

Transformation of Smallholder Agriculture Sector in Sri Lanka: An Annotated Compendium of Statistics

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Report No: 141

September 2011

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Colombo 7
Sri Lanka

First Published: 2011

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Page Layout: Dilanthi Hewavitharana

ISBN:978-955-612-100-1

PREFACE

Over the six decades after independence, Sri Lanka has transformed from food deficit to self-sufficiency or near self-sufficiency in many crop products. Especially the achievements in the rice sector are noteworthy. There is much to achieve in livestock production and sugar production. Many of the achievements have been made by increasing the area under cultivation, technology adoption, productivity improvements and orientation of production from subsistence to markets in the Sri Lanka's smallholder farming sector. Although exports crops like tea, rubber and coconut have not expanded in terms of area under cultivation, they are still major export income earners of the country. However, there are many discontinuities in Sri Lanka's agricultural transformation as revealed by data provided in the present volume.

The smallholder agricultural sector in the island has become the major domestic food supplier over the decades with supportive policies and enormous investment of limited budgetary resources. Under population pressure, production at extensive margin has resulted in the existing arable land bringing under agriculture. Data in this volume show that further scope for agricultural productivity growth and growth in production to meet the demand of a growing population is to be achieved by increasing the intensity of production through application of productivity improving technologies and crop diversification. However, the major constraint is the escalating cost of fertilizer and chemicals on which intensive agriculture development depend.

Seasonal shortages and escalating prices of certain crop products as well as dairy products are affecting most vulnerable groups like the poor, unemployed and under employed, women and children. Paths that agriculture sector has traversed over the period after independence as revealed by statistics in this volume show the areas needing more concentration by policy makers in the coming decade. The new era in Sri Lanka that began in 2009 with the fullest control over secessionist elements in the north and east presents new hopes for improving economic growth rates, development of economic and social infrastructures, reducing unemployment and poverty, arresting environmental degradation and working towards further reduction in food deficit. The issue of environment sustainability formally entered the international agenda after the Earth Summit, which was held in Rio de Janeiro in 1992. Environmental protection and the conservation of natural resources which emerged as key national priorities in the wake of 1972 Stockholm Conference on Human Environment are shared by Sri Lanka and should be in the agenda of policies for agricultural development in the country. HARTI has been the nodal agency for research and training on agrarian and rural development since 1972.

The present compendium has been conceptualized and prepared under the able guidance of Dr. Dhanawardana Gamage, the former Deputy Director (Research) and Research Fellow (Development Sociology) of HARTI. Narrative and analytical accounts in this volume are provided by Dr. Gamage. Ms. M. K. Nadeeka Damayanthi, Research Officer, completed the tedious tasks of collecting and organizing the data into a meaningful set of statistical tables/graphs that reveal the paths of agricultural transformation in the island. Ms. Damayanthi also was involved in updating data tables from 2006 to 2010 and drawing new graphs on her return to the island in 2011 from her post graduate studies abroad. I am thankful to them for spending their spare time in preparing the present volume which will be immensely useful for policy makers and academics alike. The HARTI is thankful to all the agencies which provided the data for the present edition.

Lalith Kantha Jayasekara
Director

ACKNOWLEDGEMENT

Transformation of Smallholder Agriculture Sector in Sri Lanka: An Annotated Compendium of Statistics is one of the contributions under "The State of the Smallholder Farming Sector in Sri Lanka," a major study programme undertaken by the Hector Kobbekaduwa Agrarian Research and Training Institute (HARTI) in 2007. This volume is a result of considerable amount of desk work covering information of the period after independence in Sri Lanka.

We gratefully thank Mr V.K. Nanayakkara, the former Director of HARTI for his encouragement, support and guidance throughout the exercise. We appreciate very much the help extended by Dr L.P. Rupasena, the Deputy Director (Research) of HARTI for reviewing the preliminary draft and providing comments to the earlier draft in 2009. We also thank Mr. J.K.M.D. Chandrasiri, Head, Agricultural Policy and Evaluation Division for reviewing the draft report in 2011.

The staff of the Statistical and Data Processing (SDP) Unit of HARTI, particularly Mr Ranjith Fernando (former Data Analyst), Mr. K.D.S. Ariyasinhe (former Data Analyst), and Ms. N.P.Jayanetti (Data Assistant) extended support to retrieve data from SDP data base. Ms Rajika Ranasinghe typed some tables, Mr K.M.A. Jayawardana helped in preparing maps and Ms. Udeni Karunaratna helped in creating the cover page. Mrs. Manoja Thushari Abeywickrama provided support in map setting and Ms. Dilanthi Hewavitharana did excellent work in page setting. Mr. Nandana S. Talagune, the former Editor of HARTI and Ms A.A.R.S. Amarasinghe provided much assistance in editing and proof reading an earlier draft of this report. The final draft was quickly edited by Professor W.I.Siriweera. We thank all of them.

Last, but not least, we are very grateful to Mr. Lalith Kantha, the present Director of HARTI, who discovered this document that had been misplaced or shelved over two years, in the process of reviewing HARTI performance by him. If not for his efforts, this document might not have seen light of the day.

**M.K. Nadeeka Damayanthi
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14 September 2011

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ACRONYMS

AMDP	Accelerated Mahaweli Development Programme
ARTI	Agrarian Research and Training Institute
DDEC	Dambulla Dedicated Economic Centre
DDSD	Dambulla Divisional Secretarial Division
DEC	Dedicated Economic Centre
GDP	Gross Domestic Product
HARTI	Hector Kobbekaduwa Agrarian Research and Training Institute
ILSDZ	Irrigated Land Settlement in the Dry Zone
OFCs	Other Food Crops or Other Field Crops
SFS	Smallholder Farming Sector

Measures

Kg	Kilogram
Mt	Metric ton
Ha	Hectare

CHAPTER ONE

Major Trajectories of Transformation of Agriculture in Sri Lanka

1.1 Introduction

This document provides statistics pertaining to the trajectories of transformation in the agriculture sector, particularly the smallholder farming sector in Sri Lanka during the six decades after independence. This chapter briefly explains the contextual changes and provides explanatory accounts of the major dimensions of agrarian transformation to help the reader to understand the milestones of such transformations and processes influencing them. Being an annotation, the analysis is not confined to data provided in the tables of the present volume. In order to assist the reader to understand the context of agricultural transformation and its implications, some general observations are also made in the chapter.

The agriculture sector in Sri Lanka comprise of crops, livestock, forestry and fisheries. Major crop products that dominate the sector include plantation crops like tea, rubber, coconut and food crops like paddy, non-paddy coarse grains, vegetables, yams, and spices. Plantation crops are grown mainly for export purposes on estate owned plantations as well as on smallholder farms while food crops are grown mostly on smallholder farms to meet the domestic food demand. Thus, a major characteristic of Sri Lanka's agriculture is the sectoral dualism in which the plantation sector produces tea, rubber and coconut for export purposes while the non-plantation sector or smallholder farming sector (SFS) produces rice and other food crops mainly for the domestic market.

Before plantation agriculture was expanded in the nineteenth century under the British colonial administration, agriculture in Sri Lanka has been carried out on a peasant production basis.¹ Much of what was produced on land was used for home consumption by the producers and the excess was exchanged to obtained labour or consumables mainly on a barter basis. There were three major cultivation or farming systems existing in the island before plantation agriculture was introduced on a relatively large-scale in the nineteenth century. First, rice being the staple food of the people, paddy (un-husked rice) was cultivated on lowlands at valley bottoms or in the lowland plains under irrigation as well as under rain-fed conditions. Irrigated paddy farming was largely supported by a system of irrigation tanks (cascades) on which the people were dependant for water for crop production, livestock rearing and other domestic uses. Second, a system of home gardening or agro-forest gardening was used to grow varieties of subsidiary or other food crops. Third, slash-and-burn cultivation known as *chena* was used to cultivate varieties of non-paddy grains and vegetables². At the time of independence, major non-paddy crops cultivated in SFS included *kurakkan* (millet), maize, sesame seed, chillies, sweet potatoes, cassava and vegetables. These were grown mainly on uplands cleared usually from forest or shrub land areas largely representing slash-and-burn system of crop production that had widely been spread in many parts of the world at the time. However, widespread land use transformation since then has reduced the production of many cereal crops under slash-and-burn farming (*chena*) system.

Since the beginning of the twentieth century, agriculture in the island has been dominated by the four principal crops: rice, tea, rubber, and coconut. Tea and rubber were exported

¹ In the peasant form of production, the production activities are dominated by the family group. The family provides all the labour and the produce is for the family as a whole. Landholdings are small, sometimes owned by the family, but often leased from a landlord.

² According to Peiris (2006), during the most historic periods in Sri Lanka, village areas were surrounded by forests, parts of which were temporarily cleared for farming on upland basis with other food crops. The forests were also used for hunting, grazing for village cattle, gathering wild fruit and timber.

mostly, whereas the coconut crop was sold on both domestic and international markets. Almost every bit of paddy, vegetable and other food crops produced on smallholder farms were used for domestic or national consumption. By about mid 1960s, tendency towards transformation of agriculture in SFS was readily apparent. Paddy sector underwent a drastic change as the area under irrigated paddy farming was expanded and use of productivity improving technologies like high yielding varieties and inorganic fertilizers started to spread. Both the productivity per acre and the total production have increased reducing the rice deficit that was experienced during the British administration and soon after the independence. The importance of other crops in terms of the area under cultivation and production increased in the 1970s and 1980s, but no single other crop emerged to challenge the four traditional mainstays of agriculture in the country.

At present the majority of smallholder farmers produce crops for sale rather than for domestic consumption. Agriculture has also become linked to both the manufacturing sector and the rural non-farm sector. For instance, agricultural commodities have become the major input used in food, beverage and tobacco industries accounting for almost 33 percent of their total value added in 2002. The single largest share of industrial value added came from the production of tea. Coconut production also has been an important component of the agro-based industry. Agriculture in turn demands equipment and chemical products manufactured by the industry. There has been a tendency towards a relatively large service sector associated with agricultural production. In other words, agriculture has been instrumental in the diversification of the economy.

Each sub-sector of agriculture (plantation and smallholder farming sector) has undergone considerable transformation in terms of production, productivity gains, scale of production and production orientation for past six decades after independence. Irrigated paddy area has been expanded and productivity per unit of land has been increased. Productivity of paddy lands has been achieved by providing improved and more reliable access to irrigation, dissemination of modern technologies like high yielding seed varieties and fertilizer subsidies etc by the government. Upland farming system, for instance farming of vegetables in SFS too has changed with the adoption of modern technologies and the market orientation of production. Classical slash-and-burn farming system has been declining. Before independence, the smallholder farmer production was meant for own consumption and bartering for other household necessities. Transformation has also meant the change in distinctive character of forest surrounded by village-based-agricultural-production system³.

In spite of the transformation of agriculture as depicted by the tables in subsequent chapters of this volume, it should be noted that some typical aspects of agriculture production before the colonial period remain quite unchanged even today. One major factor contributing to this is the prevalence or even reinforcement of smallholder farming sector under the agrarian policy of the government. On the other hand, the plantation crops are still produced on relatively large estate plantations, but the involvement of smallholder land operators in growing these crops has increased over the years. Similarly, a significant portion of upland farmers yet practise low-tech, low-input farming systems. Each crop sector has performed in different ways as depicted by statistical tables in this volume. Briefly explained below are the major driving forces and constraints affecting the observed level of performance. Over the last six decades, the country has achieved near self-sufficiency in rice whilst the paddy holdings have fragmented resulting in operation of uneconomic extents by the majority of farmers. The latter tendency has implications for income of the paddy farmer. Many items like red onion, potato etc are locally produced, but the shortfall is imported. On the other hand, a major portion of sugar is imported and both the wheat and wheat flour are imported as wheat is not produced in the country. Products like mustard and other major spices are

³ Many village forest areas have given the way for large scale irrigation development and village expansion by now. See for more detailed analysis of deforestation in Sri Lanka, Nanayakkara, V. R. (1987), *Forest History of Sri Lanka*, In K. Vivekananda (ed.), *100 Years of Forest Conservation*, Forest Department of Sri Lanka, Colombo.

mostly imported. Agriculture has dominated rural livelihoods income and employment from independence through late 1970s.

