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Poverty and Agriculture in Sri Lanka – Opportunities and Challenges*

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Introduction

Sri Lanka is situated between 6 and 10 degrees north of the equator and 80 to 82 degrees east near the southern tip of the Indian sub-continent. It is accorded with a climate that varies from tropical to subtropical. Based on average annual rainfall Sri Lanka is divided into three climatic zones: wet, intermediate and dry. These climatic zones are subdivided into seven major agro-ecological zones by latitude, temperature and landform. Further, these can be subdivided into 46 well-defined agro-ecological regions, each with its unique combination of rainfall pattern, elevation, landform, temperature and soil types (Figure 1). Sri Lanka has an area of 65,610 km² and a population of 19.9 million, of whom 72 per cent live in rural areas 22 per cent in urban areas, and the balance of 6 per cent in estates. The population is increasing at an average annual rate of about 1.1 per cent. The population density is 317 per km² and there is an average of ratio of one person to 0.08 ha of agricultural land.

Sri Lanka is known as an agricultural country and is endowed with fertile arable land, which makes it potentially self-sufficient in food in overall terms, enabling her to produce plantation crops such as tea, rubber and coconut as sources of foreign exchange. The agricultural sector (agriculture, forestry and fisheries) accounts for about 17 per cent of GDP, 18.8 per cent of domestic exports and 30.7 per cent of employment. Agriculture includes plantation crops (tea, rubber and coconut), paddy, other field crops (coarse grains, pulses, condiments, oil seeds) horticultural crops (fruits, vegetables, root and tubers, flowers and ornamental plants), minor export crops (cloves, pepper, cinnamon, coffee, cocoa and citronella, etc.) and livestock. Non-plantation agricultural crops contributed to 11 per cent of

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GDP in 2006. The average annual rate of growth of the agriculture sector during the last four years was 1.2 per cent. It is central to the livelihoods of the rural poor who account for the majority (around 70 per cent) of the poor. The industrial sector, which is the second highest, accounts for about 27 per cent of GDP, essentially in the form of manufacturing. The service sector contributes to 56 per cent of total GDP.

Sri Lanka's economic growth in the past three decades has been around 5 per cent and the annual per capita income in 2006 was US\$ 1,335. The poverty ratio at national level is 23 per cent in terms of the poverty head count ratio. The experience of the last few decades suggests that the benefits of economic growth have not trickled down to many segments of the poor.

An overview of poverty in Sri Lanka

Poverty is a multi-dimensional phenomenon and it has been defined differently by different stakeholders. It encompasses economic, social, governance and peace dimensions. In addition to low incomes that lead to an inability to satisfy the basic economic needs, the poor have to contend with gaps in access to good education, health care, quality shelter, water and sanitation. These in turn stifle both the individual initiative and drive for personal advancement – qualities essential to break out the vicious cycle of poverty. It has been generally accepted that measuring economic dimensions of poverty is inadequate and there is need to use a multi-dimensional approach which encompasses social, human and even political dimensions such as empowerment and vulnerability. However the economic (income) dimension of poverty, which is measured through a monetary approach and which influences other dimensions of poverty, are related to agriculture. Therefore, this overview only focuses on the economic dimensions of poverty, which is measured through absolute poverty, relative poverty and income inequality.

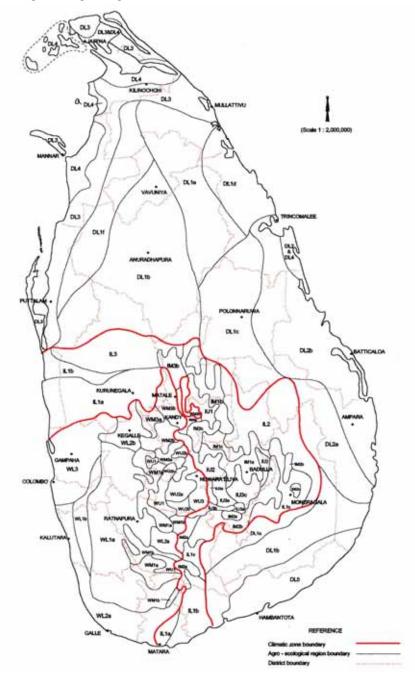


Figure 1. Agro-ecological regions of Sri Lanka

Compiled by Natural Resources Management Centre.

