sevaka's office.

Among the external resources are the Thulhiriya Textile factory 7 miles away, a Beedi Factory at Dambadeniya, 3 miles away and the Power Loom Factory at Giriulla, 1 mile away, where there is also a large dессicating mill.

Access to some of the jobs in these establishments has to have the support of some influential person who would recommend the applicant.

Education-wise, the people of Paranagama are literate, but the majority have not gone beyond primary education. In the past generation, about 15% of the people had completed Secondary education by taking up the Senior School Leaving Examination. But, they belonged to the land-owning class. At present, considerable numbers are in Secondary education, but only

20% sat the School Leaving Examination. However, two are at the University and three are preparing to enter it.

The Poverty Group :

The ongoing study of Paranagama made it easy to identify the households that were relatively poor. The earning capacity of occupations, the housing conditions and the general appearance and life style showed them up. From these poor households, about 25 were noted at random and fifteen of them were chosen at random for closer study.

Table II gives the overall picture of their circumstances. The 15 households had 100 persons; the average number per household is 6.7. This is somewhat higher than the average for the village. The group had 27 earners, some of whom were part-time workers or those with irregular employment.

The heads of households No. 8, 11 and 14 have retired and other members provide the income. All but 3 households have land ranging from  $\frac{1}{4}$  acre to 1 acre. The value of the income from the land is difficult to ascertain as it varies from season to season and with the amount of care given to the cultivations. Nevertheless, the ownership of about 50 coconut trees provides not only coconut for the household food but also a small crop for sale. The lands invariably yield a small quantity of fruits/vegetables for the household and some saleable products as mentioned in Table II. In these circumstances, the cash income by itself is only an approximation of the actual household income. However, households No. 9, 10 and 12 have to depend on cash income and any gifts of fruits, greens (pala) and vegetables from neighbours.

15 POOR HOUSEHOLDS IN PARANAGAMA

House- No.	No. in house hold	Income earners fulltime or part- time	Ave. h.hold cash in- come(Rs) per mth	Per capita cash in- come(Rs) per mth.	Fixed assets & re- sources	Debts Rs.	Occupations of Earners
1	10	2	280	28.00	1/2 acre land, coffee, arecanut, betel	-	Coconut husker, wife c.nut drier at mill
2	9	2	180	20.00	1/2 acre land 40 c.nut trees, cashew	-	Estate Watcher- son waiter at restaurant
3	3	1	120	40.00	1 acre land, 50 c.nut trees, betel	200	Casual labourer
4	7	1	240	34.28	1/2 acre, 50 c.nut trees, pepper, bananas, betel	-	Sawman
5	9	1	160	17.78	1 acre, arecanut, 75 c.nut trees	-	Coconut husker
6	8	4	428	53.50	1 acre, 50 c.nut trees, arecanut, coffee, pepper	-	Mason, son toddy tapper, daughter beedi labeller, son casual labourer.
7	5	2	200	50.00	1/2 acre, 25 c.nut trees, arecanut, pepper	200	Boutique keeper, son labourer
8	8	3	240	30.00	1 acre, 20 c.nut trees	1000	Son mill labourer, son casual lab., daughter beedi lab.
9	4	1	80	20.00	-	25	Mill workers
10	4	1	80	20.00	Carpentry tools	25	Carpenter
11	11	2	240	21.82	1 acre land, 75 c.nut trees 1/2 acre paddy	-	2 mill workers (children/ Father retired)
12	4	2	140	35.00	-	100	Mill lab., wife weaver
13	6	1	230	46.67	1/2 acre land, 50 c.nut trees arecanut, banana, coffee	-	Jaggery maker, son labourer
14	4	1	60	15.00	1/2 acre, 20 c.nut trees	-	Son casual labourer
15	5	1	320	40.00	1/2 acre paddy land	1000	Casual labour, mill worker, Mat weaver

Although some of the households have several income earners, the earnings of some are low and irregular. The high numbers in the households keep their per capita income down.

Poverty is experienced most by households with low cash income and with low or no holding of land. Households No. 3, 6, 7, 13 and 15 with cash incomes at Rs.40/- per capita per month plus income from land are poor but not suffering from absolute poverty.

Housing and General Conditions of Life :

When the poor group were settled on the land by Government, they were given a small allocation of money to put up a small house and to build a well. As a result, all the households have houses which are more or less of the same pattern, consisting of a verandah, one room and a small kitchen in the rear of the house. All the houses are of wattle and daub with cadjan thatched roofs and earth floors. Spacewise, it is approximately 700 to 800 square feet and there is no spacewise inadequacy because the verandah is also used as a living room.

All the houses have a protected well and a pit latrine but some of the children continue to use the neighbouring scrub land and not the latrine. The area around the house is otherwise kept clean.

Furniture is sparse - generally of one or two beds per household, regardless of the number of inmates, a table in few cases and a bench or a chair or two. Fifteen households with 100 persons had a total of 30 beds. There were no almirahs. A box and a clothes rack served the purpose. Utensils were few and old. However, households No. 4 and 12 had a radio set and household No. 10 (the carpenter) had a bicycle.

Food and Health :

The best meal was the dinner prepared by the parents of the household after they return from work. This was invariably of rice and two curries and greens (pala). Meat was not eaten but fish was taken (mainly dried fish) about twice a week.

The morning meal was of bread or rotti (out of wheat flour) and also the left-over rice and curry of the previous dinner. Children under 10 years were given food preference for the morning meal.

Lunch was generally a scrappy meal often prepared by an older child. It consisted of yams or jak or bread with some curry or sambol or coconut.

There is no serious illness, though some of the children appear to be under-weight. Home remedies are used for colds and fever. The older folk show a preference for Ayurvedic treatment but all make use of the government medical facilities for any ailment they think serious enough for medical attention.

The circumstances of Poverty :

The population of Paranagama has increased and the lands held by the families have become sub-divided. Those who have land today cultivate it themselves and with the support of their kin. There is no steady market for agricultural labour and land-based tasks. The competition for the jobs based on the resources of Paranagama itself is fierce.

Those in the poverty group with  $\frac{1}{4}$  to 1 acre are for various reasons unable to increase their return from the land. They do not have the capital resources to carry out regular programmes of cultivation or applications of fertiliser on the coconut land even

when the supplies arrive in the village in time. The problems of the choice of the crop and methods of cultivation of subsidiaries on a fully planted coconut land have not been adequately solved. The poor group are too poor to own and manage cattle. Besides, they spend their time looking for work or in engaging in back-breaking tasks leaving little opportunity or will to develop their plots intensively. The land alone cannot give an adequate income.

While the jobs generated by the resource base in the village are few, the competition for jobs outside is also severe and the poor of other villages also compete for them. In some of these sources of employment, there is a need for political patronage to secure a job. The main external resources, besides secondary jobs in the townships close by, are the Thulhiriya Textile Factory (7 miles away), the Beedi Factory at Dambadeniya (3 miles away) and the power loom at Giriulla which is one mile away from the village.

The poor households do not have resources to spend on clothes, books etc. to pursue education beyond the primary stage and seek better employment in the way some of the children of the influential families have done. They see around them other villagers with secondary education but still looking for adequate employment. The children of the poor seek employment early in order to add to the household income.

The prospects for the poor group are very unfavourable at present. Some progress can be made by working out easy and low-capital methods of better utilising the land planted in coconut. Employment possibilities can increase if factories or major development projects are started within a reasonable radius of Paranagama. Family planning to limit the size of families can also help the poor households by a control over the number of dependents.

