

Sri Lanka
State of the Economy Report 2011

Chapter 7
Agriculture Sector and Challenges to Inclusive Growth

by
Parakrama Samaratunga & Dilani Hirimuthugodage

7. Agriculture Sector and Challenges to Inclusive Growth

7.1 Introduction

Since the late 1970s, Sri Lanka's growth and development objectives have been pursued through a relatively liberal, open market policy regime. Whether the resulting growth outcomes have helped all sectors of the economy comparably is open to debate. This is particularly pertinent in relation to the agriculture sector which still employs 33 per cent of Sri Lanka's total labour force but continues to have a majority of the poor. However, the framework of inclusive growth can provide a basis for inquiring whether this process has helped the agriculture sector to develop on par with the other sectors of the economy. This framework refers both to the 'pace' and 'pattern' of growth, which are considered interlinked and therefore need to be addressed together for achieving a high, sustainable growth record, as well as poverty reduction. For an economy to have inclusive growth, both the pace which reflects the rate of growth and the pattern that refers to equitable growth in all sectors, should be attained together. The analysis also focuses on ways to raise the pace of growth by utilizing more fully, parts of the labour force trapped in low-productivity activities or completely excluded from the growth process. As such, the inclusive growth framework shows promise as a model for evaluating growth processes where all sectors are not equally benefitted.

“The open economy followed since 1977 has not been inclusive, at least on the count that the rural agricultural sector has not received its fair share from the growth process”

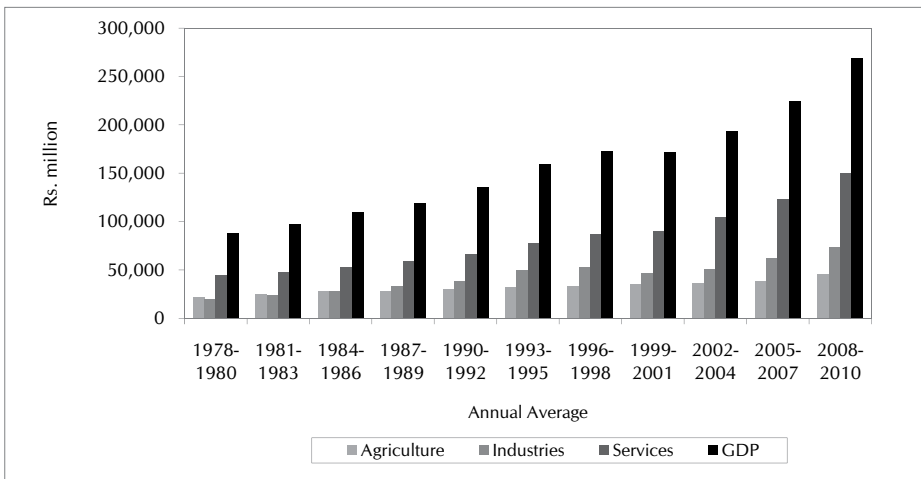
Therefore, using the inclusive growth framework, this Chapter attempts to examine whether the liberal and export-oriented growth strategy adopted by Sri Lanka has benefitted the rural agriculture sector comparably with the rest of the economy. Agriculture in Sri Lanka consists of the export-oriented plantation sector and the rural based food crop production sector. Although both these are considered together in the early part of the analysis, the food crop sector which is larger and consists of a greater degree of poverty in absolute terms, is given priority in the later sections.

7.2 Economic Growth and Agriculture

As evident from Figure 7.1, the hitherto dominant plantation agriculture sector was progressively relegated to a much less important position as a contributor to the country's GDP over time. The outcome in the food crop production sector was even more drastic. Thus, the benefits of the initial post-liberalization growth did not permeate into the rural and plantation sectors where

agriculture is the main economic activity and source of livelihood. Further, growth in industry was highly urban-biased and its benefits accrued mainly to the urban and peri-urban population. The 'inclusiveness' implications of these developments, in hindsight, do not appear to be very persuasive. A more concentrated effort to ensure a greater spread of industries across the country following further reforms in the early 1990s was a more