There has been a notable leap in the growth of the economy from 1980s. Some attribute this to the liberalisation policies adopted in the late 1970s. Economy grew speedily from 322 billion rupees in 1990 to 5,602 billion rupees by 2010. By 2006, GNP per capita grew by 7 percent while GDP per capita grew by 7.4 percent. Even with a negative 1.4 percent growth rate in 2001, the average growth rate in GDP for the period between 1990 and 2006 has been about 4.5 percent. GDP grew in 2010 at an annual rate of 8.0 percent recording 49.5 billion US dollars with a per capita GDP income of 2,399 US dollars.

These achievements had taken place in spite of the diversion of scarce resources for containing the secessionist conflict in the North and East over three decades from 1983 to 2009. War expenditures that constituted a sizeable portion of GDP could have been used for development purposes. Most important factor is that growth rates in the country even under appalling conditions like the prolonged secessionist conflict show the resilience of the economy and potential for rapid growth. Rebel activities were brought under total control by the government army by May 2009. Thereafter, the government has pledged to develop the country more speedily with equity for all sectors of the population and provinces⁴. Improvements undertaken to rural road infrastructure after 2009 appears to have a boosting effect on rural economy and more equitable distribution of growth benefits. The data contained in this volume provide the information base to understand the trajectories the agriculture sector has followed and shortfalls that have occurred for rerouting agriculture sector to support the anticipated growth rates and equitable distribution of growth as envisaged by the present government.

With expansion in the services and industrial sectors that largely contributed to growth in GDP, Sri Lanka's economy has transformed from predominantly agriculture to a service and industry dominated economy. The share of the service sector increased from about 37 percent in the late 1950s to nearly 60 percent by 2010. The share of the industrial sector to GDP slightly decreased from around 20 percent in 1950 to 18 percent in 1969. However, it remains more or less the same contributing between 25 to 30 percent to GDP while its contribution has significantly increased in absolute terms. In contrast, the share of agriculture to GDP has reduced from around 46 percent in the 1950 to 27.7 percent in 1980, 17.2 percent in 2005 and 11.9 percent by 2010⁵. The contribution of agricultural exports in foreign income earning has reduced from 90 percent of the total exports in 1978 with bulk tea representing half the value of total exports. The agricultural exports which are still dominated by tea have declined to 20 percent by around 2000.

Changes in the structure of the economy also had implications for changes in employment and unemployment patterns as well as changes in the sector of employment of the workforce. For instance, the employment outside agriculture grew at an average rate of 4.2 percent per annum from 1990 to 2000 while the employment in the agricultural sector grew negligibly at an average rate of 0.3 percent per annum during the same period. With this trend, the proportion of population engaged in agriculture decreased from 36.7 percent in 1995 to 32.7 percent by 2008. However, it shows that in spite of the structural transformation taking place in the economy, agriculture still plays a larger role in employment compared to industry⁶.

⁴ See for example, Department of National Planning (2006 b), *Mahinda Chinthana: Ten Year Development Plan*, Colombo.

⁵ The share of agriculture grew from 11.7 percent to 12.1 percent between 2007 and 2008 with much concentrated efforts by the government to increase the production at intensive margin of production.

⁶ See World Bank, 2002 and 2003 reports for more details of employment in agriculture.

1.2 Resources Used in Agricultural Production

Sri Lanka's total land area is 65,610 square kilometres. With a population of about 20 million corresponding to about 300 persons per square kilometre, Sri Lanka is a densely populated country. Land mass consists of a south central mountainous region that rises from broad lowland plains that starts from the sea level to an elevation of 2,502 metres. The central highland region which functions as the watershed for a system of rivers including nine major rivers and 94 other rivers flow into the Indian Ocean through the plains that surround it. The average temperature in the island varies between 29-35 centigrade with mean annual temperature of about 27 centigrade in the lowlands and 15 centigrade in the central highlands.

Diversity of natural environment is such that there are three distinctive agro-ecological zones in the island defined as the wet zone, the dry zone and intermediate zone. Based on rainfall and patterns of distribution, three major agro-climatic regions (wet zone, intermediate zone, dry zone) have been recognised. Area classified as the dry zone encompasses south, north, east and eastern parts of the hill region and covers about two-thirds of the land mass of the country. Second largest covering nearly one-third of the land mass in the country is the wet zone which encompasses the south-west sector of the island including the western part of the central highlands. The rest is the area between the two major zones. Therefore, Sri Lanka has a range of agro-ecological regions differentiated by soils and land forms, elevation and rain patterns. Rains occur during the south-west monsoon (May to August) and the north-east monsoon (November to January). Two monsoons dominate the precipitation pattern with marked distribution of annual rainfall. Annual rains are around 2,000 millimetres and vary across the space. The region with the highest precipitation with around 5,000 millimetres is the mountainous region. In contrast, the mean annual precipitation on the eastern slopes of the central highlands or the mountainous region is less than 3,500 millimetres. The precipitation in the north-west and south-west lowlands is the lowest with 935 millimetres recorded at the Ambalantota gauging station in the Hambantota district of the southern province. The dry zone experiences heavy rains during the north-east monsoon, with the annual rainfall averaging 1,000 millimetres to 1,900 millimetres. The region classified as the dry zone is mainly lowland while the other two zones are further sub-divided on the basis of altitude.

From ancient times, the river basins have been the attraction for land settlement and agricultural production. The major rivers like Mahaweli, Walawe, Kirindi Oya, Rantambe Oya, Gal Oya, etc have been tapped already for irrigation development and hydro-power generation. There are 10,251 tanks or irrigation reservoirs in the island with a command area of 333,952 acres and estimated 282,862 farm families supported by those (Table 11). Similarly, there are estimated 12,942 anicuts with a command area of 242,776 acres supporting 334,985 farm families.

Diverse agro-ecological conditions in Sri Lanka, support farming of many varieties of crops with marked specialisation of production on the basis of agro-ecological zones. For instance, paddy is grown mainly in the dry zone under irrigated conditions while plantation crops are grown under rain fed conditions in the wet zone⁷. Agriculture uses about 80 percent of available irrigation water.

1.2.1 Transformation of Land Use Systems in the Island

The pre-historic people of Sri Lanka did not change the land, water and forest resources as they sustained themselves mainly by hunting, fishing and gathering foods. However, migrants from North India brought iron technology into the island in the 5th century BC which they

⁷ Agriculture production is further differentiated by 24 agro-ecological niches contained in major agro-ecological regions.

used to clear large areas of dry zone forest for settled agriculture. By the 13th century AD, the population had been moving from the dry zone towards wet zone lowlands and the highlands up to a height of about 3,000 feet, and in the Jaffna peninsula and Vanni region which lie immediately below⁸.

When the British started plantation agriculture in the latter part of the 19th century, the land use system in the island considerably changed as the large areas of forests were cleared off for plantation establishment. This process continued into first few decades of the 20th century. After independence, land use system further changed and the agricultural land area expanded with a notable move towards crops diversification. This too caused rapid decline of the forest area. Causes of change in land use from forest to agriculture after independence of the country are many. The major ones include the establishment of large scale irrigation and land settlement projects in the dry zone causing deforestation as well as clearance of forest areas and reserve forests by people to cultivate crops on slash-and-burn farming basis. Illicit felling of forest trees for timber and fuel-wood as well as for illegal settlement have also contributed to change in the forest cover. Besides the deforestation, the forest denudation had become a major problem by the 1980s.

By early 1960s, the forest cover accounted for almost half of the country's land area. It was estimated at less than 40 percent by 1987. By now, the forest area in the country has dwindled to about 23 percent of the total land area. However, only about 0.2 percent and 3.1 percent of the forests were characterized as of high and intermediate yield respectively. In contrast, the total cultivated land area has increased from 168,461 hectares in 1830 to 1,885,287 hectares by 1962 and thereafter the extent has been reduced to 1,859,494 hectares by 2002 (Table 5). A steady decline of agricultural land after Agricultural Census of 1982 is due to abandoning of agricultural land and using agricultural land for alternative purposes.

Land Use Changes in the Plantation Crops Sector

Tea, rubber and coconut are classified as permanent crops. Of the total area cultivated in 1962, 1,068,337 hectares (67 percent) were cultivated with permanent crops. The area under permanent crops reduced to 914,983 hectares or 49 percent of all land under agriculture by 2002. The total cultivated area of tea in 1982 was 207,147 hectares and this increased to 210,622 hectares by 2002 and 210,622 hectares by 2010 (Table 106). This increase is mainly due to tea plantings in the smallholder farming sector. Between the Agricultural Census of 1982 to 2002, the area under rubber declined from 171,154 to 114,678 hectares while it increased to 126,000 hectares by 2010. During the same period, the cultivated extent of coconut declined from 416,250 hectares to 394,836 hectares.

The long-term changes in the extent under the plantation crops have been attributed to several factors. One major factor is the land degradation and declining soil fertility. The area under both rubber and coconut has been reduced by clearance of those crops to allow residential use. However, the reduction of the area under coconut has been partially compensated for by an increase of coconut cultivation on homesteads like in the settlement schemes of the dry zone. Area under rubber has also declined due to abandonment of land caused by land degradation⁹.

⁸ For an account of this process and impacts, see Siriweera, W.I., (1983a). A Study of Economic History of Pre-Modern Sri Lanka, New Delhi: Vikas and Siriweera, W.I., (1983b). Settlement Patterns and Climatic Fluctuation in Sri Lanka in Yoshino, M.M., Kayane, I. and Bandara, C.M.M. (eds.), Climate, Water and Agriculture in Sri Lanka, Tsukuba, Institute of Geoscience.

⁹ Peiris (2006) notes that by the 20th century the onset of processes of 'desertification' of formerly arable land on account of excessive soil erosion was becoming evident in the drier parts of the highlands. Peiris also notes that from about the mid-20th century, thousands of acres of rubber at an elevation of over 300 m were being abandoned and left as "uncultivable waste" land.

In contrast, the share of land under temporary crops has increased from 68,005 hectares (4 percent) to 147,452 hectares (8 percent) of the total land under agriculture between 1962 and 2002 due to extended assistance by the government¹⁰. The food crops that received assistance in this manner initially included potato, red onion, big onion and chillies. Vegetable production registered sharp increases over the period from 1980 to 1990, but slowed down drastically thereafter¹¹. The figures in the table 103 show the tendency towards the withdrawal of land from agriculture under most crop categories. The observed situation is in spite of the slow increase in lands under roads and buildings, etc.

Land Use Changes in the Paddy Sub-Sector

Average sown extent of paddy (*maha* and *yala* together) increased from 485,000 hectares in 1952/56 to 978,000 hectares in 2007/2010 (Table 16)¹². Paddy now represents about 27 percent of the total cultivated area and except for 1973; the area under asweddumized paddy has remained around 28 percent of the total land area under agriculture. It should be noted that this situation has prevailed in spite of the fact that a significant extent of asweddumized paddy lands has been added to the existing lot in the process of implementation of irrigated land settlement in the dry zone (ILSDZ).

The cultivated area of paddy under major irrigation schemes increased from 194,084 hectares in 1960/63 to 525,772 hectares by 2007/2010 (Table 15)¹³. For the same period, the area under minor irrigation increased from 164,063 hectares to 243,238 hectares whilst the area under rain fed cultivation decreased from 252,783 hectares to 252,097 hectares. The area under paddy cultivation under different forms of irrigation systems increased from 610,930 hectares to 1,021,213 hectares. The proportion of agricultural land under paddy however, declined by one percent between 1962 and 2002. Marginal paddy land taken out of paddy production altogether might explain the latter phenomenon.

The importance of major irrigation schemes is that these can provide year round irrigation, increase the cropping intensity and reduce crop damages due to water shortages. Especially the irrigation improves the relation between sown area and harvested area by reducing crop damages. As shown in table 18, the total average extent harvested was 588,544 hectares for the period between 1960 and 1963. This increased to 957,793 hectares between 2007 and 2010 showing an increase of 369,249 hectares. This could be attributed to reduction in crop damages due to droughts with increase of assured irrigation water, fertilizer subsidy policy as well as increase in the area under cultivation. Between 1960-1963 and 2007-2010 the average area harvested under the major irrigation increased from 189,416 to 512,746 hectares and the area under minor irrigation from 159,300 to 225,313 hectares as is shown by data in table 18. In contrast, the area harvested under rain fed paddy declined from 239,829 to 219,728 hectares during the corresponding period. The data show a significant transformation in paddy sector from rain fed farming into irrigated farming.