## 6. POVERTY IN THE PLANTATION SECTOR

### The Situation on a Tea Estate

The Estate Sector has characteristics of its own and they differ considerably from the Rural Sector of Sri Lanka. The main plantations in the country are of Tea, Rubber and Coconut. Tea is the most labour-intensive and has the largest number of resident labour on the estates. The tea plantations hold, by far, the greater part of the immigrant labour-force from India, a part of which is now in the process of acquiring Sri Lanka citizenship.

The estate chosen for the Poverty Study is Ritnageria Estate which, properly designated, is Ritnageria Division of Palmerston Group. This group consists of 507 acres of which 455 acres are cultivated in tea. Ritnageria is treated as an unit in the group. The tea factory, office and dispensary are on this estate.

Ritnageria is in the Dirbulla planting district and close to other planting districts of Nuwara Eliya and Hatton. It falls into Zone IV in the agro-climatic zones. It is at an elevation of 4000 to 6000 feet above sea level.

The property is now vested in the Land Reform Commission but it continues to be run as before as a tea estate.

The nearest postal town is Talawakelle which is  $5\frac{1}{2}$  miles away and the estates in this area are served by Talawakelle Hospital at Lindula.

Ritnageria consists of 265 acres. Except for the land holding the buildings and a few small garden plots, the whole area is cultivated with tea. The

buildings consist of the factory, office, stores, dispensary, the labour 'line-rooms', the Manager's bungalow, staff quarters, a small school-room, creche, a temple and a church. The entire land is immovable property belonging to the estate. The residential rights within the property are guaranteed only in terms of employment on the estate.

The total population on the estate is 510 and 460 are of Indian origin consisting of 164 males and 167 females and 129 children. The income earners and the households are as follows:

TABLE I

<u>Occupation</u>	<u>No. of persons</u>	<u>No. of Households</u>
1. Manager	1	1
2. Staff	11	11
3. Registered workers	260	101
	<u>272</u>	<u>113</u>

The workers (all of Indian origin) depend on a daily rated wage system.

From 1976 there were also 7 Sinhala labourers working on a casual basis but resident outside the estate.

The labour 'lines' are constructed within close range of each other and consist of 12 'lines' plus another 2 lines accommodating 27 other households. People belonging to different income classes and castes, from that of the labourers, occupy small houses consisting, generally, of one large room and a verandah. The staff quarters are better constructed and so is the Manager's residential bungalow.

The caste composition is as follows :

TABLE II

<u>Caste</u>	<u>No. of Families</u>
High castes	17
Parayar	35
Pallar	31
Sakkiliyar	29
Dhoby, Barber	3
<b>Total</b>	<b>115</b>

The labour recruitment is done by a high caste person who later becomes a "head Kangany" (supervisor and controller) on the estate. Access to the better classes of jobs and better opportunities are available only to the higher castes.

Economic Resources :

The economic resources available to the people living on the estate are their capacities for rendering services. Apart from the Manager and eleven on the estate staff, all the others earn an income from labour of various kinds.

There are 260 regular workers on the estate associated with 115 family groups. The general distribution of the tasks are as follows :

TABLE III

DISTRIBUTION OF TASKS

(Major division of work and number of workers)

<u>Type of work</u>	<u>No. of workers</u>	<u>Males</u>	<u>Females</u>
1. Plucking	119	39	80
2. Sundry work (weeding, manuring, etc.)	121	121	-
3. Factory work	31	25	06
4. Kanganies	06	06	-
5. Watchers	04	04	-
6. Line Sweepers	03	03	-
7. Postal sack & garden (bungalow) coolies	04	04	-
8. Orderlies	01	01	-
9. Creche attendant	01	-	01
10. Nursery labourer	01	-	01
<b>Total</b>	<b>291</b>	<b>204</b>	<b>87</b>

There are also a few subsidiary sources of income which are available to about 16 households out of the 115. Six of them have dairy cows, three or four indulge in a little trade on a very small scale. Two or three deal in the illicit sale of arrack and four engage in tea-basket weaving. The dairy business can yield up to Rs.150/- per month, small-scale trade up to Rs.100/- and arrack sales somewhat over Rs.100/- per month. Basket weaving may give from Rs.50 to Rs.75 per month.

Additional incomes may be earned by households by securing weeding contracts when such work is needed and it may give Rs.30 to Rs.100 per month. However, one household earns Rs.150/- a month and one other Rs.225/- per month on this score.

In season some tea field workers get "over poundage" on their work. This is in addition to their standard daily wage. However, there is no guarantee that all the workers (who are daily rated) will get six days work in a week.

Wages and allowances paid on the estates are regulated by Wages Boards and the regulations are enforced and effective. Women and children (over 14 year of age) are paid at lower rates than men.

The examination of incomes of a sample of 60 families at random showed that, about 28% received monthly incomes of Rs.200/- or less. About 50% received Rs.200 to Rs.400 per month and the balance over Rs.400/- per month.

It was found that 60% of the workers are indebted to the management during the off-season. They generally borrow from the staff, from boutique-keepers or money lenders.

The general educational standard is low. About 40% of the children (including some pre-school children) do not attend school. About 30% of the people have not studied beyond the 3rd Grade and another 20% from Grade 3 to Grade 5. Only 3% go outside the estate for secondary education.

#### Selecting the Poverty Group

In the on-going study of this estate, it was found that the outward appearance, in dress for example, was not always a good indicator of poverty. Some who looked reasonably well dressed were also, on closer examination, found to be in difficult economic straits. In selecting the poverty group, a number of factors were taken into account. The official estate data on wages, the number of income earners, the general pattern of indebtedness in meeting daily wants and the absence of subsidiary incomes were generally noted. On the basis of these indicators, thirty families were noted. From among the thirty, a random selection of eighteen were taken for closer study.

#### The Poverty Group :

A general picture of the 18 poor households is given in Table IV. They total 113 persons. It was noticed that the average number of persons in these households was 6.27 persons which is higher than that of the average family on the estate.

There were 28 adult males and 33 adult females. There were also 52 children. These children alone constituted 46% of the total persons in the sample of 18 households. Thirty of the children were in the age group 0-9 years. There were 7 persons over the age of 60 years.

TABLE NO. IV

RATNAGERIA : THE ECONOMIC CIRCUMSTANCES OF THE 18 POOR HOUSEHOLDS

<u>Household &amp; Number</u>	<u>Total No. in Household</u>	<u>Children 0-14 yrs</u>	<u>60 yrs &amp; over</u>	<u>Dependents</u>	<u>Household income Per Year</u>	<u>Income Per Capita Per Month</u>
1.	3	2	1	2	311.67	25.97
2.	9	4	0	7	451.89	37.65
3.	8	5	0	5	523.13	43.59
4.	6	3	1	4	309.50	25.79
5.	5	2	0	3	453.00	37.75
6.	8	4	0	6	336.25	28.02
7.	4	1	0	2	528.75	44.06
8.	8	3	0	3	413.75	34.48
9.	4	0	0	2	595.75	49.64
10.	7	1	2	5	408.85	34.07
11.	8	3	1	5	355.25	29.60
12.	6	1	1	4	454.17	37.84
13.	7	4	1	6	538.50	44.87
14.	6	4	0	4	519.17	43.26
15.	3	1	0	2	547.35	45.77
16.	7	0	0	6	516.28	43.02
17.	8	2	0	0	269.87	22.48
18.	6	3	0	4	476.83	39.73
<b>Total</b>	<b>113</b>	<b>43</b>	<b>7</b>	<b>70</b>		

Taking into account all persons who could not contribute to household income, it was found that 61.9% of the poor group were dependents. To be assured of regular work on the estate is a boon but only 23 persons in 18 households were enjoying this privilege.

Children seek work as domestic servants for a small income plus food. This is a practice only among the poorest among the estate households. Six families had a child in domestic service.