According to Jabber and Senanayake (2004) absolute poverty is defined as subsistence below the minimum requirement of physical well-being. A widely used measure to describe absolute poverty is the poverty line, which stipulates a standard amount of goods/services required by households to meet their basic needs. According to the global poverty lines, measured by US\$ 1 per day and US\$ 2 per day, 6.6 per cent (US\$ 1/day) and 45.4 per cent (US\$ 2/day) of Sri Lankans are in poverty. The incidence of poverty at the national level has declined from 26.1 per cent in 1990-1991 to 22.7 per cent in 2002, by 3.4 percentage points. However the actual number of poor people has increased over this period from 3.7 to 3.8 million. The World Bank (2005) estimated that between 1995-1996 and 2002 the poverty head count ratio would have fallen from 29 per cent to 12 per cent if the distribution of consumption had not changed during this period. The change in income inequality during this period is shown in Table 1.

The consistent increase of the Gini coefficient indicates the widening of income inequality during 1980-1981 to 2002. From the bottom up to sixth deciles of the population have experienced a gradual reduction of their percentage shares in total household income per capita. The income share of the top 20 per cent of the population has increased from 41.2 per cent to 52.8 per cent during the same period. Although, a gradual increase in income inequality throughout this period is observed, the widening of income inequality during 1980-1981 to 1985-1986 period is very conspicuous by all indicators.

This sharp increase in consumption inequality might have reduced poverty, thereby reducing impact of growth, i.e. the benefit of growth accrued mainly to the non-poor. Gunathilake (2005) revealed that although income distribution was deteriorating, all quintiles had experienced an improvement in real mean monthly incomes between 1990 and 2002. While for the lowest two quintiles the gain was small, Rs. 34.84 and Rs. 60.30 respectively, for the highest quintile it was Rs. 422.05. In addition the armed conflict in the North and East has both directly and indirectly contributed to existence of high level of poverty in the country despite the moderate level of growth. The incidence of poverty among households in urban and rural sectors has declined by 52 per cent and 16 per cent respectively over the last two decades (Table 2). However, actual numbers in poverty in urban areas have declined from 0.5 to 0.2 million people and increased in rural areas from 3 to 3.4 million people. Estate-sector poverty incidence increased dramatically, but the number of people in poverty remained static at 0.2 million suggesting that there was a major decline in the total estate population over this period. Further, high incidence of poverty in rural and estate sectors indicates that poverty is mainly a rural and estate-sector phenomenon in Sri Lanka.

Table 1. Sri Lankan income distribution among income deciles during 1980-1981 to 2002

Total household income by per capita income deciles (%)						
Decile	1980/81	1985/86	1990/91	1995/96	2002	
Lowest	3.5	2.4	1.9	2.1	1.7	
Second	5.3	3.8	3.3	3.5	3.1	
Third	5.9	4.5	4.3	4.4	4.1	
Fourth	6.7	5.3	5.3	5.3	5.0	
Fifth	8.0	6.2	6.4	6.4	6.0	
Sixth	8.6	6.9	7.5	7.4	7.3	
Seventh	9.4	8.3	9.2	9.0	8.8	
Eighth	10.9	10.0	10.8	11.4	11.2	
Ninth	13.8	13.5	14.8	15.6	15.4	
Highest	27.4	38.8	36.5	34.8	37.4	
Cumulative lowest 20%	8.8	6.2	5.2	5.6	4.8	
Next 20%	12.6	9.8	9.6	9.7	9.1	
Lowest 40%	21.4	16	14.8	15.3	13.9	
Top 20%	41.2	52.3	31.3	50.4	52.8	
Ratio top 20% to bottom 40%	1.9	3.3	3.5	3.3	3.8	
Gini coefficient	0.31	0.43	0.44	0.46	0.47	

Source: Fresh perspective: Exploring alternative dimensions of poverty in Sri Lanka (2007).

Table 2. Percentage of households below the poverty line by sector

Sector	1990/91	1995/96	2002 % change of poverty H.C. Ratio 1990/91-2002
Urban	12.9	11	6.2 - 52
Rural	24.7	25.9	20.8 - 16
Estate	16.7	32.2	24.3+

Source: Department of Census and Statistics.