¹⁰ The government's patronage was extended to non-paddy crops as an import substitution agricultural policy from early 1970s and this perhaps reflects the impact of change in policy. The policy was seen as a means of saving foreign exchange, increasing agricultural employment and income.

¹¹ The growth in OFC sector in general has been important for increasing farm household incomes, in particular for those farmers growing import substitution crops like potatoes and onions.

¹² In Sri Lanka the paddy farming related statistics are presented under a variety of classifications. Asweddumized area is the area prepared for paddy cultivation. However, the sown area or cultivated area in a season for which the data available is usually less than asweddumized area. Similarly, the harvested area is smaller than sown area. The latter is because the total asweddumized area is not cultivated fully either in *maha* or *yala* season in an year and the harvested area is often smaller than the sown area due mainly to crop failures. Therefore, an appropriate indicator representative of the area under paddy production would be the harvested area.

¹³ It could be noted that there has been a little growth of paddy area under major irrigation schemes after 1999-2003.

Change in Land Use under OFCs

Between the periods 1960-1963 and 2004-2006, the land use pattern in the smallholder farming sector has seen many changes. The area under crops like maize, cowpea, green gram, beans, cabbage, tomato and potato and the area under fruits like pineapple, papaw, mango and plantains increased. The area under many other crops in the SFS decreased between 1960 and 2006, though in different percentages (Table 103).

Change in Land Use under Slash-and-Burn (*Chena*) Farming Practices

The *chena* farming system has considerably changed with the reduction of the area cultivated under the system and reduction of fallow period¹⁴. What prevails of this traditional land use practice at present is the farming of seasonal crops on uplands with rain water. A major factor influencing the decline of *chena* farming system in Sri Lanka, as elsewhere, is the shortage of land to follow the typical fallow cycle. Another factor is the conversion of large areas of land formerly used for *chena* farming into more permanent agriculture like irrigated paddy and stable upland farming¹⁵.

Land Use Change in the Home Garden Sub-Sector

A major aspect of agricultural land use system in Sri Lanka is the cultivation of food crops and timber trees on home gardens. The Census of Agriculture in 1982 recorded the area under home gardens at 367,581 hectares (882,194 acres) which was about a quarter of the total operated area in SFS. Out of the 1.3 million holdings reported in the Census of Agriculture (2002), 997,135 holdings were home gardens. Except in Mannar, Vavuniya, Mullaitivu, Batticaloa, Ampara, Trincomalee, Kurunegala and Puttalam districts, in all other districts more than one fifth of the agricultural land under smallholding sector was reported as home gardens by 2002 Census. In the case of Mannar, Vavuniya and Mullaitivu, the extent under home gardens was less than 10 percent of the area under smallholding sector in each district. In some of the wet zone districts, higher share of the area under home gardens is explained by population pressure on land. When the district-wise distribution of home gardens was considered, Colombo, Gampaha and Jaffna were the three districts which reported had only home gardens in more than 50 percent of the holdings in the smallholding sector. Area under home gardens is likely to further shrink with pressure on land for housing. The fragmentation of agricultural lands adds to reduction of home gardens as they are in turn used for housing and other purposes.

Overall Shifts in Land Use under Different Crops

The data provided in this volume also show the way in which the land use under different crop regimes transformed after independence. Land use in the island is differentiated into two major categories as lowlands and uplands on the basis of water availability for farming. The paddy is grown on lowlands with irrigation as well as with rain water during the main rainy seasons called *maha* and *yala*.¹⁶ Other food crops, plantation crops and home garden

¹⁴ *Chena* farming has been a dominant form of agricultural land use in Sri Lanka from ancient time as crops grown on uplands under rain-fed conditions constituted a major part of the diet of its people. The practice of *chena* farming in the olden days was possible when the land was abundant under low population density conditions.

¹⁵ Such major agricultural development programmes like the Irrigated Land Settlement in the dry zone have converted extensive tracts of land formerly used as *chenas* for irrigated paddy farming or establishing settled farming systems. A typical example in this regard would be Accelerated Mahaweli Development Programme. For detail information of ILSDZ and AMDP, please refer Dhanawardana Gamage (forthcoming) Smallholder Farming Sector in Sri Lanka: Agricultural and Agrarian Transformation.

¹⁶ Two monsoons dominate the precipitation pattern in the island with markedly seasonal rain distribution in most areas. Two monsoons bring much of the rains into the island in varying intensity over time and the space. Rainfall occur during the south-west monsoon (May to August) and the north-east monsoon (November to January). *Maha* is the major rain season and *Yala* is the minor season.

crops are grown on uplands or on land that are not gravity irrigated. Seasonal crop cultivation largely coincides with rain pattern as irrigation systems too heavily depend on rains to replenish reservoirs. In the more recent past, well irrigation has been used to cultivate a few high value cash crops on uplands and lowlands to meet the off-season demand.

As already noted, there has been a tendency to increase the area under agriculture over the years. For example, agricultural land area increased between 1962 and 1973 from 1,885,287 to 2,032,670 hectares¹⁷. At the time of 2002 Agriculture Census, the area used for crop production was 1,859,494 hectares representing about 30 percent of the total land mass of the country (Table 5). Starting from 1970s, the area of land under different crops shifted over the last six decades as shown by inter-census estimates. Of the total extent under agriculture in the present millennium, tea occupied 211,000 hectares, rubber 115,000 hectares, coconut 395,000 hectares and paddy 750,000 hectares¹⁸. Following section examines how the land under agriculture is being allocated for different crops during the sixty year period after independence.

Most prominent aspect of transformation of land use between crops over the past few decades is the increase of area cultivated with certain OFCs. The state support systems like import controls, research and extension for selected crops have contributed to the increase in the area under import substitution crops such as maize, cowpea, green gram, beans, cabbage, tomato and potato (Table 103)¹⁹. The area under fruits and vegetables too has significantly increased.

There has been a tendency to grow potato from the British colonial period and the area under potato has grown significantly over the past six decades²⁰. As depicted in table 103, the extent under varieties of OFCs has alternated over time. Most notable fact is the alternation of the extent under non-paddy grain varieties. For instance, the area under maize has been increased by 38 percent, cowpea by 121 percent, green gram by 112 percent. This is in spite of the fact that the importance of the rice in the food basket, especially among rural agricultural communities has increased over the years.

On the other hand, the area under many other grain crop varieties has reduced in different degrees (Table 103). The grain crops of which the area under cultivation has been reduced are kurakkan (75 percent) sesame (29 percent), groundnut (18 percent), sorghum (73 percent), *meneri* (93 percent), soya beans (33 percent) and black gram (32 percent). Similarly, the area under crops such as red onion (28 percent), manioc (69 percent), sweet potato (64 percent), chillies (49 percent), turmeric (64 percent) and mustard (87 percent) have also decreased.

The area under group of crops known as other export crops (OECs) consisting of cinnamon, pepper, cloves, cardamom, nutmeg and maize has also increased after 1972-1976 (Tables

¹⁷ During the first half of the 1970s there has been a food shortage in the country and the then government placed much emphasis on cultivating almost all arable land, especially uplands at the time of which the results might be reflected in the figure of 1973.

¹⁸ Peiris (2006: 57) has noted that "The so called asweddumized or wet paddy land covers an aggregate extent of about 800,000 hectares (2 million acres) and thus constitute the single largest land use category in Sri Lanka. However, even during the main season known as *maha* paddy is cultivated on about 600,000 ha."

¹⁹ This change could be largely attributable to government intervention. In 1971, the government placed restrictions on imports of certain OFCs leading to gaining importance in production of a variety of upland crops. However, after the policy reforms in the late 1970s, potato, chilli, etc imports were largely deregulated. Population growth increasing the demand for such crops and change in consumer preferences also might have had a part to play in this transformation. Dunham (1992; p.6) noted that there was evidence of a shift in consumer preference away from kurakkan and starchy foods such as manioc and other yams towards rice and bread with corresponding decline in the per capita availability of such crops.

²⁰ By 1985, a total of 88,950,000 metric tons of potato was produced in the country representing 100 percent of the total consumed. The production fluctuated over the years, except in 1996 in which year the production increased to 100,760,000 metric tons. In 2005, the domestic production was 79,450,000 accounting for 66 percent of the potatoes consumed in the country. Per capita availability of potato has increased after 1985 from 3.98 kilogram an year to 4.93 kilogram an year.

from 115 to 119). There has been a notable increase in the area under cinnamon and pepper though the area under cocoa has declined. Area under cinnamon has increased from 21,333 hectares during 1972-1976 to 28,267 hectares by 2008-2010. This is attributable to the efforts by the government in providing assistance to increase the diversification of agricultural export²¹.

Area under cocoa decreased from 9,041 hectares from 1972-1976 to 2,720 hectares by 2008-2010. Cardamom is another crop of which the extent under production and exports declined during the period above. Area under cardamom decreased from 3,903 hectares to 1,452 hectares. There has been a large increase in area under pepper from 6,145 hectares to 36,448 hectares.

Though sugarcane cultivation has increased from 2,110 hectares in 1968 to 13,563 hectares in 1998²², it has decreased to 7,237 hectares in 2010. Several new sugar production units had been established in the 1980s and the sugar production has taken place despite the problems of the state-run sugar mills and their associated sugar lands in the Eastern Province, which have been disrupted by civil strife. Sugar output increased in the early 1990s, though domestic production still provided only a small portion of the consumer demand.

It appears that there are many factors influencing the allocation of scarce land and water resources amongst crops. These include the agro-climatic factors, market demand, crop diseases and the ability of local produces to compete with cheap imports. Except for onion and potato which have become common in the diet of the Sri Lankans, the consumption of crops such as manioc and sweet potato probably has declined. Halving of the area under such crops implies a decline in consumption.

1.3 Growing Predominance of Smallholder Farming Sector and Structuring of Size of Agricultural Land Holdings

Though this volume is concerned on transformation of agriculture, a related factor is structural alteration within the sector which has implications for effective transformation of SFS for crop diversification, increasing productivity and farm household incomes. Most visible aspect in this regard is fragmentation of land holdings in SFS. The number of agricultural holdings increased from 1.8 million to 3.3 million between Agricultural Censuses of 1982 and 2002. Increased number of holdings though with small area of new land adding up to existing land implies that there has been a trend towards decreasing the size of land holdings in SFS. For instance, of the 3.3 million agricultural holdings reported in Agricultural Census of 2002, 45 percent were less than 40 perches (Figure 56). The agriculture produce of such smallholdings was reported to be used mainly for home consumption rather than for sale. Around 55 percent of the land was above 40 perches in extent and such land plots were said to be used mainly for agricultural production for sale. The tenure structure of the plantation estates has seen a drastic change when those were transferred to state ownership from the private/company ownership after land reforms of 1972. Subsequently, some lands vested in the state in this manner were re-distributed as smallholdings.

Though embryonic, there are signs of emergence of relatively large individual private farms. These are relatively large-scale family farms of around twenty hectares. It appears that these few relatively large-scale farms are operated by private persons to realize the benefits of liberalization of the economy and increasing demand for commodities though they have not yet become a leading sector in agricultural production system in the country. There are also a few agri-business farms which provide services to small farmers with supply of seedlings along with agricultural inputs like fertilizers and agro-chemicals. The latter also supply the surplus produced on farms to supermarkets, though agri-business sector is not yet dominant

²¹ The government institutions such as the Department of Export Agriculture promotes coffee, cocoa, citronella, *kithul*, ginger, turmeric, betel and arecanut to diversify the export agriculture base of the country.

²² Sugarcane has been grown in Sri Lanka for more than a century on small scale supporting the cottage industry of producing jaggery - a sugar substitute. Several new sugar production units have been established in the 1980's though Sri Lanka is far away from self sufficiency in sugar.

in supplying agricultural products in the wider market. Some agri-business firms also mobilize farmers for production of crops like maize with an assured demand.