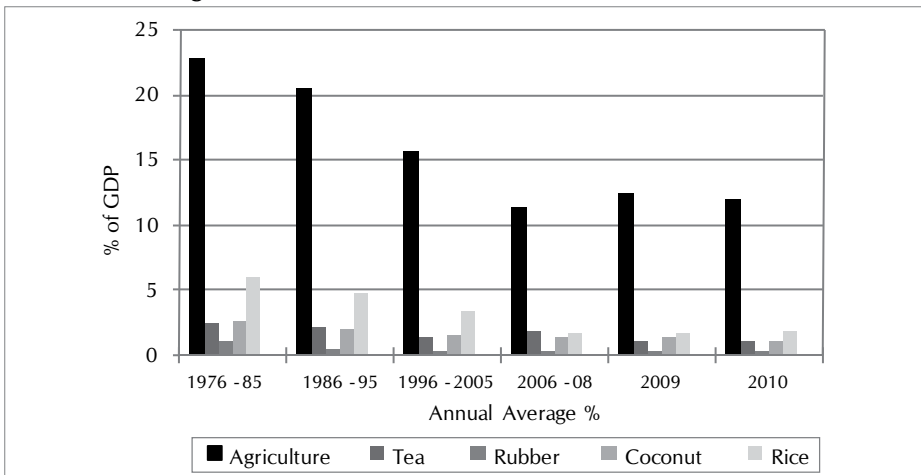
Figure 7.1
GDP Growth in Sri Lanka (1978-2010)



Notes: At constant prices.

Source: CBSL, *Annual Report*, various issues.

Figure 7.2
Agriculture Sector Contribution to GDP (1976-2010)



Source: CBSL, *Annual Report*, various issues.

positive development from an inclusive growth point of view, albeit a fairly modest improvement.¹

Over the years, the relative contribution of agriculture to GDP continued to decline due to faster growth in industrial and services sector (Figure 7.2). But this growth has not helped the rural or agricultural sectors very much due to lack of backward linkages.

Despite efforts to raise productivity and competitiveness across economic sectors - e.g., declaration of 1996 as the 'Productivity Year' and 1996-2006 as the 'Productivity Decade' - there was no notable improvement in sectors such as industry due to institutional and macroeconomic challenges. Agriculture continued to record slow growth, driven primarily by expansion of cultivated extent due to the Mahaweli development scheme.

In more recent years, Sri Lanka's services sector has seen accelerated expansion and its future prospects too are considered to be relatively bright. Nevertheless, how inclusive such growth could be is debatable. A bulk of migrant workers leaving Sri Lanka for employment overseas is predominantly unskilled, and to a lesser degree semi-skilled workers. The relatively less educated from the rural agricultural sector constituted a substantial portion of the migrants, and consequently, the rural sector received tangible economic benefits. At present, however, services sector growth (both exportable and local) is concentrated mostly on skilled manpower. Until and unless the agricultural and non-agricultural rural labour force is provided with educational and vocational training facilities that enable them to enter this category, services led growth may result in growth that is not inclusive. The anticipated

services sector driven growth might be realized in the short run by employing unemployed and underemployed youth from the urban and semi-urban sectors. Whilst the pace of growth could be appropriate in the short run, its pattern - i.e., providing opportunities for the majority of the labour force - may not be appropriate from an inclusiveness point of view.

As services growth picked up, Sri Lanka's agriculture sector has almost stagnated in absolute real terms. Although the relative contribution of agriculture to GDP declined sharply with faster growth of other sectors, it has seen Sri Lanka through a global food crisis without plunging the country into social and political turmoil. When it comes to food production, it is not the proportion but the absolute values that matter. This clearly suggests that growth of the food production sector has to be maintained at a reasonable level in the present context of growing food insecurity in the world. To do this successfully, the agriculture sector has to be an integral part of an inclusive growth strategy. Whether this has been the case in Sri Lanka during the last 30 years has to be examined in detail.

7.3 Employment and Poverty

7.3.1 Growth and Distribution of Employment

The major conduit which transmits the benefits of economic growth to the masses is growth of productive employment.² Sri Lanka's rate of unemployment has been declining steadily over the years to reach the lowest recorded rate of 4.9 per cent in 2010 (Table 7.1). During 2000-10, the labour force grew by 17 per cent. However, yearly labour force growth rates show that the labour force

¹ Other significant developments that influenced Sri Lanka's growth process came via multilateral tariff liberalization commitments under the WTO and other bilateral FTAs.

² A somewhat restrictive assumption is made that all recorded employment is of a 'productive employment' category.

is growing at a declining rate despite an increase in the working age (15 and over) population.³ A decrease in the labour force participation (since 1990) is mainly responsible for this trend.

The share of the agricultural sector in total employment has declined from a high of over 50 per cent in 1977 to 33 per cent in 2010. There are of course fluctuations from year to year depending on annual volumes of agricultural production. Although there was a tendency to increase labour absorption into 'agriculture development' (as opposed to the 'agricultural sector'),⁴ due to large agricul-

tural development projects, particularly the Mahaweli project, this was a temporary phenomenon that ended in the late 1980s. A more sustainable generation or growth of employment as a result of such projects was relatively lower as the people who were provided with irrigation or received lands were those who were already engaged in agriculture and, therefore, listed as employees in the agricultural sector.