Poverty and inequality are strongly related and therefore it is important to examine how income inequality has changed over time. Income inequality has increased dramatically from 1980-1981 to 2002, possibly due to the liberalization policy reform of 1977, which led to a change in focus from social welfare to creating an environment which was conducive to export-led growth (Table 1).

Poverty alleviation policies and programmes

From time to time, successive governments since independence in Sri Lanka have implemented several programmes aimed at the poor. Food rations (Second World War) and food stamps (1979-1989) were main programmes implemented targeting the poor. Under these programmes food grants were provided to the poor. Realizing that provision of food grants does not help to moving the people out of the poverty trap, the government replaced

the food stamp programme with the *Janasaviya* (strength of the people) programme (1989-1994) aiming to create opportunities for the poor to participate in the economic growth process in a productive manner, while continuing the relief assistance. Under this programme Rs. 2,500 was allocated per family per month comprising a food grant of Rs. 1,458 and a compulsory saving of Rs. 1,042. During 1989-1994 this programme covered about 546,910 families.

The *Samurdhi* programme introduced in 1995, replaced the *Janasaviya* programme and is still in operation. The *Samurdhi* programme promotes savings among the poor and provides loans at low interest rates for income-generating activities of the poor. The main objective of this programme was to bring all major welfare programmes under the umbrella of the *Samurdhi* programme. The original programme was planned to extend the welfare benefit to 1.2 million low-income families. However the number of beneficiaries has increased to over 1.9 million at the end of 2006. In addition to The *Samurdhi* programme, in order to improve the nutrition of poor people, programmes involving the distribution of food baskets for pregnant mothers and *thriposa* for pre school children, day meal for school children, are implemented.

In addition to this main programme, the present government has implemented a number of programmes aimed at the local rural and agricultural economies in a wider process of economic growth through development of infrastructure. These are *Gemi Diriya* (courage of the village) project, the Tank Rehabilitation programme, *Maga Neguma* (rehabilitation of rural roads and minor extension), and Technology to Village, *Pubudamu Wellassa*, *Rajarata Navodaya*.

Gemi Diriya: This programme focuses on developing rural infrastructure, strengthening market facilities, credit and technical support services to the poorer communities, strengthening local governments' planning and implementation capacities, and ensuring effective involvement of the communities in the programming of investments and their implementation. At least 75 per cent of the households in the project area would benefit from increased income, improved access to social and economic infrastructure. At least 50 per cent of national, provincial and district budgetary resources for rural development are planned to channel directly to community organization for implementation of the development programmes.

Tank Rehabilitation: This is a flagship project highlighted in the Economic Policy Framework of the present government. The project recognizes the augmentation of water supply in basins, where water stress exists, by harnessing rainwater and storing it in existing

and abandoned village tank systems. In addition, diversion of perennial water by means of anicuts to farm lands through supply canals for cultivation is also recognized. It also proposed to develop identified tanks in an integrated manner.

Maga Neguma (Rehabilitation of rural roads and minor extension): The objectives of this programme include providing transport facilities to the rural population and speedy transport facilities for conveying agricultural products to the market. The total cost of this project is US\$ 60 million.

Gamata Thaakshanaya (Technology to Village): This technology transfer programme involves a) establishing a computer-linked *Vidatha* resource centre in each of the 320 Divisional Secretary areas, and (b) establishing science and technology societies at village level.

Pubudamu Wellassa (Bloom of Wellassa): The objective of this programme is to implement an accelerated development programme dedicated to the Badulla and Moneragala districts. The main focus is on providing rural infrastructure facilities.

Rajarata Navodaya (Dawn of Rajarata): The objective of this programme is to implement an accelerated development programme dedicated to the *Anuradhapura* and *Pollonnaruwa* districts. The main focus is on providing infrastructure facilities including minor irrigation schemes, feeder roads, and basic health facilities and transport.