The workforce in agriculture declined from 41.5 percent in 1993 to 33.6 percent by 2003 and further to 30.3 percent by 2005. In the estate sector where agriculture labour force is also engaged as waged employees, workforce has declined over the years. In this sense, the agriculture workforce has shrunk over the years though absolute number engaged in the sector has increased together with growth in population. The largest agricultural population in Sri Lanka is located in SFS in which the paddy farming is the mainstay.

1.4 Transformation in Orientation of Production

Since the beginning of the 20th century, agriculture has been dominated by four principal crops -- rice, tea, rubber and coconut. Mostly tea and rubber were exported while almost all paddy, vegetable and other food crops cultivated on a smallholder farming basis were for domestic use. Coconut has become a major item in the diet of Sri Lankans and was sold largely in the domestic market with the surplus processed and exported. The importance of OFCs in terms of area under cultivation and production increased starting from the 1970s, but no single crop appeared to have challenged the four traditional mainstays.

One notable feature in agricultural transformation in SFS is that those crops that had been grown traditionally for subsistence or own consumption like maize and sweet potato are now being produced for the market. For instance, in more recent years, the area under maize has increased in order to meet the increasing demand for poultry feed industry. As such, the average area under maize has expanded from 20,230 hectares from 1970-1973 to 48,567 hectares by 2007/2010 as is shown by data in Table 28.²³ The area under soya beans has also shown a sharp increase -- from about 650 hectares in 2001 to about 3,000 hectares in 2005. Big onion is another crop increasing in importance in terms of increasing area under production and supplying to domestic market. Besides the above crops, mainly oriented for the market, almost all OFCs are cultivated now for the market than for home consumption as even the surplus of crops produced on minuscule home gardens are being offered in the local market for sale.

1.5 Crop Specialization by Area

Another notable feature of agricultural transformation in SFS is a trend towards area specialization of crops²⁴. Number of exotic vegetables like beans, carrots, cabbages, beetroot, leeks, etc were grown in the ecologically favourable niches in the central hill region during the British colonial period. Area under such exotic vegetables has expanded into other areas after the independence due to increasing demand as well as due to the efforts of the Department of Agriculture through research and extension. Prior to the outbreak of the ethnic crisis in 1983, chillies, onion, potato and tobacco were grown successfully under irrigated conditions in the Jaffna peninsula. Most OECs have also been largely concentrated in wetter ecological niches like in hill areas and low-country wet zone. Productivity as well as export volumes taken together of the latter crops have increased over the years, but there is scope for value addition.

Data provided in tables in the section under the transformation of land use and production in the other food crops sector show that the area under many of the non-traditional cash crop cultivation has been confined to certain geographic pockets like the area under the Mahaweli project, the immediate area served by the Dambulla Dedicated Economic Centre in the Matale

²³ Increases in area under maize production and supplying poultry feed industry indicate the potential linkages agriculture has for industry.

²⁴ Benefits of area specialization of crops are many. The major ones include ability to provide such services as extension, specialized inputs and market. Crops could also be concentrated in most favourable agro-ecological regions.

district, etc. This shows an emerging movement towards crop specialization though in a slow process. This is a welcome trend and should be encouraged.

The area under paddy in different districts has changed drastically from 1962 to 2002. The data show that there is a tendency to withdraw paddy from wet zone districts like Colombo, Gampaha, Kalutara, Kandy, Matale, Nuwara Eliya, Galle, Matara, Rathnapura and Kegalle. In the dry zone, districts such as Jaffna, Mannar, Vavuniya, Puttalam and Badulla also have experienced a decline in area under paddy. The rest of the districts experienced an increase in the area under paddy. The district that witnessed a dramatic increase in the area under paddy was Anuradhapura. The latter increased its extent under paddy from 34,437 hectares in 1962 to 60,497 hectares by 2002. This phenomenon could largely be attributed to the implementation of Accelerated Mahaweli Development Programme (AMDP). In the Batticaloa and Ampara districts too, the paddy area has increased significantly.

1.6 Crop Diversification

Crop diversification involves diversification from a dominant mono crop to another crop or series of crops for a certain period or forever²⁵. The tables in this volume show that there are continuities and discontinuities in crop diversification. The overall scenario, however, is some tendency towards diversification of crops including those on paddy lands.

Crop diversification started due to government efforts as well as farmer efforts voluntarily attempting to diversify crops to increase farm family incomes. A few successful efforts by the government agencies in crop diversification are reported, though there is little attempt by research to analyse the processes and outcome of crop diversification.²⁶ Amongst the more illustrative examples of crop diversification include the left bank of the Uda Walawe Irrigation System that started providing irrigation to undeveloped rain fed areas for non-paddy crop cultivation recently.²⁷ About 35 percent of the irrigated area under the Uda Walawe Irrigation Scheme now has non-rice field crops like banana and papaya. Cultivation of such crops under the irrigated conditions in the left bank has been much instrumental in increasing farmer incomes in comparison to growing paddy. Another area with a success story of crop diversification is some sections under the Dambulla Divisional Secretarial Division (DDSD) of the Matale district. The big onion cultivation in the DDSD has become an economic success and has spread into other areas subsequently. In the Mahaweli areas too other crops are grown on paddy lands during water short *yala* season with economic success and saving irrigation water.

1.7 Technology Transformation

Increased use of irrigation is a form of agriculture transformation that has helped the farmers to cultivate land more than once a year and increase productivity. Irrigation has helped most of the land area under paddy to cultivate twice a year enhancing the land use or cropping intensity. With increased access to irrigation water, double-cropping of paddy land with OFCs has also been expanded. Depending on water availability, the paddy cropping intensity ranges from over 150 percent in the major irrigation systems to less than 100 percent in the rain fed areas. In addition to cultivation of paddy under gravity irrigation schemes, there has also been an increase in the use of agro-wells to irrigate OFCs in the dry zone with increases

²⁵ Crop diversification is adopted for soil management, pest management and efficient use of the scarce resources like land and irrigation water or to shift to high value crops for increasing income from a given extent of land.

²⁶ Indeed, there is a need for comprehensive analysis of agrarian transformation in the island.

²⁷ A 3,400 hectare reservoir holds water for the Uda Walawe Irrigation System that irrigates large areas of the dry zone in the Ruhuna river system basin. Whilst the right bank of the Uda Walawe Irrigation Scheme had been developed sometime back for paddy cultivation on smallholder basis and sugarcane farming on plantation basis, the left bank was developed more recently to provide water for non-paddy crops leading to crop diversification under the scheme. Crop diversification in the left bank is one of the main strategies adopted by the Mahaweli management in order to save water and increase the farmer incomes.

in off-season availability of such crops. This trend is associated with many factors like financial support schemes introduced by the government as well as non-governmental organizations to construct agro-wells and to purchase water pumps.

Technology adopted in paddy farming has undergone significant changes in terms of land preparation, seeds used and planting methods applied, application of inputs like fertilizers and pest and diseases control chemicals. However, most OFCs are grown still under traditional rain fed upland farming basis though the slash-and-burn (*chena*) practice of farmers has declined mainly due to non availability of forest land and government regulation controlling clearing of forests for agriculture. Instead, the farmers use upland on stable basis and use fertilizer to replenish soils. Change in production practices applied in OFCs includes higher use of improved seedling varieties that are largely marketed by the private sector. Some farmers also use agro-wells to irrigate OFCs farmed on uplands. The general tendency in OFC cultivation has been to grow high value crops on established upland farms with pumped irrigation, though only a small number of farmers yet use pumped irrigation. Hikes in oil prices in recent years seem to pose an impasse to growth of pump irrigation. Cultivation of crops like red onions and certain vegetables that use pumped water is being affected mostly.

Increased use of machinery in SFS is noted. By 2002, a total of 58,693 two wheel tractors, 15,088 four wheel tractors, 155,379 manually operated sprayers, 9,759 power operated sprayers, 13,393 threshers, 24,782 winnowing fans and 84,967 water pumps were reported. This shift could be observed irrespective of the size class of the operational land holdings (Table 125) and geographical space as is shown by data in table 126. The data show that the use of machinery has widely spread in almost all the districts. However, the prevalence of machinery is higher in the districts where paddy farming predominates like in Hambantota, Ampara, Kurunegala, Anuradhapura and Polonnaruwa.

The data for previous years are not available on a regular basis for a meaningful comparison of the usage of machinery in SFS. However, circumstantial evidence suggests that there has been a surge in the use of two wheel tractors, four wheel tractors, sprayers, threshing machines, winnowing fans and water pumps. Most equipment and machines have a labour displacement impact though these reduce the problem associated with increasing water supply problems due to lengthening of the cultivation season resulting from inadequate labour supplies during land preparation and much of the drudgery associated with paddy farming.

Much of the technology transformation in agriculture in terms of mechanization of production could be seen in relation to paddy sub-sector compared to other food crop sub-sectors. The change has been generally towards the use of machineries (tractors, water pumps and spray machines) and use of market supplied inputs like seeds, fertilizers, agro-chemicals. Other crop farming uses fewer types of machinery except the water pumps and spray machines²⁸. The increased use of water pumps is associated with many factors like the spread of agro-wells, increased availability of machinery in the market, duty concessions, increasing demand for food items and greater protection provided for such crops like potato, big onion and red onion.²⁹ Increased use in water pumps has been useful in expanding the area used for production of OFCs and extending the cultivation into the dry-season to produce for the off-season market.

With increasing use of machinery in land preparation and threshing in paddy farming, use of animal draught power in paddy production has been reduced over the years. This situation remained throughout the 1990s with 50 percent of the land preparation being done with

²⁸ After the liberalization of the economy in 1977, there has been a phenomenal increase in use of water pumps for lifting water for irrigating OFCs.

²⁹ There are descriptive accounts of how mechanized water pumps started to spread in Jaffna making it possible to expand cash crop production by improving the lifting water more efficiently and locally made devices like sootherum outmoded.

hand tools and animal draught power³⁰. It is evident that the traditional role of the draught buffalo in paddy cultivation has been gradually eroded by tractor power in the last 30 years. Meanwhile, there has been a slow decline in the buffalo population in the country during the 1960s.

By mid 1960s, a number of newly improved seed varieties were introduced to paddy farmers with a package of extension and incentives to adopt those as the productivity of new seedlings depended on assured irrigation and application of fertilizer³¹. Of the total of 845,675 hectares sown with paddy during 1979-83, 612,112 hectares (72 percent) was cultivated with new improved seed varieties. However, 108,084 hectares were cultivated with traditional varieties during the same period. This could have been due to reasons like growing paddy for home consumption on minuscule plots of lands, special market niches such farmers serve and ecological factors influencing the ability to grow new varieties as well as due to sheer lack of access to improved new or old seedling varieties³². The situation depicted above further changed by 2004-2006. By this time, almost 99 percent of the area sown (863,554 hectares out of 872,650 hectares) was cultivated with new improved varieties.

Therefore, it seems that as far as the adoption of new varieties of paddy seeds are concerned, there has been a satisfactory progress. However, the issue is that the yields are significantly below the technical potential of the seeds. Probably the factors influencing the situation are lack of certified or good quality seeds and insufficient management practices like fertilizer application and diseases control.

By mid 1980s, 91 percent of the cultivated paddy land area had been applied with chemical fertilizer only whilst the rate improved over the years progressively (Table 123). Along with this trend, the percentage of average area using only organic fertilizer also reduced from 1.78% (15,309 hectares) in 1985-88 to 0.73% (6,975 hectares) by 2007-2009. On the other hand, the average area applied with both chemical and organic fertilizer increased from 29,230 hectares (3.41%) to 238,874 hectares (25.17%) between 1985-88 and 2007-2009. Similarly, there has been much progress in methods of land preparation (Table 120), method of sowing (Table 122) and method of weeding (Table 124).

Increases in both chemical and organic fertilizer use imply a number of factors. The major ones are inclination of farmers to use the land more sustainably and increasing productivity of land. The orientation by the farmers to use fertilizer is also induced by extension efforts of the Department of Agriculture over the years.