The decrease in the agricultural labour force from the late 1970s is usually attributed to labour absorption into the growing industry sector first, and later into the services

Table 7.1
Key Statistics of Labour Force

	1971	1981	1990	2000	2002	2004	2006	2008	2009	2010
Labour force ('000 persons)	n. a.	4,500	5,915	6,827	7,145	8,061	7,599	7,650	8,074	8,108
LFPR ^a (%)	35.4	33.8	50.7	50.3	50.3	48.6	51.2	50.3	48.7	48.1
Male	50.7	49.4	67.2	67.2	67.9	66.7	68.1	67.6	66.6	67.2
Female	19.1	17.6	34.7	33.9	33.6	31.5	35.7	35.0	32.8	30.7
Employment status ^b (%)										
Employees - Public sector	66.6	67.2	55.7	13.4	13.4	13.0	13.4	14.9	15.2	14.3
Private sector				42.9	44.5	46.4	42.1	41.1	42.1	41.2
Employers	3.1	1.7	1.5	2.3	2.8	2.9	3.1	3.0	2.6	2.6
Self-employed	25.4	28.4	29.8	28.4	28.6	28.3	30.8	30.2	29.2	31.5
Unpaid family workers	5.2	2.6	13.0	13.0	10.7	9.4	10.5	10.8	10.6	10.4
Composition by economic activity (% of total)										
Agriculture	50.1	45.9	47.7	36.0	34.5	33.5	32.2	32.7	32.6	32.7
Industry	12.8	18.5	20.5	23.6	20.9	22.8	26.6	26.3	25.1	24.2
Services	28.5	35.6	31.8	40.3	44.7	43.7	41.2	41.0	42.3	43
Unemployment rate (%)	14	17.9	16.3	7.6	8.8	8.3	6.5	5.2	5.8	4.9
Male	n. a.	13.1	12.5	5.8	6.6	6.0	4.7	3.6	4.3	3.5
Female	n. a.	32.0	23.5	11.1	12.9	12.8	9.7	8.0	8.6	7.7

Note: a: Labour Force Participation Rate; b: Includes unspecified employment of 0.8 per cent for 1971.

Sources: DCS and CBSL, *Annual Report*, various issues.

³ Samaratunga, P.A., 2010, "Impact of Global Economic Crisis and Agriculture Sector in Sri Lanka", paper presented at a conference on "Global Economic Crisis and its Impact on South Asian Agriculture", Beijing, 2010.

⁴ The agriculture sector is defined to consist of resources and employment involved in (annual) agricultural production. A large segment of population working in expansionary development projects are not considered to be a part of the agricultural sector, but rather as a part of the construction sector. The agricultural development sector above is defined to include those who are engaged in such development activities as well.

sectors. In addition, out-migration of Sri Lankan labour for employment abroad contributed to this change as well, especially from the mid-1980s. But, for such labour absorption to be inclusive in nature, the employment generated should be of high quality, belonging to the productive employment category. The lack of strong backward linkages from the industrial expansion that followed liberalization - particularly in key export sectors such as garments - hampered the generation of productive employment. The rural and agricultural labour was not ready to benefit from industrial growth as they lacked the skills needed by most industries except the garment industry. The employment created was also largely related to activities like import trading which is of a less productive nature.

On the other hand, those who are employed in the agricultural sector may not be considered as fully employed because, even in the current state of apparent labour shortages in the rural sector, the jobs available are largely seasonal and do not secure year-round employment. These characteristics of employment generation cast serious doubts on the validity of assuming that all employment growth is in productive employment - a necessary condition for inclusive growth. Even at present, informal sector employment accounts for over 60 per cent of total employment in Sri Lanka. These developments suggest that Sri Lanka's workforce remains vulnerable to socio-economic stresses in the event of job lay-offs. Thus, the nature of employment that is generated matters for inclusive growth, particularly where surplus rural agrarian labour needs to be absorbed by other more dynamic sectors of the economy.

7.3.2 Land and Rural Poverty

Poverty levels in Sri Lanka have been declining over time, with the highest drop recorded between 2006/07 and 2009/10. Whilst rural poverty too has also been on the decline, at any given time, the percentage of the poor in rural areas appears to be greater than in the urban sector (and less than in the estate sector). In absolute numbers, the rural population below the poverty line is higher compared to both urban and estate sectors. For example, in 2009/10, out of 1.8 million poor people in Sri Lanka, 1.5 million are estimated to be from the rural sector. The agriculture sector still has the highest absolute number of poor people in Sri Lanka.