Realizing the importance of the growth of the agriculture sector in order to alleviate rural poverty as well as economic development of the country through increasing farm and labour productivity and income in agriculture, the Government of Sri Lanka has been implementing a series of policies and programmes since independence. The fertilizer subsidy scheme, agriculture credit facilities, price support schemes and import restrictions are the Government policies implemented in broad terms. Fertilizer prices have been subsidized for nearly 4.5 decades with different rates in different time periods, with the objective of encouraging farmers to use fertilizers in adequate amounts at correct stages and thereby enhancing the level of agricultural productivity. Currently paddy farmers who are registered at the Agrarian Service Centres were eligible to obtain fertilizer at a subsidized rate of Rs. 350 (US\$ 3.09) per 50 kg bag. Further, farmers who cultivate subsidiary food crops (chilies, maize, onion, big onion and vegetable) in paddy land during the yala season are also eligible to obtain fertilizer at subsidized rates. Smallholders who own less than 5 acres of tea, rubber and coconut land are also provided with a 50 kg bag of urea at a less subsidized rate of Rs. 1,200 (US\$ 100). In terms of output price policy, the Government has established the Agricultural Products Marketing Authority to enhance a fair price for agricultural produce. The Field Crop Research Development Institute Development Project, the Rice Research Development Institute Development Project, the Crop Zoning programme, The National programme on increasing domestic food production and forward sales contract, are the main national programmes implemented at present.

Rice, being the staple food and responsible for employing half of the total agriculture labour force, was given highest priority. As a result the rice sector has shown a significant growth and Sri Lanka has achieved near self-sufficiency in rice at a personal consumption level. Expansion of area under irrigation, productivity improvement coupled with high yielding varieties, and rice-biased government policy, such as price support schemes, have contributed towards achieving self-sufficiency in rice. Today rice farming occupies around 730,000 ha of land. Out of this around 46 per cent is irrigated land. Production of subsidiary food crops was encouraged during 1970-1977 through import restriction. However, a subsidiary food crop sector is lagging behind the desired level. Despite the satisfactory overall annual economic growth of 5 per cent experienced by Sri Lanka during last decade, the annual growth in the agriculture sector has been paltry.

Government perspective on reducing poverty

Strategies for poverty reduction vary across various stakeholders. The common strategies on which most agree include: i) transferring cash to the poor; ii) increasing farm and labour productivity and income in agriculture; iii) including the local rural and agricultural economies in a wider process of economic growth; and iv) reducing costs and increasing prices through subsidies. In Sri Lanka all these strategies are being used to different degrees. Some policies and programmes related to these strategies were given in a very concise manner in the above sections of the report. However the Sri Lankan Government believes that provision of a cash grant does not help to move people out of the poverty trap. The strategy of increasing farm and labour productivity, increasing income in agriculture and including the local rural and agricultural economies in a wider process of economic growth are considered more important.

Agriculture has an important role to play in the struggle against poverty: It is central to the livelihoods of the rural poor who, in spite of urbanization, still account for the majority (around 70 per cent) of the poor. Raising the growth in agriculture can make an important contribution to rural poverty reduction through increasing income and employment. Food insecurity is a poverty-related problem. Agriculture contributes to food security by helping to keep prices low so that food is affordable to the poor, providing income and employment

that help poor people access food, and providing a tax base to support service delivery that helps ensure access to food by poor people. Realizing the importance of agriculture to accelerate overall economic growth and thereby reducing poverty in alignment with the Millennium Development Goals, the Sri Lankan Government has set out the vision for the agriculture sector as 'an agriculture sector contributing to regionally equitable economic growth, rural livelihood improvement and food security through efficient production of commodities for consumption, for agro-based industries and for exporting competitively to the world market'. In order to achieve this vision the government has presented its agriculture policy. The goals and objective of this policy, in broad terms are: i) increase domestic agricultural production to ensure food and nutrition security of the nation; ii) enhance agricultural productivity and ensure sustainable growth; iii) maximize benefits and minimize adverse effects of globalization on domestic and export agriculture; iv) adopt productive farming systems and improved agro-technologies with a view to reduce the unit cost of production and increase profits; v) adopt technologies in farming that are environmentally friendly and harmless to health; vi) promote agro-based industries and increase employment opportunities; and vii) enhance the income and the living standards of farming communities.