None of the households owned cattle. Seven families owned chickens and the total for all these families was only 27. One household was engaged in tea-basket-making.

As regards the monthly household income, eight out of the eighteen had income between Rs.200 and Rs.300 per month. Three had household incomes between Rs.300 and Rs.500. This was the highest income slab. Seven households had incomes below Rs.200 a month.

But household incomes are deceptive as measure of per capita resources.

Seven of the households had per capita incomes below Rs.36.50 which was the poverty line of absolute poverty at 1973 prices. Four others had per capita incomes between Rs.36.50 and Rs.40/-. Seven households had per capita incomes between Rs.40 and Rs.50. This group had the highest per capita income.

Four of the families which had low household incomes below Rs.200 per month were above the poverty line. They were household No. 5 (5 members, 2 income earners), No. 7 (4 members, 2 income earners), No. 15 (3 members, 1 income earner).

Housing and Amenities :

Housing design and construction are at the discretion of the Management. There are two types of houses currently in use - Barrack-type "line-rooms" and cottages.

The Barrack-type is a long building with sections divided out for each household, consisting of a single room and a verandah. No kitchen is provided. The householder has to make his own hearth.

At Ratnageria, the long line-room consists of 22 rooms and each room is 12' x 14' and the verandah is 6' x 14'. The construction of any more barrack-type quarters was prohibited in 1950.

The cottage-type has a kitchen, a room and a smaller verandah. The floor is cemented in the new construction. It is of clay in the older buildings.

Regardless of the numbers in a household, each family group is constrained to live in their allotted quarters. If a member gets married, the new couple sometimes share a parent's quarters.

An improvised ceiling is sometimes constructed in the house to store firewood and keep it dry. Only in four houses of the poor group are there any beds. There are no chairs or tables but there may be a stool or two. The coconut scraper (bench type) is also used for sitting.

The clothing of the poor group is in poor condition. The children are often in the nude. New clothes are bought only at festival time, which may be Deepavali, Pongal or the New Year. In the poor group, when they come in for some extra money, they spend it on food. About 80% of the income is spent on food.

Among the poor, coconut shells and condensed milk tins are used as drinking vessels. But one household in the poor group has a battery-operated radio. Another had a radio which is not in use as they cannot afford to buy the batteries. Both units are very old and unsaleable.

Education :

Education on the estate is negligible. There is an attempt to have some classes up to 5th Grade. At the time of the survey, there was only one teacher for ten classes. In the poverty group, only two children have gone beyond 5th Grade. This is lower than the general performance on the estate.

The poor children are unable to continue schooling because they have to prepare the noon meal and take it to their parents who may be working at a tea field some distance away from the lines. At the age of 14 they seek work. Some children in the age-group 12-14 years also help the household members in their weeding tasks. Some other poor children go out to urban centres to work as domestic servants.

As most of the workers are still Indian citizens, there are no avenues of local employment open to their children. This fact too discourages them from education beyond a simple ability to read and write.

None of the households in the poor group buy or borrow a newspaper. They also do not receive letters except an occasional one from India. If they need to write a letter, they get it done by one of the few people who customarily do so for the fellow workers.

Health :

The general health conditions of the poor group are unsatisfactory. There is under-nourishment. Coughs and colds and fever are common ailments. The poor group has one person who is dumb (Household No. 2) and one who is blind (Household No. 10). In Household No. 14, one inmate has T.B. Households No. 7, 13 and 15 have an Asthma patient. Household No. 17 has a paralytic. Two households, No. 16 and 17 have patients with skin rashes.

The estate dispensary is the chief place of treatment. The patient needs a chit from the dispenser to seek treatment or admission at the hospital at Lindula. Common colds and fever are treated with home remedies and sometimes they consult the ayurvedic physician. The T.B. patient is receiving the attention of a Government Western qualified doctor.

Causes and Circumstances of Poverty :

The estate workers are under a daily-rated wage system and about 50% are not sure of regular employment. The household's income is determined by the number of days work available and the number of income receivers in the household. There is also the possibility of earning out of contracts for weeding. Out of the 18 households in the poverty group, only 5 have weeding contracts. These households earn about Rs.30/- per month extra on this account.

None among the poor group have other subsidiary sources of income as from petty trade or having a milch cow. But the poor group loses working days on account of illness.

The poor group also suffers on account of having a considerable number of dependents (vide Table IV).

Some of the estate families operate under the extended or joint family system. This promotes a better management of incomes and resources. This type of family organisation is more common among the higher caste groups and not in the poor group.

Rice, flour and sugar are supplied through the estate Management. Other items have to be bought at boutiques which may exploit them by overcharging or giving short weight. There is no cooperative society on the estate.

Food consumption does not have a steady, regular pattern. The quantity of consumption varies with the ready availability of cash at the time and more is spent at festival times or on ceremonial occasions. The low caste groups in particular are addicted to consuming arrack.

Ceremonies are a part of the social life on the estates and families get into debt because of the higher consumption at these times.

Particularly among the low caste, poverty is accepted as their condition of life. They have little prospect of favoured treatment by the high caste kanganies or labour foremen.

COMPARATIVE OBSERVATIONS ON THE MICRO STUDIES

The micro-studies of poverty which have been presented in the preceding sections attempt to depict six different profiles of poverty, five of which are in the rural sector and one in the estate sector. These profiles have been prepared from information elicited from concrete situations of poverty investigated in the rural and the estate sectors. The study has not been able to select situations which are representative of all five zones covered in the Consumer Finance Survey. Mirissa, Horape and Henegama fall into Zone I of the Consumer Finance Survey. They however present three distinctly different profiles of poverty and indicate the wide variety of socio-economic conditions in this zone. While Horape and Mirissa represent communities which are located on the fringe or relatively close to the urban coastal belt, Henegama is a village which is further removed from this urban belt and is situated in the plantation sector in the South. Walgampaya and Paranagama are both in Zone IV of the Consumer Finance Survey. But again while Paranagama is in the low country cocorut area, Walgampaya presents a different situation, located as it is in the central part of the country and encompassed by the tea plantations. Ritnageria is a typical plantation community and provides an insight into the poverty in the estate sector.

In our analysis of poverty based on the data of the Consumer Finance Survey, we tentatively arrived at a poverty line defined by the per capita income of households which is in the region of Rs.37 per month at 1973 prices. The study also indicated that the incidence of poverty was high in Zone IV and from the data available, this poverty seemed to be concentrated in the rural sector of the Kandyan area. The profiles of poverty which have been presented in the micro-studies do not attempt to provide very accurate measurements of

of poverty which can be used for comparative analysis of the incidence of poverty in all these situations that have been studied. What they attempt to do is to provide insights of a qualitative kind which enable one to define some of the essential characteristics of poverty as they are manifested in typical situations in the rural sector and the plantation sector. Within these limits the profiles of poverty support some of the broad conclusions in the macro-analysis in Part I of the study. Walgampaya which is in the central region in Zone IV appears to have the largest proportion of households which are close to or below the absolute poverty line. The village study estimates that approximately 30% of the households in the community in Walgampaya fall into the category which could be described as being desperately poor. The estimate of the poorest households in Henegama which have per capita incomes around the absolute poverty line, is estimated at around 20% of the total community. When we come to the communities closer to the urban belt--Mirissa and Horape--the comparable figures are 5.3% for Horape and 9.3% for Mirissa. For Paranagama the estimate would be approximately 20% and in the plantation community it would be about 11%.