1.8 Productivity Performance

In considering the overall trends in productivity from the time of independence, most crops have experienced productivity increases³³. Most discernible of productivity increases is noted for paddy, brinjal, beans, cabbage, turmeric, tomato, maize and *kurakkan* (finger millets). Increase in yields is probably due to the use of hybrid seeds and improved management practices. However, the yields of most crops in the short run have fluctuated due to drastic

³⁰ Reports published by the Agrarian Research and Training Institute (1980 and 1982) and the Department of Agriculture (1987) showed that animal power was used to cultivate about one third of the cultivable land. A large scale survey in 16 districts representing all agro-ecological zones of the country (de Silva *et al.*, 1985) showed that 92 percent of the buffalo owners used their animals for land preparation in agriculture. The time taken to plough one acre of land with one pair of buffaloes ranged from 2 – 4 days. Puddling required twice as much time than ploughing. Overall, each buffalo was used for draught over a period of only 52 days per year.

³¹ One would consider that newly developed paddy seedlings had a revolutionizing impact on paddy agriculture in Sri Lanka not only by increasing productivity but also by changing the entire orientation of the farmer from producing for own consumption to market for sale.

³² Gamage Dhanawardana (1996) notes that in the Kothmale Divisional Secretariat Division in the Nuwara Eliya district of the Central Province, the farmers had little access to improved paddy seed varieties that are suitable for its ecological niche after 30 years of introduction of high yielding varieties.

³³ Despite some increases in productivity, the rice output was disappointing in the 1960s and early 1970s.

weather changes like heavy rainfalls and droughts damaging the crops, as well as slacked management practices due to drops in market prices. The average paddy yields have increased over the years alike during the major season as well as minor reason. In effect, the average paddy productivity has nearly trebled from 1,560 kilograms to 4,369 kilograms, a hectare between 1952-56 and 2007-2010 (Table 20). This gain is due to the increased area under irrigation by assuring water for production and improved technology adopted in production.

Productivity increases are also noted for other food crops (Tables 104). Productivity in terms of kilograms per hectare from 1970-1973 to 2004-2006 increased for maize from 793.13 to 1485.59, for cowpea from 634.28 to 961.26, for green gram from 576.69 to 919.51, for gingerly from 553.50 to 634, for groundnuts from 227.91 to 822.91, for sorghum from 626.13 to 836.50, for *meneri* from 632.82 to 755.56, for soya beans from 851.44 to 1,621.22, for black gram 921.34 to 1090.06, for red onion from 5,710.13 to 9380. Data show that even such traditional crops like *kurakkan* has performed relatively well in terms of productivity increases.

In spite of the relatively better productivity performance of crops over the years, Sri Lanka's yields remained well below their technical potential. The poor performance of paddy in Sri Lanka in realizing technical potential could be attributed to a few factors. A major one is non availability of perennial sources of irrigation water to a significant sector of farmers. Though the area under irrigation has increased over the years, many areas in the island lack an assured water supply. This has affected the productivity potential of new seeds even in the irrigated areas in the dry zone. Besides the water availability, productivity is also influenced by flooding and prolonged dry period discouraging the farmers making full investment on the farm³⁴. In the wet zone, flooding and water logging of land is a major problem affecting the application of productivity improving inputs like fertilizer.

1.9 Agricultural Gross Outputs

Both the total agricultural output and the composition of the output have been significant over time. Changes have also taken place in the share of outputs between SFS and estate sector in production of plantation crops. The share of total plantation crops by large-scale plantation estates has reduced. The share of the plantation sub-sector's contribution to total GDP and export income too has declined over the years. On the whole, the share of the large land holdings like the plantation estates has reduced, while the share of family operated (smallholder) plots has been growing.

Tea production declined from a high of 220 million kilograms in 1969 to 211 million kilograms in 1986³⁵. This is in spite of the increase of the area under tea smallholdings over the years and despite relatively higher levels of productivity in relation to estate sub-sector. Although rubber yields improved greatly in the first twenty years after independence, both the output and area planted with rubber has declined in the 1980s. Coconut output fluctuated with drastic change of weather and management practices adopted by the farmers like the fertilizer application³⁶. For instance, due to a drought in 1983, the production suffered a setback during 1984 and fell to 1.9 billion nuts, this being its lowest level since 1977. Another

³⁴ The impact of drastic changes in weather has been reported in the 1980s.

³⁵ Tea industry in the 1970s and early 1980s affected due to low productivity and lowered prices. Tea plants in Sri Lanka are old and therefore the productivity is low. In 1987 the average age of trees was around sixty years and only 15 percent of the total area under tea had been replanted with high-yielding varieties. Replanting had been neglected in the 1960s and 1970s due to low tea prices and high export duties making reinvestment difficult. Between 1972 and 1974, the growing risk of nationalization also might have discouraged investment on large tea estates. Land reforms implemented in the 1970s affected mainly the tea grown on a plantation scale.

³⁶ Though conventionally classified as an export crop, a major portion of the coconut produced is sold in the domestic market and the rest is exported as copra, coconut oil, and desiccated coconut. Coconut is also used for multiple purposes like the trunk for housing construction, leaves for thatching and siding, coir in making ropes and flower sapping for making alcoholic beverages like toddy and arrack.

hazard the coconut production faces is rapid price fluctuation³⁷. The 1987 drought has reduced yearly coconut production by at least 20 percent in that year and the following year. Like tea and rubber, the coconut sector suffered from inadequate re-planting.

The increase in paddy production is one of the most important changes in agricultural production after independence³⁸. Despite some increases in productivity, rice output was disappointing in the 1960s and early 1970s whilst much of the improvement came in the late 1970s and 1980s as the data provided in this volume indicate. Greater incentives to farmers after 1977 contributed to increases in production. Both the area under cultivation and the yield increased steadily between 1980 and 1985, when the annual output reached 2.7 million tons, compared to an annual output of around 1.4 million tons in the early 1970s. In 1986 unfavourable weather and security situation led to a slight decline in production. As the land extent under different crops fluctuated, production of many crops like *kurakkan*, sesame, black gram, and manioc had reduced from 1970s.

Production of OECs changed from 1972-1976 to 2008-2010. During the period, an average production of cocoa declined from 13,393 metric tons to 1,731 metric tons and export quantity from 1,181 metric tons to 62 metric tons, while there has been a sharp increase in the average quantity of export as 601 metric tons by 2008-2010 (Table 115). Cardamom production declined progressively from 5,227 metric tons to 502 metric tons (Table 117). An average production of cinnamon decreased during the period from 16,422 metric tons to 14,815 metric tons, while there has been a steady increase in exported quantity of cinnamon (Table 116). On the other hand, an average production of pepper increased from 14,464 metric tons to 25,466 metric tons, while citronella production has seized (Tables 118 and 119). Pepper also saw a significant increase in exports; from 520 metric tons to 8,413 metric tons. Citronella production had declined from 1972-1976 by 1982-86 and seized the production entirely by 1987-1991.

There has been a general tendency of declining livestock numbers except poultry (Table 128). Between 1970 and 2010, the cattle population reduced from 1,596,000 to 1,169,670. A peak in cattle population was noted in 1987 when the number reporting increased to 1,807,000. There has been a sharp decline in the number of cattle between the two years from 2001 to 2002 by 55,000. The buffalo population declined from 736,000 to 422,450 from 1970 to 2010, recording a reduction of 93,000 heads (Table 132). Similar to cattle, a peak in buffalo numbers was recorded in 1987 with 1,007,000 heads. This particular pattern of increase cannot be explained. Like the cattle and buffalo, the goat population declined from 558,000 to 381,375, pigs from 108,000 to 83,785 and ducks from 30,000 to 13,000, during the period under consideration. Sheep population declined from 27,000 in 1970 to 12,000 by 2002. The data show that there has been a steady increase in poultry population from 6,856,000 to 14,018,320 during 1970 to 2010 (Table 132).

Poultry has been traditionally concentrated in SFS or as a backyard production system. In the recent decades, the entry of large-scale producers has boosted the growth in the poultry sector. Of all, the livestock and poultry sector has grown fast both in terms of number of animals reared as well as eggs and meat production. The growth has paved the way for Sri Lanka to become self-sufficient in eggs and poultry meat.

Total milk production grew from 108,919,068 litres in 1960 to 248,000,000 litres by 2010 (Table 133). However, Sri Lanka imports between 70 percent to 80 percent of its milk requirements in the form of milk powder. In comparison to milk production, the beef

³⁷ For instance, when production rose by 3 percent into 3 billion nuts in 1985, the average export price fell by 56 percent in 1986.

³⁸ This increase resulted from the government's efforts in both extensification of frontier of paddy lands and intensification of production by introducing new high yielding varieties, providing extension, price support systems and subsidies etc. However, in the late 1980s, the yields remained well below those of the major rice producing countries.

production from 1970 to 2002 has increased slightly. Beef production increased from 12,243 metric tons in 1960 to 13,942 metric tons by 2002. However, the mutton production decreased from 1,239 metric tons to 809 metric tons (Table 136). Pork production during the period increased from 666 metric tons to 923 metric tons. Production of eggs increased from 431 million to 1,139 million between 1970 and 2010 (Table 137).

As mentioned earlier, the numbers of all types of livestock population like the buffaloes, goats, sheep and swine have declined over the years (Table 128). A basic issue has been the disproportionate presence of the local native herd in the stock that yield either low level of milk or poor quality meat (Gamage *et al*, 2009). The sector is also affected by high costs of imported feed. The government stress the need for upgrading the existing stock and increasing the efficiency of domestic feed production. Attempts are being made to increase the production of goats for both meat and milk. Considerable attention has been given to the development of farming systems that include livestock, but such attempts have made little headway. It should be noted that considerable potential exists to develop the cattle industry as a means of increasing income of smallholder farmers (Gamage *et al*, 2009).

Between 1972 and 2010, the total fish production (offshore and deep sea fishing, coastal fishing and inland fishery production) increased from 101,712 metric tons to 381,630 metric tons. Of the 381,630 metric tons produced in 2007, only 351,390 metric tons (13.5% of total production) came from inland fisheries though this has been increased from 8,438 metric tons in 1972.

1.10 Agriculture Markets

As of the crop production system, the agriculture marketing system too has changed over the years after independence. The services of purchase and sale of farm products and distribution of agricultural inputs rested hitherto on the public sector have been transferred to the private sector though the government continue to purchase paddy at a guaranteed price and distribute fertilizer for paddy at subsidized prices. Quotas on the importation of several important foodstuffs like potato, onion, chilli, black gram, lentils and maize were recommended in the 1994 budget, though imports of onions were subsequently banned. There has also been a change in orientation of production of crops for home consumption and for local niche markets to notable focus on wider markets. Such trends have expanded the prospects for specialized local production systems -- a welcome trend. Crops grown with some local area specialization include banana, papaya, water melon, onion, maize, potato, etc³⁹.

Another notable feature of emerging marketing system is a move towards establishment of mega agricultural marketing structures as dedicated economic centres. An illustrative example in this regard is the Dambulla Dedicated Economic Centre (DDEC), located in the Dambulla town of the Matale district which spontaneously has emerged as a regional agricultural marketing centre. Later DDEC received much support from the government. Producers and vendors from different areas use DDEC as the centre of sales and purchase of agricultural commodities. Following this model, the government has established DEC's in other areas though with little success in comparison to Dambulla DEC. Dambulla DEC has many marketing channels. Some stall operators of DDEC have been provided with stalls at Welisara and Meegoda DEC's. Vendors from DDEC send their purchased supplies to these other centres for sale. Vendors of fairs and road side stalls purchase their farm produces at DDEC and distribute them through re-sale. Another important distribution channel of DDEC is *polas* or weekly fairs.

Emergence of DDEC as a specialized market centre has been instrumental in agriculture based rural development through market orientation of production, crop diversification and

³⁹ According to existing information, onion in villages at the Jaffna peninsula was grown for local market. But, in early 1960s the crop started reaching an island wide market.

product specialization. As a result of the operation of DDEC, there has been a large linear development of business in the Dambulla town area. Amongst these are banking and other financial institutions.