Poverty has its roots in low endowments. Amongst other factors, the rural poor lack land, physical and liquid capital, education and social standing, etc. In the Sri Lankan rural sector where 60 per cent of the population depends on agriculture, rural poverty is synonymous with agricultural poverty. Although many factors contribute to poverty in agriculture, scarcity of land can be singled out as the major cause of poverty.

Table 7.2 provides information of land ownership by all land holdings as well as that of rice and highland as well.⁵ The largest proportion of the poor is the landless. Those with no land in the rice sector appear to be among the worst of the poor in this category. This is partly because earnings from casual employment from rice are low as rice is a low-income crop in many parts of the country, and wage rates are also lower consequently. In all land holding size classes, contribution to poverty decreases with increasing size of holdings. The data also shows that size of landownership is highly skewed. The proportion of those who own lands larger than 4 acres is small. Landless-

⁵ As land is the major asset of farmers, as well as non-farmer inhabitants in rural Sri Lanka, access to land is used here as a proxy for access to assets.

Table 7.2
Incidence of Poverty by Land Holding Size (1995/96)

Land Size	Incidence of Poverty (%)						Population Share of Total Land
	All Land Holdings ^a		Rice Land Holding		Highland Holding		
	Index	Contribution	Index	Contribution	Index	Contribution	
Landless	29.3	16.0	27.5	79.4	29.3	16.8	14.7
0 < 1/8	23.4	14.2	24.9	0.4	23.3	14.7	16.3
1/8 – 1/4	20.8	8.4	24.9	1.2	20.8	8.8	10.8
1/4 – 1/2	28.4	13.3	24.1	3.3	28.2	14.8	12.6
½ < 1	30.8	17.3	28.7	6.3	29.9	19.3	15.1
1 - < 2	28.3	14.4	24.1	4.6	28.7	15.3	13.7
2 - < 3	31.0	8.2	24.7	3.5	31.9	7.3	7.1
3 - < 4	28.5	4.4	18.7	0.7	23.3	1.3	4.1
4 - < 5	20.4	1.5	10.9	0.1	12.1	0.4	2.0
5 - < 10	15.8	1.5	11.7	0.3	16.1	0.6	2.5
10 - < 20	16.9	0.4	15.6	0.1	21.2	0.4	0.6
> 20	21.7	0.5	33.5	0.2	17.7	0.3	0.6

Note: a: All holdings of rural and estate sectors.

Source: Gunewardena, D., 2000, "Consumption Poverty in Sri Lanka, 1985-1996: A Profile of Poverty Based on Household Survey Data", mimeo.

ness and uneconomical small holdings have been an ever worsening problem in the 20th Century in Sri Lanka due to a continuously growing population. Before 1950, however, this problem was redressed through developing unutilized land in the dry zone and settling people from highly populated areas. But, by the late 1970s, Sri Lanka had almost exhausted this potential. Despite the accelerated Mahaweli development programmes, extremely limited availability of developable land restricted the allotment size of new settlers to 2.25 acres, as against 8 acres per family in early settlements. Thus, efforts at inclusive growth outcomes were often hampered by natural resource constraints.

7.4 Agriculture Sector Growth

Despite constraints faced, agriculture continues to be an important sector of the Sri Lankan economy in terms of its contribution to GDP, employment and income. Whilst the absolute contribution of this sector to GDP has more than doubled over the

period 1978-2010, its relative contribution has declined from 23 per cent to 12 per cent in 2010 over the same period. The composition of the contribution of different sub-sectors of agriculture shows that rice is the single crop that has consistently been responsible for the highest share, but at the same time recording the steepest decline over the years. This indicates that the food crop sector - amply represented by rice - has declined more severely in its GDP contribution, compared to the plantation crops. The rest of the discussion will, therefore, concentrate on the food crop sector which appears to have been the least included in Sri Lanka's growth process in recent decades.