If we measure poverty in terms of income, the micro-studies reveal a somewhat varying pattern. The relative poverty level appears to be different in different situations. In Horape for example, among the households selected as the worst affected in the community, only two households have per capita incomes below Rs.40. The per capita incomes in the other households range between Rs.50 and Rs.70 and are well above what would be regarded as the absolute poverty line. In the estate sector, 11 households out of the 18 selected fall below the Rs.40 per capita level. In Mirissa the comparable figure is 12 out of approximately 500 households. In Henegama, out of the 15 that have been selected only 2 households have per capita incomes slightly above Rs.40

per month and in Walgampaya out of the 20 that have been selected, 15 fall below Rs.40, the other 5 ranging between Rs.40 and Rs.50. The presence of a large mass of undifferentiated poverty is evident in rural situations such as Walgampaya and Henegama. A more differentiated picture comes out of the profiles of Horape, Mirissa and the plantation community. These communities fall into the segment of the economy which have either more regular or more diversified income-earning opportunities. We saw this situation in our analysis of the income data in the Consumer Finance Survey where both Zone I and the estate sector are least affected by absolute poverty.

The impressions that have been gathered regarding the food habits of the poorest households in these communities that have been studied confirm that the conditions are least satisfactory in rural situations that are represented by Walgampaya and Henegama. It is the Walgampaya village which probably would have the highest protein and nutritional deficiencies. This is probably related to the income situation as well as the food economy of the village itself. Walgampaya has comparatively little land devoted to the cultivation of the staple food, rice. This combined with an overall resource situation which is very poor would inevitably work against the poorest households who would have to buy the major share of their food requirement while at the same time being unable to earn sufficient cash income. We saw that the poorest households in Walgampaya very rarely had any animal protein in their diet whereas all the other communities which have been studied do have either meat or fish for a few meals during the week. The studies however do not reveal any acute insufficiency of food among the poorest households that have been investigated in the various poverty situations. In certain situations such as Henegama and Paranagama, the morning meal does not

appear to be substantial. In Walgampaya the households have only one rice meal a day with yams, roti or bread for the other meals. The instances where households were reported to be doing without a main meal owing to absolute poverty were very rare. This is mentioned in the Mirissa study and the Walgampaya study.

The information gathered in the micro-studies however can only provide a general impression regarding the availability of food for the poorest households. Normally an innate sense of pride prevents most households from revealing to an outsider that they are unable to provide themselves with the minimum food. In these studies however the information has been collected by participant-observers who have identified the living conditions in the village over a long period. The observations that have been recorded although they may not be exact when they deal with quantitative estimates, are fairly reliable when they present the general level of living in the household. It is evident from the data that in villages such as Walgampaya and Henegama, the poorest households who constitute as much as 20-30% of the rural community suffer from an insufficiency of food. This comes out from the revealing details regarding the pattern of the daily food intake. In certain situations the households are compelled to give preference to the food requirements of children particularly in regard to the morning meal. In several situations of absolute poverty observed in these six studies, the adult members of the households managed with little for the morning meal. Altogether the condition of these households is a precarious one. With no assured supply of food and dependence on casual income, illness or any personal disability of the income-earners could easily push them into a condition of semi-starvation. The situation is slightly different in the estate sector where the wage-earners obtain credit for their food requirements from the estate management, and for this reason are able to

enjoy better conditions of food security than the poorest households in the other sectors of the economy.

While insufficiency of food would obviously be the hard core of poverty, it would be necessary to see this manifestation of absolute poverty in association with its other characteristics. Hard core poverty is manifested in the poor conditions of shelter and inadequacy of living space; in the lack of access to satisfactory health facilities; in poor environmental sanitation reflected in unsatisfactory sources of drinking water, inadequate toilet facilities and so on, and in the lack of skills in literacy and numeracy for conducting the minimum relationships with the outside world. The poverty in housing was most pronounced in the estate sector. There was both poor environmental sanitation and severe overcrowding. The housing conditions in the estate sector have been discussed in some detail in Part I of the study. The problems which were set out there have been clearly illustrated in the micro-study of the plantation community. In the other micro-studies we observe a somewhat unusual feature in regard to housing. There appears to be considerable variation in the levels of housing among the poorest households that have been surveyed. An appreciable number of these households seem to enjoy housing conditions which at the level of absolute poverty in which they live are fairly satisfactory in terms of the materials used for the structure and the living space available per person. In Mirissa, for example, a number of houses in this poverty group were constructed with bricks and tiles and had cemented floors. In many cases living space exceeded 50 square feet per head. The situation is similar in Horape and Paranagama. The exceptions appear to be Henegama and Walgampaya. While these villages too had a number of houses built of bricks with tiled roofs, they generally seemed to suffer from inadequacy of space. Most of the houses are either two-roomed or one-roomed.

The quality of housing becomes a critical indicator when examining the quality of life at different income levels and determining the point at which households raise themselves above the condition of absolute poverty and begin to possess the capacity to satisfy basic needs and bring about a qualitative change in their living. Households in absolute poverty lived in housing conditions in which the specialised use of living space is not possible. They often lived in one large room or at best two in which all activities have to be undertaken-- sleeping, eating, storage of goods, entertainment of relatives and friends, study and so on. Housing facilities in which there is some capacity for specialised use of living space and interior arrangement of activities denotes a certain quality of life which is above stark poverty. It is true to say that in a large number of households which have been selected from the poverty group in the micro-studies, the level of deprivation in regard to housing was not absolute. In many instances the per capita space was adequate. There was some specialisation in the use of space. Household assets however in the nature of furniture and other equipment were very few. But even households in this poorest segment have a use of living space which could generate a demand for consumer durables of various kinds. In this sense households are likely to have a higher level of expectations and respond with a corresponding sense of deprivation to their present conditions.

The conditions relating to health reflect the benefit of the free health services that have been fairly well distributed throughout the Island. Health conditions appear to be worse in the estate sector where the poorest households contain a number of cases of serious disability and illness. In the other rural situations of the study, the poorest households appear to have satisfactory access to the government medical

facilities as well as to the ayurvedic medical system. All the studies report that conditions relating to morbidity are fairly satisfactory. In many cases even the poorest households have had access to immunisation facilities. None of the studies has discovered any endemic condition of ill health or high rates of mortality, particularly infant mortality, which are specific to the condition of absolute poverty. The studies of Walgampaya and Henegama however report evidence of physical underdevelopment and malnutrition. In many of the situations studied, environmental sanitation seems to be poor. This is true of Paranagama, Henegama and Walgampaya. Few of the households in the poverty group have no latrine and several households have to share a common well. Some of the wells used for drinking water have no protecting wall and other safeguards against pollution. Poor environmental sanitation is one common characteristic of these pockets of acute poverty. It is however not entirely a result of a lack of resources in these households. The conditions reflect a level of sanitation to which households appear to have been traditionally accustomed. Greater cleanliness in individual households and better collection action for improving conditions pertaining to environmental sanitation for the whole poor community is possible regardless of their present poverty.

It was pointed out that the possession of skills in literacy and numeracy was also another determinant of the level of living. Lack of these skills create a condition of absolute dependence in regard to all relationships which the households need to have with the outside environment. In a rural sector which is getting rapidly monetised and where state activity plays a dominant role, communication with the outside world for various matters in daily living requires a minimum level of education. The micro-studies reveal that the educational level in most households in the poverty group did not vary very

significantly from the average in the village. While none of them reported participation at the tertiary level, the years of schooling of the inmates in the poorest households and school attendance seemed to show only marginal differences in comparison to the more well-to-do part of the village. It would however be correct to conclude that in these groups children would seldom complete their secondary schooling. The situation in the estate sector we saw earlier is a contrast to the rest of the country. In the plantation community educational levels are significantly lower. In the poverty group only two children appear to have been able to go beyond the 5th grade. The plantation community while living in more favourable conditions as regards income and nutritional level, is seriously deficient in regard to two basic needs--housing and education. The pattern of poverty in the estate sector is therefore one in which poverty in housing and poverty in education are the two dominant characteristics. These aspects of poverty in the estate sector are an integral part of plantation agriculture based on Indian resident labour. The stateless condition of the estate labour, the lack of mobility and eligibility for employment in other sectors of the economy have locked the resident labour into a situation in which the large majority of the households can look forward only to work in the plantations. Within such a framework of expectations, higher levels of education and advancement through education have little meaning.