Agriculture and poverty

Rice farming is the main agricultural activity of rural people in Sri Lanka and about 1.5 million farm families are engaged in rice farming. The rice sector in Sri Lanka has achieved spectacular performance in the last four decades (Figure 2). Total rice production has nearly achieved self-sufficiency. Yields have increased two-fold during the past four decades. A rice biased policy environment, the expansion of area under irrigation and improved technology (high-yielding varieties) favoured this performance. However, the performance of the rice sector has little impact on smallholders living in rainfed and marginal areas where people are more vulnerable to food insecurity (Figure 3) and poverty where is concentrated. Badulla, Moneragal and Hambanthota districts are highly rainfed and marginal districts. In these districts the incidence of poverty is high compared to other districts (Table 3).

Figure 2. Trend in extent, production & average yield of rice

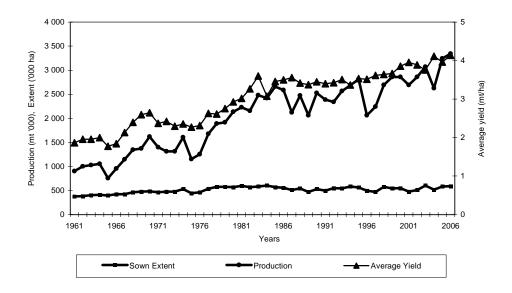


Table 3. Percentage of poor population by district

District	1990/91	1995/96	2002
Colombo	16	12	6
Gampaha	15	14	11
Kalutara	32	29	20
Kandy	36	37	25
Matale	29	42	30
Nuwaraeliya	20	32	23
Galle	30	32	26
Matara	29	35	27
Hambantota	32	31	32
Kurunegala	27	26	25
Puttalam	22	31	31
Anuradhapura	24	27	20
Polonnaruwa	24	20	24
Badulla	31	41	37
Moneragala	34	56	37
Rathnapura	31	46	34
Kegalle	31	36	32
National	26.1	28.8	22.7

Source: Household Income and Expenditure Survey.

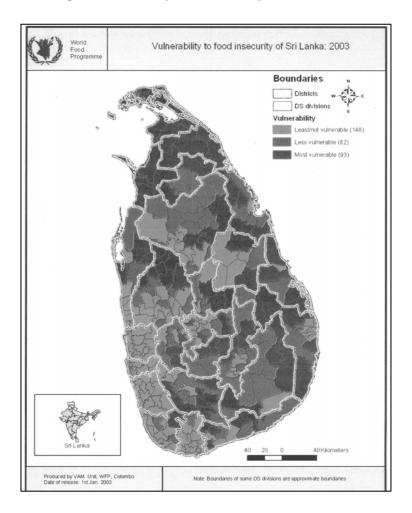


Figure 3. Vulnerability to food insecurity in 2003

The agro-ecological condition in these areas favours the cultivation of subsidiary food crops. The districts in Sri Lanka in which growing of subsidiary food crops is concentrated have been identified based on the calculation of the 'Specification Quotient' or 'Specialization Index' by Mahrouf (2004) (Table 4). This analysis shows that growing of subsidiary food crops is concentrated in these districts. Figures 4 to 8 show the distribution of subsidiary food crops in Sri Lanka.

Table 4. Major districts of growing subsidiary food crops based on estimation of specialization quotient

Crop	Major districts growing CGPRT crops	Specialization quotient (SQ)		
Maize	Anuradhapura	1.0530		
	Badulla	1.0094		
	Moneragala	0.8606		
	Ampara	0.5551		
Finger millet	Anuradhapura	4.6291		
	Moneragala	3.2789		
	Hambantota	2.8996		
	Kurunegala	0.9656		
Mungbean	Hambantota	2.7353		
-	Moneragala	2.4564		
	Kurunegala	1.3219		
Black gram	Anuradhapura	6.3417		
	Mullativu	5.1069		
	Vavuniya	3.6199		
Soybean	Anuradhapura	27.6266		
	Mahaweli 'H'	5.6231		
	Matale	4.2784		
	Nuwara Eliya	1.3447		
	Kilinochchi	1.1002		
Cowpea	Ampara	2.7051		
	Moneragala	1.6077		
	Hambantota	1.0087		
Ground-nut	Moneragala	2.5481		
	Ampara	1.2280		
	Mullativu	1.7405		
	Hambantota	0.9509		
Sweet Potato	Matale	2.0410		
	Kurunegala	1.6274		
	Moneragala	1.5849		
	Ratnapura	1.3878		
	Badulla	0.9973		
	Gampaha	0.9045		
Cassava	Kurunegala	0.5632		
	Gampaha	0.3919		
	Ratnapura	0.3784		
	Moneragala	0.2960		
Potato	Badulla	16.1009		
	Nuwara Eliya	2.8762		

Source: Mahrouf, 2004.