7.4.1 Food Crop Sector Growth

The requirement of crop based food items in Sri Lanka are met with local production as well as imports. Currently, more than three-fourths (77 per cent) of food commodities are produced domestically, while slightly less than one-fourth (24 per cent) is imported (Table 7.3). The amount of food exports from

Table 7.3
Annual Average Food Availability by Major Food Commodity Groups (2000-09)

Commodity Group	Gross Availability	Production		Exports and Change in Stock		Imports	
		Qty (000 Mt)	% Availability	Qty. (000 Mt)	% Availability	Qty. (000 Mt)	% Availability
Cereals	3354.8	3144.9	93.8	292.4	34.6	889.3	26.5
Roots, tubers & other starchy food	417.2	377.4	90.5			65.0	15.6
Sugar	557.9	49.8	8.9			492.3	88.2
Pulses & nuts	147.5	34.0	23.9			113.5	76.9
Vegetables (incl. onions)	989.7	863.8	87.3	22.1	2.2	64.8	6.5
Fruits	365.3	328.1	89.8	4.2	1.2	41.9	11.4
Meat	121.2	119.3	98.4	0.1	0.1	2.0	1.7
Eggs	55.4	53.3	96.1				
Fish	369.2	308.5	83.6	48.6	13.2	76.1	20.6
Milk	271.2	213.0	78.5	77.3	28.5	58.2	21.5
Oils & fats (incl. coconut)	986.4	1026.8	104.1	107.5	10.9	16.3	1.6
Total	7635.9	6518.9	85.4	552.2	0.7	1327.2	17.4

Notes: The availability does not add up to 100 as other elements such as losses, net change in annual stocks, etc. are excluded.

Source: DCS, *Food Balance Sheet*, various years.

total domestic food production is very insignificant at just over 1 per cent. At individual commodity level, local production of all major crop based food items except wheat flour, other cereals, sugar and pulses and nuts which are imported in bulk quantities, exceeds 75 per cent of total availability.⁶

Although food imports have been increasing in both volume and value in absolute terms, their share in total imports and total exports have been declining slightly. Food imports as a percentage of total imports has declined from 9.3 per cent in 1977-80 to 7.3 per cent in 2007-10, and food imports as a percentage of total value of annual food consumption has declined from 12 per cent to 10.7 per cent for the same period. This shows that Sri Lanka has brought down its import

dependence for food over the last 35 years and credit for this should go to the domestic food production sector. However, it is worth examining under what conditions this growth took place, and how far it was included in the overall growth process of the period.

As Table 7.3 indicates, even the politically coveted goal of food self-sufficiency has not yet been achieved in Sri Lanka even after decades of agricultural development efforts. But this is not to say that the food crop production sector has not expanded and developed. Table 7.4 provides an insight into the domestic food production sector as well as some of its problems. The extents cultivated by major food crops have been constant since 2000 but this level is considerably higher compared to the 1970-79 period mainly due

⁶ Computed based on DCS, *Food Balance Sheets*, various years.

Table 7.4
Extent and Production of Major Food Crops (1970-2009)

	Average 70-79	Average 80-89	Average 90-95	Average 96-00	2001	2002	2003	2004	2005	2006	2007	2008	2009
Rice													
Extent (ha)	772400	853100	846201	819374	798259	852529	982617	778549	937175	910490	816713	925000	842000
Production ('000 Mt)	1955	2333	2555	2542	2695	2860	3072	2609	3246	3342	3131	3875	3652
Yield (Kg/ha)	2301	3310	3447	3658	3953	3893	3761	4086	3963	4137	4421	4187	4336
Maize													
Extent (ha)	30355	37904	31399	28806	25712	23413	27060	23421	28401	32000	34190	51608	50857
Production (Mt)	44170	40058	32412	30982	28755	26417	29645	35201	41804	47530	56440	112300	129800
Yield (Kg/ha)	970	1075	1032	1076	1118	1128	1096	1503	1472	1485	1651	2200	2600
Pulses													
Extent (ha)	54755	51635	50746	40727	28865	30765	21743	14641	18933	29220	29070	32122	38532
Production (Mt)	31442	50151	50392	35788	25304	27010	32403	23814	32086	30750	31920	43700	46800
Yield (Kg/ha)	809	924	993	879	877	878	1490	1627	1695	1052	1098	1900	1500
Roots/ Tubers													
Extent (ha)	58403	54890	53540	42929	39400	40687	40157	35050	35669	35510	34420	33482	23465 ^a
Production (Mt)	584036	531489	469192	363141	339803	361158	344640	341767	343832	346190	346470	74800	61700
Yield (Kg/ha)	12695	129141	8763	8459	8624	8876	8582	9751	9640	9749	10066	15400	14900

Note: a: Does not include Potatoes.

Source: CBSL, *Annual Report*, various issues and DCS.

to new land being brought in under the Mahaweli development project.⁷ The near constancy since 2000 is due to the lack of new arable land to be brought under agriculture.

Presently, 1.2 million hectares of high land and 0.7 million hectares of low land are available for crop production, and about 80 per cent of this total arable extent is annually cultivated. As such, even under most favourable economic and natural environment conditions, only a 20 per cent increase in area cultivated can be expected. Under the current yield levels, therefore, production cannot reach the national requirement even under the present levels of per capita food consumption. As the population is growing at 1.1 per cent annually and per capita income is rising at 15 per cent per year,⁸ the national requirement will be rising constantly in the years to come, and consequently, area expansion will not be a solution to this growing food requirement.