The studies do not reveal major non-economic factors such as caste playing any significant role in either pushing groups into conditions of poverty or preventing them from overcoming these conditions. In most communities caste is not a significant factor in the composition of the poverty group. The poverty group comes from various castes including the so-called high caste.

In Walgampaya the multicaste village, the castes which are traditionally lower in the hierarchy have succeeded in breaking into important socio-economic and political positions in the village, and in that way have modified the traditional power structure. These castes have found it to their advantage to organise themselves politically and establish links with political groups which sought their electoral support. At the same time they have taken to trades and other economic activity which the Govigama elite had avoided. The poverty group in Walgampaya contains both the so-called Govigama high caste households and the traditionally inferior castes. The two exceptions where caste has distinctly contributed to the marginalisation of households are Mirissa and the estate community. In Mirissa the small group which had undertaken non-fishing activities in this community and which belongs to the Durawa group was not able to participate in the changes that took place in the village with the introduction of the new technology as they were traditionally not in the fishing occupation. But although this is true of a few Durawa households, other households in the community which did not belong to the main fishing social group--the Karawa caste--were able to take part in various other activities such as trade and improve their position. And again while the poverty group contains a few Durawa households, they contain households from the main fishing community as well. In the estate community a large number of the impoverished households belong to the castes which are traditionally among the lowest in the hierarchy. Caste relationships appear to play some part in the network through which various fringe benefits such as weeding contracts and other non-wage employment is given. It may also affect regularity of work. While there is evidence that such networks would continue to operate, affecting the social and economic position of certain castes, it is nevertheless true that the growth of the trade union movement has brought about significant changes in the structure

of power in the estate communities and provided better means of access to the working population as a whole.

The micro-studies also reveal that poverty is in many instances closely related to the large size of the household and the high ratio of dependants to income earners. This appears to be particularly true of Walgampaya and the plantation community. The analysis in Part I, we saw, showed how a large number of families in the income slabs below Rs.200 and Rs.200-400 are kept below the absolute poverty line on account of the large number of dependants and persons in the economically inactive age groups. Large families in the poverty group might be both the cause of persistent poverty as well as its effect.

It is important to distinguish between the pattern of poverty in the rural sector and the estate sector. The insecurity and low income in the wage earning sector in the estates is of a very different kind from that of the rural sector. In the propertyless wage earning sector in the estate, dependency in old age appears to have more acute characteristics of deprivation and poverty than in the rural sector where property and assets, however small, provide the old a means of controlling their environment. But at the same time during the working life, income even at a low level is assured to the estate worker with some degree of regularity. Households can obtain their basic requirements on credit from the management. The estate management is therefore "responsible" for the resident estate worker in a more comprehensive form than the employer in a normal contractual relationship. But the quality of this form of security should not be overrated. It has overtones of the relationships in which the worker is a capital asset like the slave and has to be maintained at a minimum level of physical well-being to supply the needed labour.

Rural poverty is very different in character and arises out of a different set of circumstances. It is related to the ownership of income-earning assets and the access to income-earning opportunities in a labour market within and outside the village. The income-earning opportunities for labour are not organised in the manner in which the formal urban sector or the plantation sector with resident labour have organised them. Seasonality, the casual character of the work, and the unorganised nature of the demand for labour imparts a pervasive insecurity to the livelihoods of the rural poor. Indebtedness, illness, death of an income-earner, crop failure may have dire irreversible consequences for a rural household. The insecurity which afflicts the rural poor in these circumstances is very different from the type of insecurity of the wage-earner in the estate sector.s.

The contrast in the patterns of poverty between the estate sector profile and the rural profile points to certain conclusions which deserve to be investigated further. Whereas food insufficiency is the main characteristic of poverty in the rural situation, the social components of poverty--elements such as "poverty in education", lack of access to health care, "poverty in housing" and so on--do not manifest themselves in an acute form. The social welfare programme appears to have succeeded in ameliorating some aspects of poverty, but in the process has sustained a significant share of the population (20% of households in Henegana, 30% in Walgampaya) in an undernourished and physically underdeveloped condition. The modern health care systems, well distributed to reach the poor, appear to have a capacity of reducing mortality and enabling people to have a longer span of life at lower levels of physical well-being. Indicators such as life expectancy in the context of poverty as is to be found in the rural sector in Sri Lanka should therefore be examined more

carefully before they are accepted as definite indicators of an improvement in the quality of living. On the other hand, if we examine the living conditions in the estate sector, we have a situation which is more or less the opposite. If food sufficiency is the criterion of households having reached a level of living above conditions of absolute poverty, the estate households have fared satisfactorily. At the same time, along with food sufficiency they suffer from serious inadequacies in other components which are needed to ensure a minimum quality of life--health, education and housing.

At this stage of the analysis, it would be useful to place these poverty groups in their economic setting and examine how the distribution of resources and the socio-economic structures in their communities are related to the persistent poverty of these groups. We saw that Mirissa and Horape illustrate patterns of poverty somewhat different from the rest. In Horape the process of urbanisation has brought diversified income-earning opportunities to the rural community which lived there. Land began to acquire value for residential purposes in this process. Village communities which are caught up in the expansion of the urban sector would invariably benefit. Even small plots of highland which had yielded little income in the past are converted into assets of high value. It is only a very small group in the village who would have no land at all or whose ownership is in such fragmented holdings that it is of little value who are likely to get marginalised in the process of urban expansion. But even here the growth of urban activity provides a diversified labour market for such persons and enables them to earn reasonable livelihoods. This is by and large the process which we have witnessed in Horape. It would indicate that villagers in the urban fringe would generally improve their living conditions. Their situation would be very different from the propertyless urban poor within the city who are uprooted

from their village links, have no assets of their own and are cast into the urban labour market in which the level of unemployment is rising. Therefore it is to be expected that the poverty that we observe in Horape is more of an accidental nature than of a structural kind. It is derived from sudden loss of employment, from situations which have led to migration to Horape from another village, a high dependency ratio and similar circumstances. It is invariably a situation which afflicts those who own no land of economic size.

In Mirissa the situation is somewhat different. Here the poverty group consists largely of households who have been marginalised as a result of the introduction of a new fishing technology. The government programme which introduced mechanised boats for deep sea fishing led to an alteration of the pattern of ownership of resources, the structure of power and the distribution of incomes in the village community. It bypassed the traditional fishing elite who owned the equipment required for the traditional modes of fishing which relied heavily on deep sea fishing. The government programme reached out to those directly engaged in fishing--the fishing crews which worked for these elites--and provided them with mechanised boats under a hire purchase programme which gave them access to new resources, freeing them from their dependence on the traditional power holders in the village. While the introduction of the new technology did to some extent overturn the old power structure in the village, in the process it displaced some of the village crafts and economic activities which were organised round the traditional fishing technology. The import of nylon nets reduced the use of local nets and other coir-made items. Coir spinning ceased to be lucrative. In this situation however most of the coir workers could not find alternative types of coir craft or other income-earning opportunities. A combination of coir spinning

and manual labour did not provide enough income especially when the number of dependent members in the household was considerable. A few of the coir workers were of the Durawa caste and in the local situation they could not readily have access to fishing operations which were controlled by the Karawa caste. They continued in coir work and other tasks that were less lucrative. While the new technology led to a reorganisation of the groups engaged in different types of fishing, a few of the fishermen engaged in subline fishing using small boats were disadvantaged. It is also possible that the new technology together with changes in the coastal area had adverse effect on the fishing operations close to the shore and reduced the catch. Not all the crewmen were able to find adequate and continuous employment in the new activity and in the new distribution of functions in the fishing operations. The poorest segment of the Mirissa community which has been discussed in the micro-study were mainly those who were adversely affected or bypassed by the new technology.