Another agricultural marketing system that has evolved over the years is contract farming⁴⁰. The contract is between the Agri-business Companies and individual farmers. Companies provide services to contracted farmers and in return the farmers guarantee supply to the company some or all of their produce. Agreements typically involve the provision of seed, fertilizer, pesticide, technology and production credit by the firm in the cases of contracting for crop production. The farmer has to provide a product with standard quality and quantity prescribed in the agreement. The repayment of any loans and the costs of providing these services are recovered when the produce is sold. Contract farming works successfully only when the farmers are contractually linked to input and output markets. In other words, the system works when the farmers contracted are provided with inputs, extension and technology in addition to buy back guarantee.

There has been an increasing incidence of forward contracting for poultry production. Chicks, medicine, extension, etc are provided by the firm and the produce is bought at prior agreed upon prices. The costs of inputs provided by the firm are deducted at the time of the farm produce sale. The contract methods have helped Sri Lanka to increase the poultry production and productivity while also benefiting the small-scale farmers who join such schemes. However, the high costs of supervision have been found to be a burden on contracting firm.

1.11 Conclusion and Recommendations

The agricultural transformation in Sri Lanka cannot be fully comprehended from the brief accounts this chapter provides. Therefore, one has to study the tables to understand the trajectories it has followed over the period. It is important to understand those trajectories in relation to causes, contexts and discontinuities for policy purposes. At the same time, it is important to understand the contextual factors like the policy, structural issues like land tenure, ecology and markets to understand continuities and discontinuities in agricultural transformation in the island.

In comparison to the situation before independence in February 1948, Sri Lanka's agriculture has transformed in many respects while changing its basic structure. Growth in SFS is particularly important during the period and growth in this sector has meant achievement in self-sufficiency in rice and reducing the deficit in many varieties of crop based products. Sri Lanka is far away from achievement of milk products while it depends for import of fish and meat products. New horizons in agriculture should be explored in latter areas.

The percentage of labour force employed in agriculture and contribution of agriculture to GDP has declined over the years. These trends by themselves are not problems as the economies transform the relative role of agriculture declines too. However, the problematic are relatively high incidence of poverty amongst the farming households and in the provinces agriculture is the mainstay of the economy.⁴¹ The latter aspects are not dealt in the present documents as it deals only with agricultural transformation in the country. However, the linkages agriculture has with household and provincial poverty levels have to be fully explored to find what Sri Lanka's agricultural transformation has meant for farmers in SFS and workers in the plantation sector. One of the aspects needing an in-depth study would be linkages between evolving land structures and agricultural diversification, productivity and production. Given

⁴⁰ Initiatives by private agri-business companies to secure access to smallholder produce is referred to as contract farming or out-grower schemes.

⁴¹ See for analytical view of this matter, World Bank (2007) - Poverty Assessment: Engendering Growth with Equity: Opportunities and Challenges, Report No.36568-LK, Poverty Reduction and Economic Management Sector, South Asian Region Unit.

the impasse presented by the prevailing agrarian structure, the alternative approaches to agriculture like the export potential of fruits and vegetables and foliage and flowers through the attraction of investment for storage, processing and transport need attention.

CHAPTER TWO

Agro-ecology and Agricultural Resource Systems

Table 01: The Zonal Distribution of Lands in Sri Lanka

Zone	Extent (Ha)	Percentage
Wet Zone	1,524,512	23.5
Intermediate Zone	871,182	13.3
Dry Zone	4,171,781	63.5

Source: Land Commission, 1990.

Peiris G.H. (2006), Sri Lanka Challenges of the New Millennium, Kandy Books, Colombo, Sri Lanka.

Table 02: Percentage Distribution of Total Land Area in Each Category by Zone

Land Use Category	Wet Zone Lowlands	Central Highlands	Dry Zone Lowlands	Sri Lanka
Built-up land	1.1	0.2	0.3	0.4
Agricultural land	81.6	68.5	42.6	56.9
Forest and	5.4	21.8	37.7	27.0
Range land	7.4	7.6	10.3	9.1
Wetlands and water	4.2	1.3	7.3	5.4
Barren land	0.3	0.6	1.8	1.2
All categories	100.0	100.0	100.0	100.0

Notes: (a) The data source does not indicate whether the estimated extent of 'Agricultural land' includes land under shifting cultivation.

(b) 'Range land' includes grasslands, pasture land and open scrubland

(c) The estimates are based on air-photo surveys of 1982-88

Source: Peiris G.H. (2006), Sri Lanka Challenges of the New Millennium, Kandy Books, Colombo, Sri Lanka.

Table 03: The Main "Great Soil Groups" of Sri Lanka

Soil Group	Extent (000 Ha)	Main Areas of Occurrence	Typical Terrain Association	Texture of Surface Soil	Structure of Surface Soil
Reddish Brown Earths	2,502	Dry Zone interior	Slopes on undulating terrain	Sandy loam to sandy clay loam, gravel content varies	Weak crumb or weak sub-angular blocky
Red Yellow Podzolic Soils	1,490	Wet Zone (including most of the highlands)	Slopes on hilly and mountainous terrain	Sandy loam to sandy clay loam	Weak crumb or granular
Low Humic Gley Soils	615	Dry Zone interior (a wide scatter)	Low-lying, ill-drained localities	Sandy loam to sandy clay loam	Weak, sub – angular blocky
Alluvial	470	Lower courses of the main rivers	Floodplains and valley floors	Variable – sandy, loamy and clayey	Structureless
Red Yellow Latosols	276	Northern and north-western coastal areas	Flat, low-lying	Sandy to sandy loam	Sub-angular blocky
Non-Calcic Brown Soils	176	Lowlands adjacent to Mahaweli delta	Gently undulating terrain	Sandy loam	Weak sub-angular blocky
Solodized Solonetz	158	Lowlands of the north, north-east and north-west	Flat, low-lying	Loamy sand to sandy loam	Usually structureless
Regosols	136	Wide scatter along the littoral	Coastal fringe	Sand	Single grain, structureless
Reddish Brown Latosolic Soils	62	Areas of intermediate elevation in Wet Zone	Steep slopes in rolling or hilly areas	Sandy loam to sandy clay loam	Strong crumb to granular
Immature Brown Loams	62	Kandy, Matale, Kurunegala	Hilly areas with steep slopes	Sandy loam to sandy clay loam	Weak, sub – angular blocky

Source: Peiris G.H. (2006), Sri Lanka Challenges of the New Millennium, Kandy Books, Colombo, Sri Lanka.

Table 04: Extent under Terrestrial and Aquatic Ecosystems in Sri Lanka

Terrestrial Ecosystems	Extent (Ha)
Forest Ecosystems	
Tropical Lowland Wet Evergreen Forests	141,506
Tropical Sub-Montane Forests	68,616
Tropical Montane Forests	3,108
Tropical Moist Evergreen Forests	243,886
Tropical Dry Mixed Evergreen Forests	1,090,981
Thorn Scrub Forests	464,076
Grassland Ecosystems	
<i>Patana</i> (Wet and Dry)	65,000
Savannah	N.A.
<i>Talawa, Damana and Villu</i>	10,000
Aquatic Ecosystems	
Inland Aquatic Ecosystems*	
Reservoirs	170,000
Rivers, Streams and Riverine Forest	22,435
Fresh water marshes **	10,000
Coastal Ecosystems	
Coral Reefs	N.A.
Sea Grass Beds	33,573
Salt Marshes	23,819
Mangroves	11,788
Lagoons and Estuaries	158,017
Sand Dunes, Sea Beaches, Mud Flats	N.A.

Note:* Excluding wet paddy land

** Including the so-called *villu* grasslands

Source: United Nations Environment Programme, 2001.

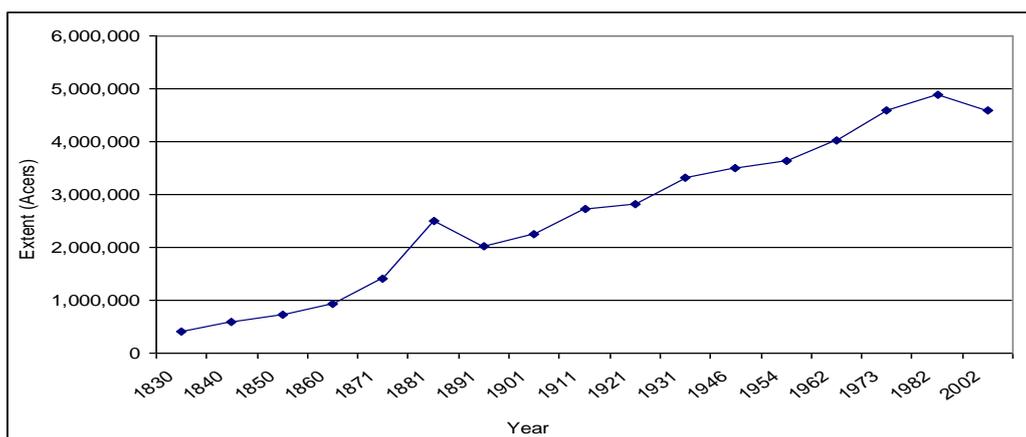
Peiris G.H. (2006), Sri Lanka Challenges of the New Millennium, Kandy Books, Colombo, Sri Lanka.

Table 05: Total Cultivated Land Area, 1830-2002

Year	Acres	Hectares
1830	416,982	168,461
1840	588,460	237,738
1850	722,323	291,818
1860	927,581	374,743
1871	1,402,556	566,633
1881	2,506,399	1,012,585
1891	2,025,016	818,106
1901	2,247,869	908,139
1911	2,730,175	1,102,991
1921	2,829,367	1,143,064
1931	3,313,000	1,338,452
1946	3,502,562	1,415,035
1954	3,638,000	1,469,752
1962	4,666,552	1,885,287
1973	5,031,361	2,032,670
1982	4,963,683	2,005,328
2002	4,602,708	1,859,494

Source: Census of Agriculture, Department of Census and Statistics, Various Issues

Figure 01: Total Cultivated Land Area, 1830-2002



Source: Census of Agriculture, Department of Census and Statistics, Various Issues

Table 06: Distribution of Land within the Agricultural Holdings (Ha)

Category of Land	1962		1973		1982		2002	
	Extent	%	Extent	%	Extent	%	Extent	%
Total Agriculture Land Area	1,885,287	100	2,032,670	100	2,005,328	100	1,859,494	100
Permanent Crops	1,068,337	67	1,120,264	55	972,952	56	914,983	49
Asweddumized Paddy	459,828	28	508,106	25	556,038	28	497,052	27
Temporary Crops	68,005	4	165,957	8	194,718	10	147,452	8
Forest Land	68,178	4	42,900	2	54,038	3	130,360	7
Lands under Roads, Buildings, etc	48,203	3	77,818	4	-	-	78,266	4

Source: Agriculture Census, Various issues, Department of Census and Statistics

Table 07: Zonal Variations of River Discharge in Sri Lanka

Zone/Catchments	Number of River Basins	Aggregate Area (km ²)	Estimated Discharge (million m ³)
Dry Zone	86	37,542	20,162
Wet Zone	16	17,392	19,400
Mahaweli basin	1	10,327	11,016
All river basins	103	65,261	50,578

(a) Approximately 0.5% of the surface area of the country has no surface drainage.

(b) In this tabulation, Karambala Oya basin in the western lowlands and Nilwala Ganga basin of the south, both included in the Wet Zone have also been considered as the zonal boundary except where the trans-zonal Mahaweli basin overlaps the two climatic zones.

Source: Peiris G.H. (2006), Sri Lanka Challenges of the New Millennium, Kandy Books, Colombo, Sri Lanka.