Figures 4.

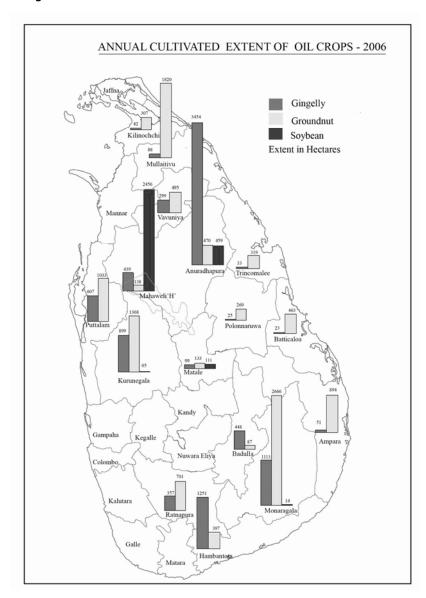


Figure 5.

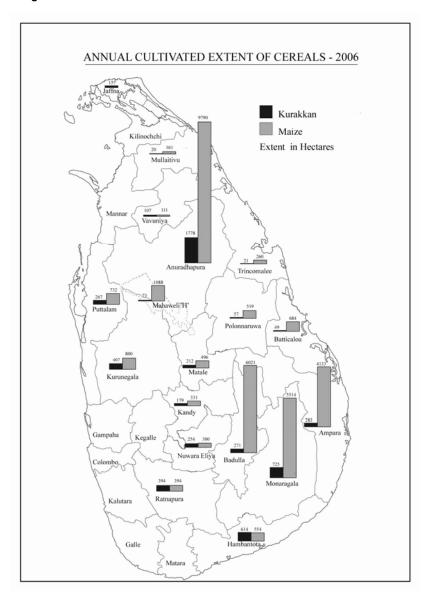


Figure 6.

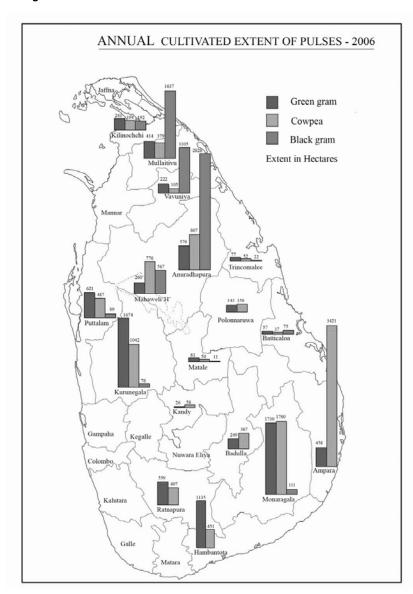
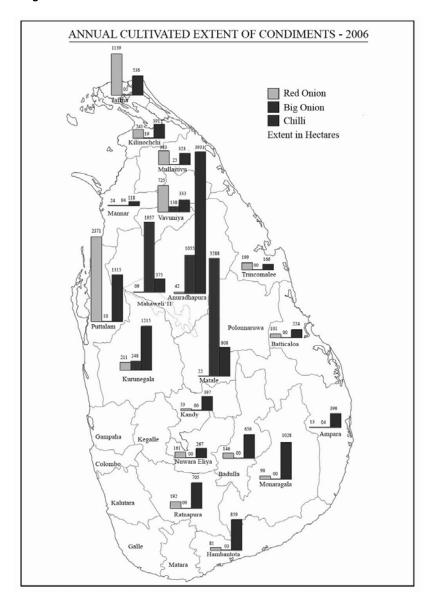


Figure 7.



Compared to rice production, much of the subsidiary food crops production in Sri Lanka does not show a clear increasing trend. Figures 8 to 14 show the trend in area, production and yield of major subsidiary food crops grown in Sri Lanka.