Walgampaya, Henegama and Paranagama present three interesting examples of poverty arising out of village economies which are mainly agricultural but which are organised on a very limited resource base. They illustrate the problems of village economies where on the one hand income-earning opportunities in the village have not expanded to keep pace with the increasing workforce, and on the other the labour markets outside the village had not generated sufficient demand for village labour. All three villages exist alongside the plantation sector. Walgampaya is adjacent to the mid country tea plantations, Paranagama which is located in the coconut area with coconut plantations surrounding it and Henegama is in the environs of the low country tea plantations. The land resources within the village as a whole are quite small. For Paranagama with 170 households, the total extent of paddy land was

approximately 30 acres and the highland (exclusive of coconut estates) available to the village was approximately 200 acres. In Walgampaya there were 271 households. The total land resource consisted of 254 acres, 193 of which was highland and 61 was paddy. In Henegama the total number of households was 176. The village had 97 acres of paddy and 347 acres of highland. In terms of land resources in proportion to the population, it would be seen that Walgampaya is the poorest. As pointed out earlier, it has only a limited land extent for cultivation of the staple food and the output of this extent of paddy is far below the requirements of rice for the village population. The situation is a little better in Henegama both in respect of paddyland and highland. The overall land resources available to the village would however indicate that agricultural activity particularly at its present low level of technology and output would be able to support only a very small part of the population in the village. As is to be expected, the distribution of land in the villages is skewed, but the structure of land ownership is not such that few families own substantial extents of land. On the whole, land holdings are small, the largest seldom exceeding a range between 5-10 acres. While this structure of land ownership does not reflect gross disparities, the limited resource base not permitting such disparities, the inequalitarian distribution of land as we have it, inevitably results in a large number of households being deprived of any reasonable access to land. As might be expected, it is these households which are pushed to the margin of absolute poverty.

But landlessness itself would not have been a cause of absolute poverty if the village economy was viable enough to create a market for labour. This the village economy could not do to any appreciable extent except to provide opportunities for casual labour and for seasonal employment as well as for domestic services

in the more well-to-do households. The service relationships that existed in the past between the well-to-do families in the village and the poorest families and which provided some form of employment and a source of income transfers, appear to have contracted and dried up. The village elites themselves have become more outward looking, using their resources for upward social mobility, education of their children and employment in the urban sector. The leadership given by these elites to the development of the village economy itself has been not very significant. Meanwhile, their capacity to extend patronage and sustain the traditional patron-client relationship has also contracted and even dried up. In all this the poorest segments of the village have been confronted with a relatively stagnant village economy or at least a village economy which was not expanding fast enough to absorb the growing workforce and at the same time a loosening of the patron-client ties which had supported them in the past.

The main market for village labour was therefore outside the village itself and this was available in the commercial plantation sector. But if we examine the situations in Walgampaya, Paranagama and Henegama, we find that with the exception of Henegama, the commercial plantation sector could do very little to expand the labour market for village labour. In the case of Walgampaya, the tea plantations were more or less adequately supplied with resident Indian labour and the demand for village labour was marginal. The demand would be residual and therefore provide only a very casual and irregular source of income. In the case of Paranagama, of all the perennial crops, the coconut plantations made the least demand on labour. One labourer was adequate for 10-15 acres. The entire coconut plantation of over a million acres supports a workforce which does not exceed 100,000. The coconut plantations could have provided a labour market for

the village only if it could have introduced new and more intensive agricultural systems in the coconut plantations through interplanting, pasture, dairying and so on. But under the previous ownership, proprietors of the coconut plantations were reluctant to undertake an enterprise of this nature and to integrate the village economy with the plantation economy. Prospects however now exist for such an integration after the land reform. In Henegama the plantation economy depended largely on the supply of village labour and therefore the propertyless households had a ready market for their casual labour in the adjoining estates. This to some extent alleviated their situation. It would probably account for the marginal differences that exist between the proportion of the poverty groups in Walgampaya and that of Henegama. It has to be pointed out however that in the case of Walgampaya the village is in fairly close proximity to urban centres and is not typical of some of the Kandyan villages which are far removed from access to urban labour markets. Walgampaya is therefore likely to represent a situation which is somewhat better than the average village in the Kandyan area. Caught between this limited resource base and the stagnant village economy on the one side and a plantation economy which fails to integrate itself effectively with the village economy and offer an expanding market of income-earning opportunities on the other side, the propertyless households or the households with uneconomic landholdings in the village have been pushed to conditions of acute poverty.

There is however another aspect which ought not to be neglected in analysing the use of resources and the manifestation of poverty at the village level. The village agricultural systems of the areas we have been examining have been traditionally geared to subsistence agriculture and within this subsistence system the efficient management of agriculture was found largely

in the lowland rice cultivation system. The highland agriculture was generally of a migrant type and seldom demanded the intensive management and the cultural practices of a settled system. As a result it might be argued that the agriculturist in the peasant economy seldom looked on a small highland holding as a valuable agricultural resource. In contrast, we could examine the agricultural systems in the North of Sri Lanka where a highly efficient intensive agriculture has been developed on small highland allotments on the basis of dry farming and supply to a commercial market. This approach to highland agriculture was absent in the village economies in the South, the Dry Zone and the central region. It is possible to argue that many of the small highland allotments which are owned by households in the poverty group are capable of intensive development under a well-managed highland agricultural system. Examples have been forthcoming in one or two areas in the peasant economy such as in the case of vegetable cultivation and tobacco cultivation. But the intensive and efficient development of highland smallholdings in the village would require organisational and technical inputs which the households in the poorest segment are not capable of undertaking on their own initiative.

## Comment on Low-Cost Health Delivery Systems in Sri Lanka

Sri Lanka is in a rather unique position in Asia. In assessing the general levels of health among its population and the health services offered, selected social indicators give a very favorable picture. (Table I) Life expectancy is 66 years, and infant mortality 51 per thousand. Both the crude birth rate and the crude death rate have been falling, the former rather dramatically. The rate of natural population increase stands just below 2 percent. A recent World Bank Report stated, Sri Lanka has about one and one-half times the life expectancy, one quarter the infant mortality and half the birth rate that would be expected at its per capita income level.

The medical services available to the population are also impressive. The health infrastructure is the most elaborate within the South Asia region. There are a total of 23,081 health facilities, hospitals, dispensaries, nursing homes and maternity homes. The doctor/population ratio is 25.7 doctors per 100,000 population, with an additional 10,000 registered ayurveda physicians.

Taking into account both the government and private sectors, using Western and ayurveda medicine, translates into some kind of medical attention available within an average of .8 miles of any home.

In addition to the medical care services, the government conducts independently five specialized campaigns (anti-malaria, anti-filariasis, anti-tuberculosis, anti-leprosy and anti-venereal disease) resulting in a 44 percent decrease in T.B. since 1961 and a 59 percent decrease in filariasis. There is a government supplementary feeding program and a Maternal Child Health Program which provides Family Planning information and services, immunizations, surveillance and care of expectant mothers and newborn infants.