Table 08: River Basin Details by Districts

River by District	Total Area Km ²	Area within the District (sq. kms)	Area % in the District	Number of Schemes	Command Area (Acres)
Colombo					
Kelani Ganga	2,292	974	67.92	155	3,675
Bolgoda Ganga	328	229	32.08	109	2,858
Gampaha					
Kelani Ganga	2,292	452	32.33	39	1,108
Maha Oya	1,528	263	18.82	0	0
Attanagalla Oya	736	683	48.88	606	16,322
Kalutara					
Bolgoda Ganga	378	154	9.64	29	933
Kalu Ganga	2,719	1,304	81.66	377	13,548
Bentara Ganga	629	138.9	8.70	105	4,519
Kandy					
Kelani Ganga	2,292	341	18.06	0	0
Mahaweli Ganga	10,448	1,496	79.15	1,664	22,159
Maha Oya	1,528	52	2.79	117	1,049
Matale					
Mahaweli Ganga	10,448	1,397	70	822	15,951
Yan Oya	1,538	54	2.7	0	0
Aruvi Aru	3,284	29	1.5	0	0
Kala Oya	2,805	403	20	210	810
Deduru Oya	2,647	109	5.5	71	746
Nuwara Eliya					
Kelani Ganga	2,292	3,625	21.3	-	-
Mahaweli	10,448	1,341	78.7	1,186	23,874
Galle					
Benthara Ganga	629	490	29.7	81	2,862
Madu Ganga	60	60	3.6	13	516
Madampe Lake	91	91	5.5	18	860
Telwatta Ganga	52	52	3.2	45	2,033
Ratgama Lake	10	10	0.6	25	787
Gin Ganga	932	837	50.7	216	6,760
Koggala Lake	65	26	1.6	34	1,347
Polwatta Ganga	236	84	5.2	29	996
Matara					
Gin Ganga	932	94	7.37	25	486
Koggala	65	39	3.03	0	0
Polwatta Ganga	236	151	11.8	113	5,900
Nilwala Ganga	971	971	75.7	851	23,454
Kirama Oya	225	27	2.1	13	171
Hambantota					
Sinimodara Oya	39	34	1.49	22	365
Kirama Oya	225	198	7.54	113	1,879
Rekawa Oya	72	76	2.89	74	793
Urubokka Oya	352	352	13.41	121	1,943
Kachigala	223	223	8.5	53	2,262
Walawe	2,471	283	10.78	14	789
Karagam Oya	59	59	2.25	7	438
Mulala	404	231	8.81	36	1,792
Embilikala Oya	60	60	2.29	7	308
Kirindi Oya	1,178	450	17.14	24	928
Banbewa Oya	80	80	3.05	6	431
Mahasiliwa Oya	13	13	0.50	-	-
Butawa Oya	39	39	1.49	-	-
Menik Ganga	1,287	147	5.6	-	-

Table 08: River Basin Details by Districts (Cont)

River	Total Area Km ²	Area within the District (sq. kms)	Area % in the District	Number of Schemes	Command Area (Acres)
Katupita Aru	87	87	3.31	-	-
Kurunda Aru	132	132	5.03	-	-
Nabadagas Aru	109	109	4.15	-	-
Karambe Aru	47	47	1.79	-	-
Jaffna (not available)					
Mannar					
Pallavarayankadu Aru	161	30	1.50	-	-
Pali Aru	456	52	2.60	-	-
Chappai Aru	67	52	2.60	-	-
Parangi Aru	842	148	7.40	-	-
Nay Aru	567	442	22.14	46	2,222
Aruvi Aru	3,284	590	29.60	72	3,677
Kal Aru	212	59	2.96	-	-
Modaragama Aru	943	133	6.66	-	-
Vavuniya					
Churiyan Aru	75	16	0.81	-	-
Palladi Aru	62	12	0.61	-	-
Manal Aru	189	42	2.14	-	-
Per Aru	378	198	10.06	-	-
Kanakarayan Aru	906	422	21.45	-	-
Pali Aru	456	220	11.18	-	-
Parangi Aru	842	441	22.43	244	12,497
Nay Aru	567	108	5.49	28	1,172
Aruvi Aru	3,284	508	25.83	121	5,614
Mullativu					
Churiyan Aru	75	44.24	1.92	-	-
Chavar Aru	31	29.49	1.28	1	102
Palladi Aru	62	32.50	1.41	3	344
Manal Aru	189	103.22	4.48	5	172
Kodalikallu Aru	75	75.0	3.26	8	345
Per Aru	378	250.70	10.10	42	2,233
Pali Aru	85	85.0	3.69	1	8
Maruthapillay Aru	41	41.0	1.78	3	152
Theravil Aru	91	91.0	3.96	1	152
Piramanthal Aru	83	44.24	1.92	-	-
Methali Aru	122	73.72	3.21	2	270
Kanakarayan Aru	906	294.91	12.82	22	769
Kalawalappu Aru	57	36.86	1.60	-	-
Akkarayan Aru	194	132.71	5.77	4	183
Mandekal Aru	300	88.47	3.85	10	420
Pallavarayan Kadu Aru	161	58.98	2.56	11	541
Pali Aru	456	235.93	10.26	12	1,072
Chappai Aru	67	36.86	1.60	1	51
Parangi Aru	842	66.35	2.88	9	499
Nay Aru	567	14.75	0.64	-	-
Kilinochchi (not available)					
Batticaloa					
Tumpan Keni	9	9	0.34	6	147
Nawakada Aru	12	12	0.47	39	1,255
Mandipattu Aru	101	101	3.83	-	-
Pathantoppu Aru	101	101	3.83	32	1,552
Vett Aru	26	26	0.98	11	656
Unnichchai	350	125	4.78	-	-

Table 08: River Basin Details by Districts (Cont)

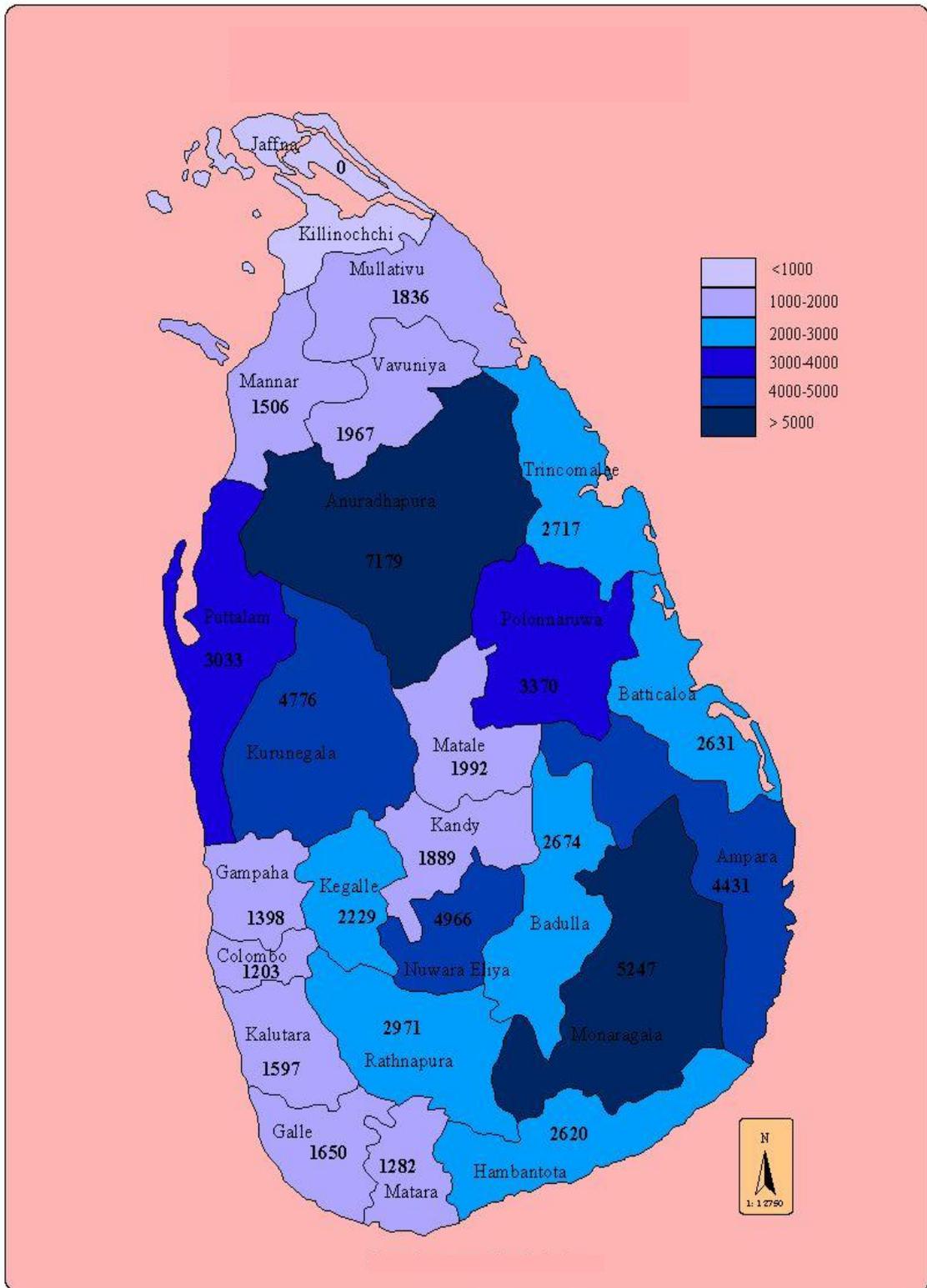
River	Total Area Km ²	Area within the District (sq. kms)	Area % in the District	Number of Schemes	Command Area (Acres)
Mundeni Aru	1,295	322	12.24	126	11,584
Miyangolla Ela	228	169	6.44	8	715
Maduru Oya	1,559	1,252	47.56	1	100
Pullianpota Aru	53	53	2.02	-	-
Kirimechchi Aru	78	78	2.96	-	-
Bodigalla Aru	166	166	0.31	-	-
Mandan Aru	13	13	0.49	11	1,213
Makarachchi Aru	38	38	1.45	5	460
Mahaweli Ganga	10,448	166	6.30	-	-
Trincomalee					
Mahaweli Ganga	10,448	1,389	51.27	97	5,497
Kantai Aru	451	328	12.06	13	1,105
Panna Oya	70	70	2.57	8	64
Palampotta Aru	145	145	5.32	26	2,006
Pankulam Aru	381	381	13.97	104	5,770
Kunchikumban Aru	207	207	7.59	52	1,720
Palakutta Aru	21	21	0.77	-	-
Yan Oya	1,538	105	3.85	82	3,808
Mee Oya	91	71	2.60	30	2,672
Ampara					
Kumbukkan Oya	1,233	214.33	4.82	-	-
Baguru Oya	93	93.0	2.09	8	642
Girikula Oya	16	16.0	0.36	2	85
Helawa Aru	52	52.0	1.17	10	1,219
Wila Oya	490	283.63	6.40	5	589
Meda Oya	611	306.65	6.92	44	4,838
Karanda Oya	427	345.63	7.80	94	8,412
Semana Aru	52	52.0	1.17	-	-
Tandiadi Aru	22	22	0.56	-	-
Kangikadichi Aru	57	57	1.29	-	-
Rufus Kulam	35	35	0.79	3	101
Pannel Oya	106	106	2.39	5	432
Ambalan Oya	117	117	2.64	3	234
Gal Oya	1,813	940	21.21	13	1,064
Andella Oya	528	528	11.92	13	1,016
Tumpan Keni	09	09	0.22	-	-
Unnichchai	350	204.38	4.62	-	-
Mundeni Aru	1,295	844	19.05	9	266
Miyangolla Ela	228	205	4.64	27	1,446
Kurunegala					
Kala Oya	2,805	411.9	8.63	113	3,423
Mi Oya	1,533	637.5	13.35	123	2,770
Rathambala Oya	218	38.9	0.81	644	5,888
Deduru Oya	2,647	2,218.2	46.45	3443	65,086
Karambala Oya	596	327.3	6.84	239	6,326
Ratmal Oya	218	83.6	1.76	0	0
Maha Oya	1,528	1,058.24	22.16	142	3,777
Puttalam					
Kala Oya	2,805	919	30.29	153	5,198
Moongil Aru	44	44	1.45	50	1,273
Mi Oya	1,533	895	25.49	468	11,412
Madurankuli Aru	73	73	2.40	0	0
Kalagamune Oya	153	153	5.03	77	1,948
Rathambala Oya	218	179	5.89	53	2,597
Deduru Oya	2,647	319	10.52	14	680

Table 08: River Basin Details by Districts (Cont)