Figure 8. Trend in extent production & average yield of mungbean

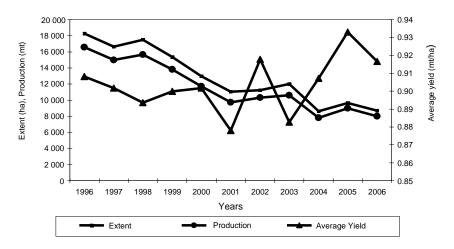
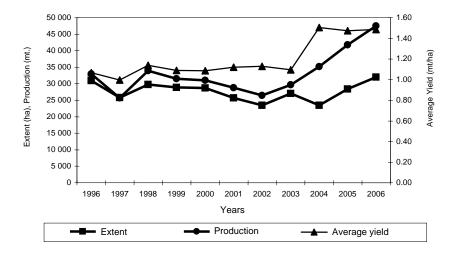


Figure 9. Trend in extent production & average yield of maize



In general, the SFC sector has shown a declining extent (land under cultivation) and production in recent years. Maize, soybean, ground-nut and potato are the crops that have shown increasing trends in extent and production during recent years. Increases in the relative prices of the produce of these crops during recent years have been the major cause of this increased extent in these crops. From these crops, the increase in potato extent could be mainly attributed to the relatively high protection given to this crop, which is very important to the poverty stricken Badulla district and also the Nuwara Elliya district. Because of the existing international and national trends in rising prices of maize and soybean, the extent under these two crops is likely to increase in the future. The rapid economic growth in China and India are likely to rapidly change net food importing patterns, particularly of maize and soybean, which are mainly used for the provender industry.

Despite the relative price increase of pulses, the extent under pulses such as green gram, cowpea and black gram have been declining. The former two pulses, which have been mainly used as subsistence crops, have lost their importance with increasing population pressure and environmental regulations that inhibit shifting types of cultivation. Increasing competition from perennial crops in home gardens has also contributed to the declining extents of these crops.

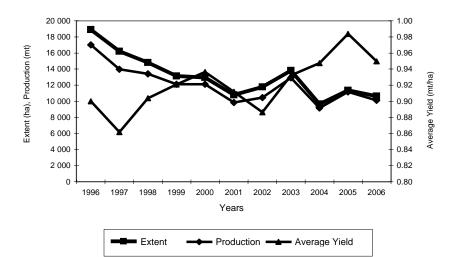


Figure 10. Trend in extent production & average yield of cowpea

Figure 11. Trend in extent production & average yield of blackgram

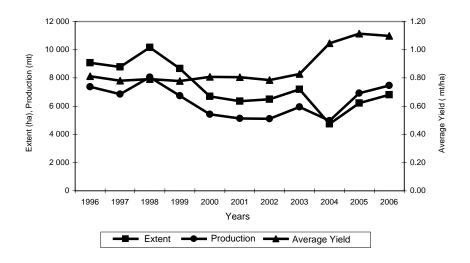


Figure 12. Trend in extent production & average yield of soybean

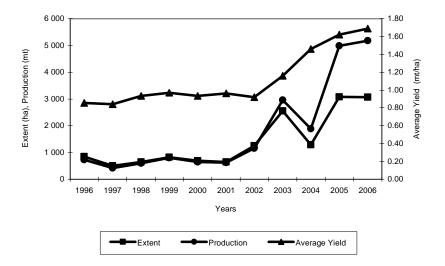


Figure 13. Trend in extent, production & average yield of ground-nut

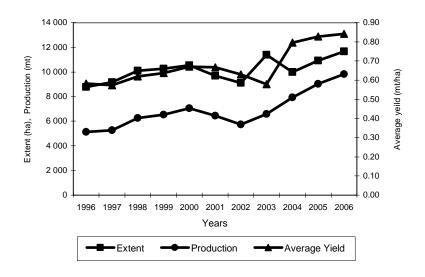
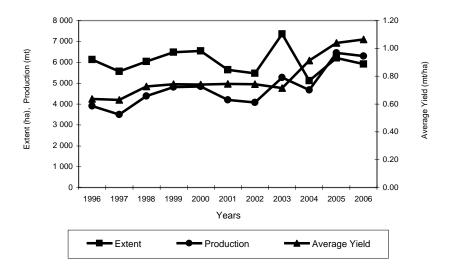


Figure 14. Trend in extent, production & average yield of Kurakkan



It seems that many factors have contributed to these trends in production of subsidiary food crops. Among them uncertainty under rainfed cultivation inadequate storage and processing facilities, agro-based industries and small landholdings are important.