The government's medical budget, 6 percent of the national budget, supports primarily an institutionally based, curative, western medical health care system. Eighty percent of the health budget is spent on Patient Care Services and 20 percent on Community Health Services. The fact that the government provides almost 100 percent of the in-patient treatment and 40 percent of the out-patient medical services, all for only a token fee (Rs. 0.25 or US \$.02), including medicines, accounts for the relatively high annual per capita expenditure on health.

What then are the major health problems and health needs that Sri Lanka faces? The basic health requirements to which the Health Care sector must respond can be broken down into three main areas: (1) those connected with the environment; (2) with population dynamics; and (3) with the demand for medical care. Table II and Table III give the number of cases of leading diseases treated at government hospitals and rates (per 100,000) and the number of deaths from leading causes of disease. Clearly barring the respiratory infections and heart disease, diarrheal diseases and infectious diseases dominate both tables, those being of the first category, i.e., determined by the environment. Sri Lanka is characterized by health agencies as having a "challenging" environment with malaria, filariasis, rabies, typhoid, diarrheal diseases, dysentery,

leprosy, tuberculosis, food poisoning, whooping cough, tetanus, diphtheria, polio and infectious hepatitis all rooted deeply in the environment. The "challenging environment" refers to both the physical and human environment with particular reference to water sources, sewage disposal, levels of hygiene, prevalence of infectious and other communicable diseases and population densities.

In a survey published in 1975, it was found that only 1 percent of the households in Sri Lanka have what WHO officials term "a reasonable public water supply system" and in large areas over 10 percent of the population are dependent on rivers, streams and tanks. Furthermore, it is estimated that 32 percent of the households have no toilet facilities. It is also pertinent to note that given the prevalence of infectious and parasitic diseases, the environment can no doubt be held partially responsible for high levels of anemia and malnutrition both commonly triggered by bouts of infection.

As for the second category of health concerns, those related to population dynamics, a look at the composition of the population reveals that newborns and infants comprise 6 percent of the population with diseases of infancy and immaturity high on the list of deaths from leading diseases. They require the special attention of the health care services for immunization programs, child welfare clinics and supplementary food programs. Expectant mothers and pregnant women in the state of delivery comprise another 6 percent of the population requiring special attention. Seventy percent of all deliveries are institutional deliveries which accounts for a large number of hospital admissions.

The third category of health needs reflects the demand for health services. In Sri Lanka, the demand for medical care is high; an average of 5.7 visits are paid per person annually to government and private, Western and Ayurveda medical facilities. While the government provides predominantly Western medical care and training, the estimated consumption for ayurveda services, primarily within the private sector, amounts to Rs. 111 million annually or more than 22 percent of the annual consumption for health. A village study of health seeking behavior found that: (1) there are, on the average, three visits to some sort of health care facility for each sickness; (2) there is not a strong allegiance to one system of medicine, 70 percent of the sample acknowledging use of both Ayurveda and Western medical care; and (3) in case of persistent or chronic illnesses, the patient will alternately seek the care of both Western trained doctor and ayurvedic physician. While the ayurvedic physician obviously serves as a reassuring backstop when Western doctors or facilities fail to meet the patient's needs, he is also consulted for specific ailments or symptoms, primarily rheumatism, asthma, chest colds, fractures and wounds, and fainting episodes. Given their numbers (10,116 in 1972 versus 3,281 Western trained doctors), the respect with which they are still regarded by most villagers, and their low cost to the government (71.51 percent of the health capital goes to the Western medical services as compared with .42 percent for the Ayurveda government sector), it is understandable that the government includes in its health strategy, "the extension of curative training and research facilities for the Ayurveda health services".

In view of the high demand for medical care, the prevalence of environmentally rooted infections and communicable diseases and the strains imposed on the curative and preventive medical services by a young and continually burgeoning population, what priorities has the government set for itself in each of these areas and what types of programs have been initiated to address these priorities?

With regard to the first, environmentally rooted health threats, malaria has become a major concern. While the incidence of malaria in Sri Lanka as recently as 1967 was 0.3 cases per 1,000 (Annual Parasitic Incidence - API), today malaria is endemic in 3/5ths of Sri Lanka. The resurgence is attributed to the vector developing resistance to D.D.T. and severe droughts during which time standing pools provided breeding conditions for the malaria mosquito vector. In addition, drastic cuts in the Anti-Malaria Campaign did not allow for proper reserves of insecticides or spraying equipment, nor for a capacity to control localized outbreaks.

With the total number of recorded malaria cases up to 400,777 in 1975 (API 29.0) and a strong suspicion that this figure only represents about 40 percent to 50 percent of the actual total number of cases, the government has declared malaria control a high priority matter. The Anti-Malaria Campaign, partially funded by USAID, represents a 5 year effort to reduce the incidence of malaria in Sri Lanka to 1 case per 1,000 population per year country-wide. It is a three phased program of: (1) intensive spraying; (2) selective spraying with surveillance; and (3) surveillance with phased integration into the General Health Services and stresses preventative measures rather than a clinical approach to combatting malaria.

In addressing the area of health needs related to population dynamics, the government renewed its pledge in August 1977 to accord very high priority to the diffusion of Family Planning facilities among the adult population. A Family Health Bureau was established within the Ministry of Health in 1957 to be responsible for a national Family Health Program. This program received a new impetus in February 1973 through a commitment of some \$2.7 million by UNFPA, UNICEF and WHO to strengthen Family Planning Services through the provision of equipment, construction costs, supporting costs for training activities as well as technical assistance and fellowships. The in-service training programs and orientation sessions in Family Planning techniques reached 50 percent - 70 percent of the doctors, nurses, midwives, Public Health Inspectors and Assistant Medical Practitioners by 1977. New Family Planning acceptors climbed from 95,931 in 1973 to 107,851 in 1974 and 109,639 in 1975 to plummet unexpectedly down to 88,215 in 1976 and possibly to pre-project levels in 1977. The number of sterilizations and vasectomies performed also rose to new levels during these years, with a precipitous fall off in 1976 and 1977. While the reasons for the sudden down swing in these figures is addressed later in the paper, the fact remains that there is a high demand for contraceptives and sterilizations, a significant number of the medical

personnel have now been trained in family planning counselling, and the medical system is capable of providing family planning services on a much larger scale than before.

Finally, in attempting to meet the health demands of Sri Lankans, the government faces not only a growing population with expanding health needs, but a disturbing trend for doctors to emigrate. Forty percent of the registered doctors are lost from professional practice during the first 10 years after registration. While there was an attempt to curb the emigration of physicians in the early 1960's through the adoption of a policy of compulsory public service and compulsory remittance by nationals employed abroad, it proved ineffective and actually had the opposite effect of accelerating the outflow according to a recent study of "Reverse Transfer of Technology" (Brain Drain/ A Survey of Problems and Policies in Sri Lanka; Marga Institute, February 1978) There has been a great deal of thought given to "indiginizing" medical schools through a revision of the medical curriculum so that it is more responsive to the health needs of the country and less geared to internationally recognized professional qualifications. However, as the Marga study points out, there is some question whether the restructuring of professional training would in fact "delink" Sri Lanka's medical cadres from the international market, and this would not affect the present doctor population, nor the outflow of doctors for the next 10 years.

Consequently, in response to this exodus and the growing demands on the health care system, the government is enlarging its cadre of medical personnel by training increasing numbers of nurses, Auxiliary Medical Practitioners, Public Health Midwives, and a new category of Community Health Workers. Their role is to provide primary health care at the periphery in the rural areas and function as a referral service to Sri Lanka's hierarchically organized system of medical institutions. Unfortunately, increasing demands are being placed on these categories of medical personnel to provide Family Planning counselling in addition to their other responsibilities with some danger of reducing their effectiveness in all spheres.