Possible solution to this problem from the domestic production and farm income fronts should, therefore, come through yield improvement. Table 7.4 shows that the yield levels of domestically grown food crops have been stagnant for nearly 20 years at levels non-impressive even by developing country standards, except for rice. This situation has been a result of a severe lack of investment on agricultural research and extension in Sri Lanka since the late 1970s.

Figure 7.3 depicts public spending on agricultural research as a percentage of agricultural GDP in Sri Lanka over the years. The investment in agricultural research had

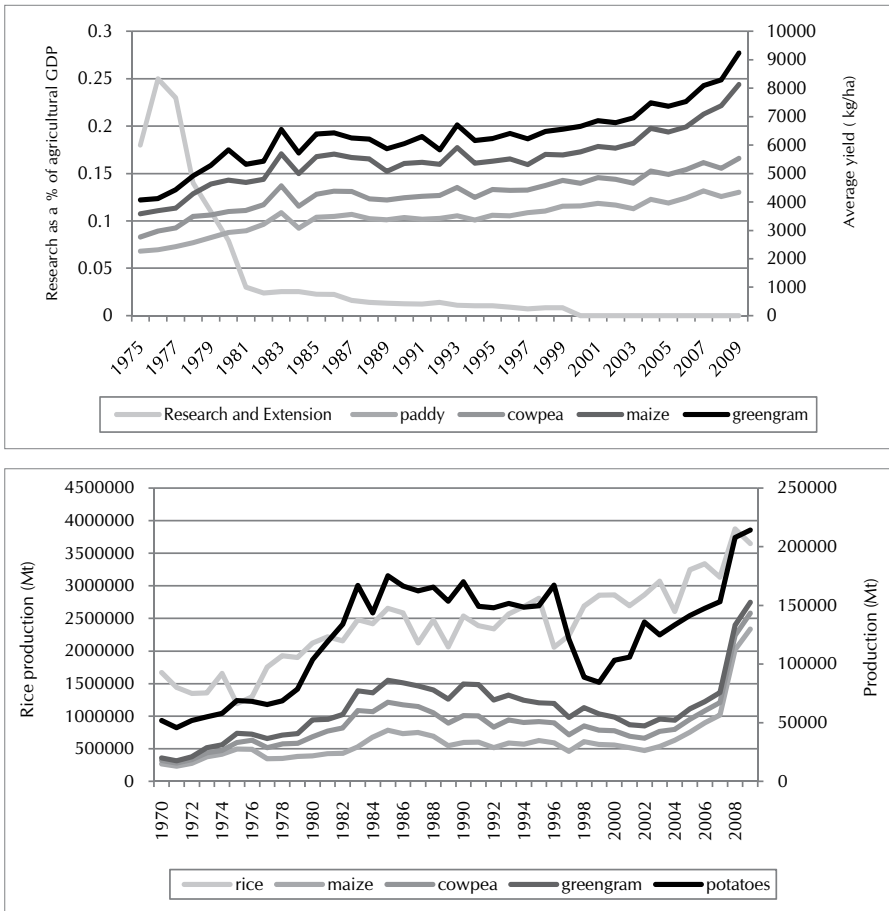
an upward trend during the green revolution starting around 1970s. It is clear that this investment started declining in the late 1970s - coinciding with the opening up of the Sri Lankan economy - and continued on a negative trend thereafter. This has been as low as 0.6 per cent of agricultural GDP of the country as against the internationally accepted standards of around 4 per cent. Figure 7.3 also indicates that the yields of rice and other important food crops started stagnating following this turn of events, after a long period of impressive growth. The yield stagnation combined with the restriction of area expansion to an apparent maximum at the completion of the accelerated Mahaweli diversion programme brought the growth of food crop production sector to a halt (see Table 7.3).

The impact of stagnant crop production technology is reflected in declining profitability (Table 7.5). Profitability in nominal terms may be stagnant or increasing slightly in some cases, but they have been declining in real terms over recent years. In fact, these are financial net returns and the effects of government interventions are not netted out. Consequently, the social net returns would be even lower as the agricultural sector of Sri Lanka is supported by incentive prices and a fertilizer subsidy. The impacts of these subsidies on productivity are questionable but their income distribution effect is the intended benefit: an unsustainable surrogate for inclusive development. This leads to the conclusion that agricultural policy during recent years, with the exclusion of the irrigation subsidy, has not helped the food crop production sector of Sri Lanka to grow on par with the rest of the economy.