There is high demand for subsidiary food crops in Sri Lanka. At present maize, soybean and potato are imported in large quantities into Sri Lanka. Table 5 shows the imports of subsidiary crops to Sri Lanka.

Table 5. Imports of subsidiary food crops

Year	Maize (seed)	Maize (other)	Finger millet	Soybean	Mung bean	Black gram	Ground nut	Potato (seed)	Potato (consumption)
	, ,	, ,		Qu	antity	(mt)		, ,	, ,
1996	35 502	56 076	499	285	22	4 034	1 194	5 200	25 784
1997	10 859	70 382	1 254	200	2 091	1 659	1 756	1 122	108 403
1998	38 358	68 179	695	179	5 132	677	2 350	1 706	115 613
1999	66 669	58 956	277	1 830	7 528	4 928	4 348	1 764	128 921
2000	7 864	115 248	551	2 972	6 767	7 332	4 382	2 794	116 453
2001	69	157 334	816	3 166	8 717	7 891	4 890	6 725	62 559
2002	7	94 588	1 134	3 512	7 121	6 939	5 494	7 028	37 997
2003	8 247	128 450	610	1 451	8 181	7 597	2 680	5 031	40 487
2004	84	148 782	1 829	1 607	12 673		4 199	3 724	28 014
2005	80	14 940	1 380	1 308	9 321	1 589	4 691	5 718	40 746
2006	348	83 695	1 933	212	11 495		5 023	2 245	46 554

Concluding remarks

The experience during the last few decades suggests that the benefit of growth has not adequately trickled down to many segments of the poor. Despite reasonable average growth (5 per cent for the overall economy and around 1.2 to 1.4 per cent growth in the agricultural sector) coupled with significant growth in the rice sector, poverty still remains pervasive in the country. Therefore, there is a need to redesign the policies and programmes to exploit the potential sectors that are lagging behind the desired levels in order to alleviate rural poverty in the country.

Agriculture has an important role in the fight against poverty: It is central to the livelihoods of the rural poor who, in spite of urbanization, still account for the majority (around 70 per cent) of the poor. Raising the growth in agriculture can make an important contribution to rural poverty reduction through increasing income and employment.

Development of the subsidiary food crop sector is an important step in reducing poverty in rainfed and marginal areas where incidence of poverty is high. In order to develop the subsidiary food crop sector creating favourable policies, developing appropriate technologies (high-yielding varieties, agronomic practices, post-harvest technology) and dissemination of these technologies are important.

References

- Cader, A. A. and Remnant, F. (eds), 2007. Fresh Perspectives: Exploring Alternative Dimensions of Poverty in Sri Lanka 2007, Centre for Poverty Analysis, Colombo, Sri Lanka.
- Central Bank of Sri Lanka, 2006. Annual Report 2006, Colombo, Sri Lanka.
- Department of Census and Statistics, 2002. *Household Income and Expenditure Survey* 2002, Ministry of Finance and Planning, Colombo, Sri Lanka.
- Jabbar, S. and Senanayake, D., 2004. "Overview of poverty in Sri Lanka", *Briefing Paper Series 1-2004*, Centre for Poverty Analysis, Colombo, Sri Lanka.
- Mahrouf, A.R.M, 2004. "Enhancing sustainable development of diverse agriculture in Sri Lanka", *CAPSA Working Paper No. 83*, UNESCAP-CAPSA, Bogor, Indonesia.
- Ministry of Finance and Planning, 2006. *Mahinda Chintana: Vision for a New Sri Lanka : A Ten Year Horizon Development Framework 2006-2016*, Discussion Paper, Department of National Planning, Ministry of Finance and Planning, Sri Lanka.
- Socio Economics and Planning Centre, 2006. *Agstat 2006*, Department of Agriculture, Peradeniya, Sri Lanka.
- World Bank, 2005. A Poverty Map for Sri Lanka: Findings and Lessons, World Bank, Colombo, Sri Lanka.