In summary, the Government of Sri Lanka maintains an impressive Health Care System whose services are provided free of charge. Government medical facilities and personnel are complemented by the private sector which in combination with government services translates into highly accessible medical care of either the Ayurveda or Western type.

While Sri Lanka's medical care system was originally set up to provide a relatively high technology curative medical service on an individual commodity basis, the government is now attempting to focus more on: (1) primary health care using auxiliary medical personnel; (2) island-wide campaigns to combat specific diseases such as malaria; and (3) Family Planning counselling and services.

The Government of Sri Lanka, with the substantial help of organizations such as UNFPA, UNICEF, and a number of donor countries (Sweden, Holland, West Germany, Canada, Australia ...) has demonstrated a willingness to test alternative

health delivery schemes. Auxiliary Medical Practitioners, Public Health Midwives, Voluntary Community Health Workers have all been integrated into various aspects and levels of the health care system. The success of the Family Planning Program can be largely attributed to the efforts of the Public Health Midwives whose 3 - 4 million annual home visits provide the primary source of information and counselling to the majority of new Family Planning acceptors. The government's continued support of the Auyrveda system of medicine offers another low cost alternative in health care. Attempts are now being made to integrate the Ayurvedic physicians in Family Planning activities by providing them with training to qualify them to distribute birth control pills. In addition to the cadres of auxiliary health personnel and the indigenous Ayurvedic physician, there are also local groups, the Sarvodaya Shramadana Movement and the Lanka Mahila Samiti that are committed to a strategy of community involvement in identifying the most urgent needs at the village level and organizing projects that can be met with village labor and resources, which include the construction of community kitchens and clinics, improving water supplies, etc.

In other words, not only does Sri Lanka boast a comprehensive health care system, but one that exhibits innovative approaches to the health needs of its population. Therefore, AID's directive to "come forward with demonstration projects to test alternative low-cost health delivery systems" seems inappropriate in Sri Lanka.

The weaknesses of the system, in fact, stem not from a lack of innovative, alternative approaches to health delivery, but from a need to coordinate, supervise and sustain the various on-going programs. For instance, a study undertaken by WHO to explain the sudden drop in new Family Planning acceptors and in numbers of sterilizations between 1976 and 1977, mentioned earlier, specifically refers to administrative difficulties and a lack of coordination to partially account for the downswing. With UNICEF, WHO, UNFPA, Sweden and other donors already on the scene, it is doubtful that Sri Lanka needs further foreign advice in attempting to improve the efficiency of its low-cost health and family planning delivery systems.

What are areas where further assistance might be needed, either from the U.S. or other donors?

First, capital equipment. The deterioration of medical facilities and equipment is a major obstacle in the operational effectiveness of the medical care system. Only 1 percent of the overall health services budget has been allocated for the purchase of medical capital equipment in recent years. Hospitals in Colombo and in outlying regions function with equipment that is either obsolete, out of order, beyond repair, or lacking in spare parts. The Netherlands Mission has agreed to allocate Df. 1.4 million under the 1978 financial assistance program for the rehabilitation and upgrading of hospitals and clinics. Vehicles and transport are also needed.

More importantly, the fact remains that the "challenging" environment is Sri Lanka's major health hazard. With 45 percent - 50 percent of the illnesses treated at government medical facilities categorized as "preventable", the vicious cycle of infection and re-infection, of diarrheas, dysentery, etc. continues. UNICEF committed \$1 million in 1970 to bring safe drinking water to 100 rural communities over a 5 year period. Due to technical and administrative problems, and an increase in the cost of water pipes, pumps and accessories, only 55 of the water supply schemes were completed by 1977, serving approximately a population of 100,000.\*

Given AID's involvement in Sri Lanka in malaria eradication and the Mahaweli Ganga Development Project, a closer study of possible projects related to environmental sanitation and potable drinking water seems the more appropriate focus for AID.

- \* An important element of the water schemes was community participation with 50 percent of the local costs met by the village council.

Table I: SELECTED SOCIAL INDICATORS

	1946	1952	1963	1970	1971	1972	1975	1976	1976
<u>EDUCATION</u>									
Adult Literacy (%)	58	65	72	-	78	-	-	-	-
School Enrollment Ratio (ages 5-14)	41	58	65	99	100	89	86	-	-
<u>HEALTH AND DEMOGRAPHY</u>									
Life Expectancy	43	56	63	-	66	-	-	-	-
Infant Mortality (per '000)	141	71	56	48	45	64	46	51	-
Crude Birth Rate (per '000)	37.4	38.7	34.3	29.6	30.1	29.8	27.9	27.4	27.4
Crude Death Rate (per '000)	20.2	10.0	8.6	7.6	7.6	8.0	7.7	8.9	7.9
Rate of Natural Population Increase (%)	1.7	2.8	2.6	2.2	2.3	2.2	2.0	1.9	2.0
Net Migration (per '000)	5.2	5.2	-1.0	-0.8	-2.7	-3.2	-3.6	-4.0	-3.7
Average Age at Marriage:									
Male	27.0	27.2	27.9	-	28.0	-	-	-	-
Female	20.3	20.9	22.1	-	23.5	-	-	-	-
Number of New Family Planning "Acceptors" (per '000)	-	-	-	55	49	71	96	-	-
Female (Crude) Labor Force Participation Rate (all ages %)	-	-	15.5	19.5	19.1	-	-	-	20.3
									20.6

Source: Central Bank of Ceylon.

TABLE II: NUMBER OF CASES OF LEADING DISEASES TREATED AT  
GOVERNMENT HOSPITALS AND RATES (Per 100,000)  
1951 - 1970

<u>Diagnosis</u>	<u>1951</u>		<u>1961</u>		<u>1971</u>		Percentage Increase (+) or decrease (-) from 1951 to 1970
	<u>cases</u>	<u>rate</u>	<u>cases</u>	<u>rate</u>	<u>cases</u>	<u>rate</u>	
Respiratory infections	189,647	2,408	288,956	2,842	330,124	2,690	+ 12
Accidents & suicides	87,082	975	99,835	982	219,148	1,786	+ 83
Diarrheal diseases	81,702	1,037	164,032	1,613	180,323	1,470	+ 42
Other infectious diseases	59,952	761	31,437	309	137,424	1,120	+ 47
Anaemia and mal-nutrition	25,439	323	67,152	660	89,017	729	+ 126
Heart diseases	16,513	210	38,911	392	44,000	359	+ 71
Tuberculosis	15,598	198	12,744	125	12,841	105	- 48
Diseases of infancy and immaturity	13,853	176	22,444	221	4,727	39	- 78
Malignancies	4,380	56	5,488	54	12,115	99	+ 78

TABLE III:  
NUMBER OF DEATHS FROM LEADING CAUSES OF DISEASES, 1965

<u>DISEASE</u>	<u>Estimated no. of deaths</u>	<u>% of all deaths</u>
Diseases of infancy and immaturity	11,845	13.05
Heart diseases	8,414	9.27
Diarrheal diseases	7,751	8.54
Respiratory infections	5,201	5.73
Gastroenteritis	5,092	5.61
Accidents and suicides	4,983	5.49
Anaemias and malnutrition	4,202	4.63
Malignancies	2,986	3.29
Infectious diseases	2,324	2.56
Helminthic diseases	1,661	1.83
Tuberculosis	1,661	1.83
Dysentary	554	0.61
Hookworm	218	0.24
Typhoid	109	0.12
Other diseases	33,764	37.20
All causes	90,765	100.00

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