⁷ Land and irrigation development programmes have been undertaken since 1930 up to the final stage of the Mahaweli river diversion scheme completed in the early 1990s, marking the end of an era of area expansion in agriculture in Sri Lanka.

⁸ On the basis of the average percentage change in per capita GDP for the period 2000-07.

Figure 7.3
Investment in Agricultural Research and Extension and Productivity Growth



Source: DCS and CBSL, *Annual Report*, various issues.

Low productivity, combined with small farm sizes averaging at 0.48 ha,⁹ do not provide an adequate income for farmers to meet their consumption needs, let alone to invest on farm improvements and innovations. In fact, as evident from Table 7.5, private net returns in real terms have not increased over the last two decades. Under these circumstances, agriculture survives due to direct and indirect support measures provided by the government, and partly due to lack of alternative employment opportunities in the non-farm sector. The economic costs of these measures are a reflection of the unsustain-

able and misdirected measures adopted by governments to maintain domestic food crop production. This is far from any acceptable notion of inclusive growth.

Under the liberal, open economic model, the rural agricultural sector could have been comfortably accommodated by converting the less productive traditional food crop sector into a competitive export crop production sector through diversification. This called for increased investment in research and development (R&D) on diversified agriculture. Unfortunately, reduced in-

⁹ DCS, *Census of Agriculture 2002*.

Table 7.5
Profitability of Some Major Food Crops in Sri Lanka: 1990-2007 (Rs/ac)

	Paddy				Maize			
	Nominal		Real ^a		Nominal		Real ^a	
	NRAIC	NRBIC	NRAIC	NRBIC	NRAIC	NRBIC	NRAIC	NRBIC
1990	1364	4412	1364	4412	n.a	n.a	n.a	n.a
1993	-422	3556	-304	2558	-1341	2190	-959	1576
1996	-1894	2560	-981	1326	n.a	n.a	n.a	n.a
1999	-845	4839	-342	1959	769	8032	311	1797
2002	-1250	3558	-380	1081	6582	14420	2001	4283
2006	3171	11252	665	2415	8368	22129	1754	4639
2007	6902	11045	1225	1962	8671	15975	1540	2837

	Potato				Gingelly			
	Nominal		Real ^a		Nominal		Real ^a	
	NRAIC	NRBIC	NRAIC	NRBIC	NRAIC	NRBIC	NRAIC	NRBIC
1990	47555	52632	47555	52632	538	1915	538	1915
1993	n.a	n.a	n.a	n.a	1479	3244	1064	2334
1996	18801	42323	9741	21929	5059	8004	2621	4147
1999	24807	36248	10043	14675	n.a	n.a	n.a	n.a
2002	95146	110630	28920	33636	1394	8576	424	2606
2006	70873	127897	14858	26812	1899	10171	398	2132
2007	n.a	n.a	n.a	n.a	1919	6058	341	1076

Note: a: Deflated using the food component of the CCPI (1952=100); NRAIC = Net Returns After Adding Inputed Costs; NRBIC = Net Returns Before Adding Inputed Costs; n.a. = Not Available.

Source: CBSL and Department of Agriculture, *Cost of Cultivation Report*, various years.

vestment in any form of agricultural technology generation and a continuation of the traditional political objective of self-sufficiency in food through area expansion alone, proved insufficient. A key opportunity of including agriculture in Sri Lanka's expanded growth process was missed due to inconsistent policy directions.

7.5 Where things Went Wrong

The overall conclusion that can be drawn from the preceding discussion is that the rural agricultural sector has not received its fair share from the growth process under a liberal market economic framework. The growth process, as was mentioned earlier, could be right in its pace, but wrong in pattern.

The reasons for the wrong pattern were three-fold. The first was the preconception that the open economy, export-led growth process has no place for rural agriculture which was oriented towards domestic food production. High expectations of enhanced foreign exchange earnings from expanding industrial and services sectors, combined with declining food prices in the world market in the 1980s and 1990s could have contributed towards such reasoning. What was ignored here is that the rural agricultural sector could be a part of export-led growth if necessary product diversification was promoted. What was unforeseen, on the other hand, was that the rosy prospects for the world food market were short-lived due to growing demand for food worldwide, and under-investment in agricultural research by national

governments as well as the international donor community. A gradual rise in food prices that started around 2000 gathered momentum in 2008, resulting in a renewed interest in domestic food production in almost all food importing countries.

A second reason, was the expectation that a rapidly growing industry and services sectors would absorb the surplus rural labour force so that they would be 'included' in the growth process from early on. The above discussion assessed why this prospect was not realized - i.e., lack of backward linkages and skills mismatches of the rural populace for the jobs made available.

A third reason for the non-inclusiveness was the adoption of inconsistent policy objectives and strategies. While export promotion was the policy for the industrial sector, import substitution and self-sufficiency was the policy for rural agriculture. No attempt was made to exploit the opportunities opened by liberalization for agricultural exports. Even the objective of self-sufficiency was attempted through area expansion with non-viable small holdings, while the mandatory technological change process was crippled by severe under-investment. The result was stagnation of productivity and income of the rural farming community, leading to high incidence of poverty.

7.6 Way Forward

The way forward is mainly in the correction of past mistakes - making the pattern right through necessary structural change. The first step in this direction is to get the right perspective. As over one-third of the population is agriculture-dependent, and the employment opportunities offered by the present industrial and services sector growth are not directly accessible to the rural (and mainly agricultural) poor, the present structure of the Sri Lankan economy is not likely to undergo a drastic change in the near

future. The rural agricultural sector will remain in its present form with only moderate changes in the medium run. On the other hand, even within a non agriculture-led export growth process, there is a niche for rural agriculture - firstly, as an export-oriented venture, and secondly, as an undertaking to ensure food security.

In this context, Sri Lanka's current development efforts are likely to offer mixed results in terms of its agricultural development orientation. On the positive side, the strong political will to lay an overall policy foundation encompassing the rural sector in the country's growth process is encouraging. The increased sensitivity shown by the state, particularly in the light of growing global food shortages in recent years, towards solving the food security problem in the country is another positive sign. Although not a direct input to agriculture, the present drive to improve rural infrastructure, particularly rural road networks, also holds significant potential to promote rural agricultural growth. In spite of these positive attributes, rural agriculture in Sri Lanka is still suffering from some major deficiencies that thwart its growth, in parallel to industrial and services sectors.

The main drawback is in relation agricultural investment. The role of public investment is of paramount importance in this regard as rural agriculture depends largely on public goods. Hitherto ignored research and extension have to be revived with the dual objectives of enhancing domestic food production and developing an export-oriented agriculture sector. Neglect of agricultural research and extension over recent decades was mainly due to the industry bias in economic policy, and too high expectations of policy makers that industrial growth would generate employment and absorb the surplus agricultural labour force. Further, it was also expected that private sector investment would

substitute for public sector investment, at least partially.¹⁰ However, despite the importance given to developing the rural sector, these issues continue to remain unaddressed.

Indeed, what Sri Lanka's agricultural sector needs at this stage is complementary investment. Physical infrastructure and skilled manpower needed for developing new agricultural technology is already present in institutions such as the Department of Agriculture and the Department of Export Agriculture. What is needed is a comparatively limited additional investment to activate existing resources to generate new agricultural technology. Significant investment in irrigation and land development has already taken place over many decades. Presently, further investments are being made in rural roads and IT facilities. All these can yield optimal returns only if complementary technological inputs are in place.

Developing international competitiveness may not be the aim in the case of domestic food production, but depreciated agricultural incomes have to be raised without burdening consumers. In the case of export promotion, however, research should look into diversifying uneconomical traditional food crop production into high value, labour-intensive products with comparative advantage, such as horticultural products. In addition to such horizontal diversification, vertical diversification in food processing is another avenue to utilize surplus labour avail-

able in farm households. The SME sector may be integrated into this process generating rural non-farm employment. The bottom line of all these, is increasing land and labour productivity in the rural agricultural sector, and thereby improving rural incomes to a level comparable with that of the rest of the economy. Institutional innovations and infrastructural developments that reduce transaction costs in agriculture are also vital in this respect.

In the end, all such efforts to promote the rural agricultural sector are not aimed to perpetuate small scale agriculture that employs a larger portion of the country's labour force. In the long run, the inevitable shrinking of the rural sector in terms of employment share will take place. But as mentioned earlier, this did not happen in Sri Lanka because the expansion of other sectors did not offer many opportunities that are accessible to the rural youth who were lagging behind in education and technical skills. Imbalances in social services and infrastructure, leading to such hindrances to the inclusion of the rural labour force in the growth process, should be minimized in the long run to facilitate the final exodus of the surplus rural agricultural labour force. Only this would enable the remaining farmers to have larger farms, exploit economies of scale, and have income levels comparable to other sectors, completing the inclusive growth process.

¹⁰ See IPS, 2008, "Does 'Foodflation' Call for Agricultural Reforms?" in *Sri Lanka: State of the Economy 2008*.