River	Total Area Km ²	Area within the District (sq. kms)	Area % in the District	Number of Schemes	Command Area (Acres)
Karambala Oya	596	268	8.56	85	5,444
Ratmal Oya	218	134	4.45	46	1,551
Maha Oya	1,528	49	1.62	20	717
Anuradhapura					
Yan Oya	1,538	1,234.8	17.2	-	-
Mee Oya	91	20	0.28	7	242
Ma Oya	1,036	802	11.17	230	12,552
Aruvi Aru	3,284	2,530.8	35.3	1,108	55,807
Kal Aru	212	198	2.8	-	-
Modara Gam Aru	943	912	12.7	159	6,886
Kala Oya	2,805	1,481	20.6	409	15,758
Polonnaruwa					
Maduru Oya	1,559	487	1.46	0	0
Mahaweli Ganga	10,448	2,563	88.92	223	22,017
Kantale Aru	451	122	3.67	0	0
Yan Oya	1,538	198	5.96	0	0
Badulla					
Walawe Ganga	2,471	240.5	12.3	229	1,701
Kirindi Oya	1,178	179	6.5	174	2,069
Kumbukkan Oya	1,233	35.9	1.3	-	-
Gal Oya	1,813	35.9	1.3	-	-
Maduru Oya	1,559	192.3	6.9	-	-
Mahaweli Ganga	10,448	1,990.4	71.8	2,882	30,698
Monaragala					
Walawe Ganga	2,471	573	11.3	32	420
Malala Oya	404	172.6	3.3	17	60
Kirindi Oya	1,178	726	14.3	48	591
Manik Ganga	1,287	1,139.9	22.0	208	5,883
Kumbukkan Oya	1,233	1,021.7	20.1	200	6,151
Wila Oya	490	206.4	4.0	13	127
Meda Oya	611	304.7	6.0	21	2,619
Karanda Oya	427	81.7	1.6	5	121
Gal Oya	1,813	872.8	17.2	205	5,074
Unnichhar	350	20	0.3	-	-
Mundeni Aru	1,295	128	2.5	12	629
Kegalle					
Kelani Ganga	2,292	1,238	56.0	304	3,570
Kalu Ganga	2,719	203	09.0	0	0
Attanagalu Oya	736	113	05.0	0	0
Maha Oya	1,528	675	30.0	535	6,624
Ratnapura					
Kelani Ganga	2,292	104	3.5	83	1,270
Kalu Ganga	2,719	1,310.3	44.1	790	11,062
Walawe Ganga	2,471	1,557	52.4	550	9,371

Source: Data Books for Village Irrigation Schemes on Sri Lanka – 2000, Department of Agrarian Services

Map 01: River Basin Area (Sq.km) within the Districts



Source: Prepared by APPE Division, HARTI on the basis of Department of Agrarian Services Data.

Table 9: Seasonal Variations of Flow of Selected Rivers of Sri Lanka

Gauging Station	Percentage Deviation from the Average Monthly Volume of Flow												AMD
	January	February	March	April	May	June	July	August	September	October	November	December	
	Mahaweli Catchment												
Peradeniya (middle Mahaweli)	-58	-84	-81	-67	-8	+83	+67	+42	+21	+63	+41	-17	2,400
Weragantota (lower Mahaweli)	+89	-26	-46	-54	-34	+10	-15	+8	-27	-1	+34	+105	6,333
	Wet Zone Lowlands												
Patupaula (lower Kalu ganga)	-50	-72	-68	-32	+54	+54	+8	-18	+1	+78	+54	-8	8,442
Glencorse (Lower Kelani ganga)	-64	-79	-67	-31	+52	+70	+29	+19	+17	+62	+24	-31	5,808
	Dry Zone Lowlands												
Pangurugas wewa (lower Yan Oya)	+235	-35	-86	-88	-76	-97	-99	-95	-97	-69	+101	+409	747
Tottapatimadu (lower Parangi)	+157	-73	-91	-92	-85	-95	-99	-99	-99	-84	+146	+515	374
Ambagastota (Kumbukkan Oya)	+228	-2	-35	-30	-45	-91	-98	-98	-96	-79	+143	+209	824

AMD = Average Monthly Discharge in Cusecs

Source: Peiris G.H. (2006), Sri Lanka Challenges of the New Millennium, Kandy Books, Colombo, Sri Lanka.

Table 10: Surface Geology and the Groundwater Potential in Sri Lanka

Surface and sub-Surface Formation	% of Country's Total Area	Main Areas of Occurrence	Probable Groundwater Potential
Sedimentary rock areas			
Miocene Limestone	3.6	Lowlands of the north and north-west	Large
Coastal sandy deposits	7.5	Eastern and north-western littoral	Moderate to large
Alluvial deposits	1.5	Valley floors, lower courses and flood plains of rivers	Moderate
Crystalline Hard rock areas			
Deeply weathered rock with a lateritic mantle	3.7	Coastal lowlands of the Wet Zone	Moderate
Deeply weathered and densely fractured rock with a soil mantle of varying thickness	26.7	Mountainous areas of the Wet Zone interior	Low to moderate
Shallow weathered and densely fractured rock with a thin soil mantle	29.0	Scattered localities of the Dry Zone interior	Low
Shallow weathered and sparsely fractured rock with a thin soil mantle	27.1	Interior of the Dry Zone plains (large tracts in the north and the south-west)	Very low

Note: This tabulation is based on the 'Hydrological Map of Ceylon', 1968 by A.D.N. Fernando
Source: Peiris G.H. (2006), Sri Lanka Challenges of the New Millennium, Kandy Books, Colombo, Sri Lanka.

Table 11: Tanks and Anicuts by Districts

District	Working								Abandoned	
	Number of Tanks	Number of Anicuts	Command Area (Acres)			Farm Families			Tanks	Anicuts
			Tanks	Anicuts	Total	Tanks	Anicuts	Total		
Colombo	3	210	300	4,848	5,148	330	7,226	7,556	2	49
Gampaha	24	395	886	11,448	12,334	945	15,292	16,237	33	165
Kalutara	6	401	387	14,695	15,082	600	22,968	23,568	1	105
Galle	0	504	0	16,973	16,973	0	17,155	17,155	0	26
Matara	24	825	1,459	28,083	29,542	2,967	32,808	35,775	3	93
Hambantota	446	32	8,120	893	9,013	7,081	892	7,973	23	1
Kandy	86	1,586	1,585	21,175	22,758	2,363	31,849	34,215	40	118
N'Eliya	54	1,113	2,202	20,885	23,087	3,083	31,670	34,753	19	28
Matale	278	759	10,120	13,687	25,334	11,614	19,198	30,902	33	42
Kegalle	7	806	258	10,275	10,533	382	17,718	18,100	3	32
Ratnapura	59	1,436	2,031	28,137	30,248	2,580	45,825	48,405	8	67
Badulla	259	3,623	4,805	31,637	36,442	5,786	55,730	61,516	128	73
Monaragala	285	325	5,328	5,400	10,728	6,986	6,173	13,159	151	47
A'pura	2,333	8	114,458	398	114,856	78,982	238	79,220	665	1
Polonnaruwa	79	131	6,330	11,457	17,787	3,109	5,211	8,320	36	17
Kurunegala	4,192	657	81,857	17,400	99,257	107,893	21,719	129,612	77	104
Puttalam	743	63	21,614	3,428	25,042	18,061	2,256	20,317	175	33
Mulathivu	129	3	7,124	277	7,401	2,108	99	2,207	4	0
Mannar	61	3	2,874	61	2,935	1,376	61	1,437	51	6
Vavuniya	453	12	25,751	554	26,305	10,233	446	10,679	101	1
Batticaloa	132	4	7,592	525	8,117	2,232	190	2,422	110	14
Ampara	181	46	8738	290	9,028	4,421	110	4,531	87	37
Trincomalee	417	0	22133	250	22,131	9,730	151	9,631	183	1
Total	10,251	12,942	335,952	242,776	578,729	282,862	334,985	617,847	1,933	1,060

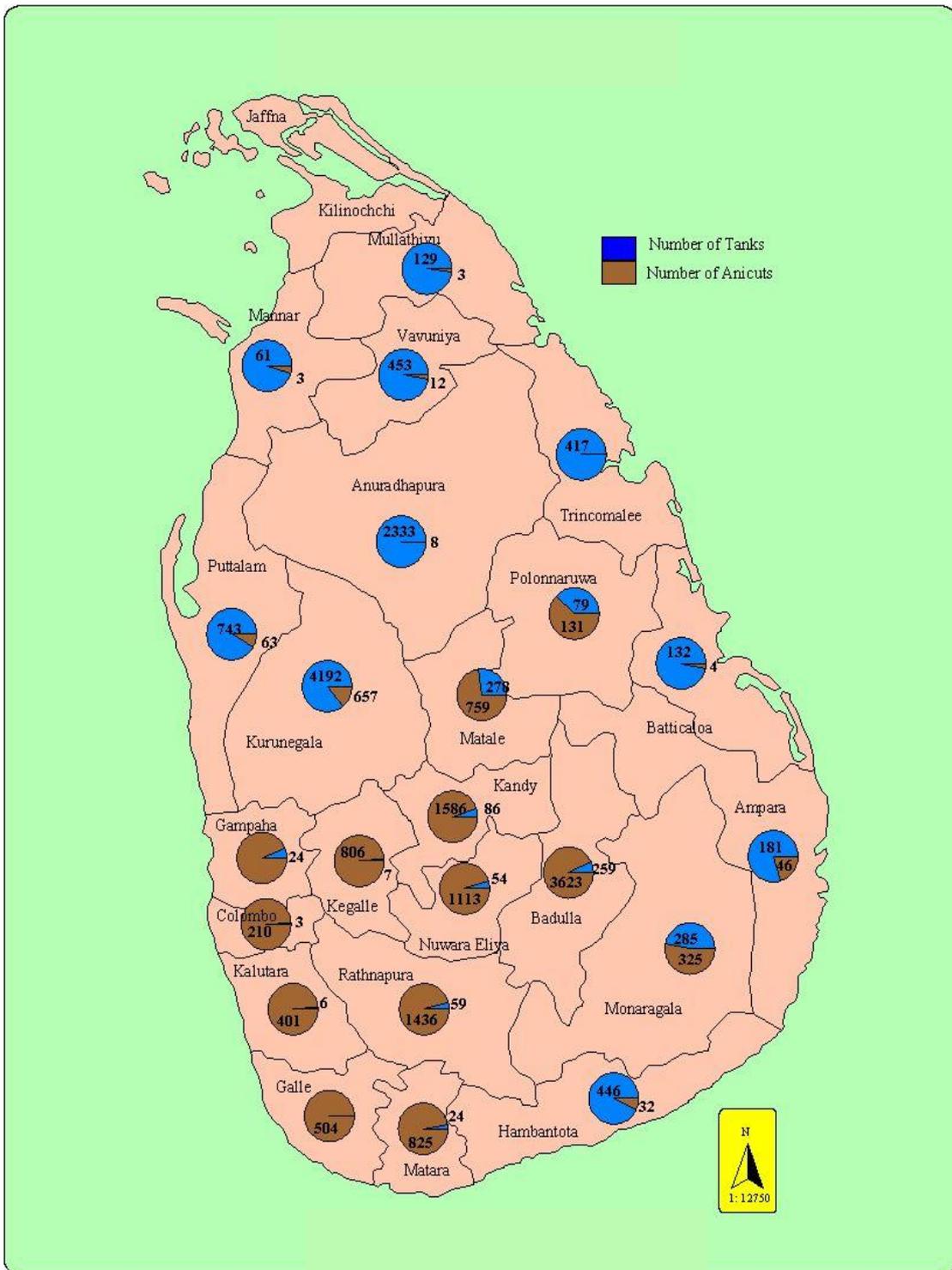
Source: Data Books for Village Irrigation Schemes of Sri Lanka- 2000, Department of Agrarian Services, Water Management Division, Ministry of Agriculture and Land Department, Colombo

Table 12: Carbon Dioxide Emission in Sri Lanka (Percentage Classified by Source/Process)

Source of Emission	Percentage of total
'Natural' processes	82.9
Burning of fossil fuels:	
in manufacturing	2.6
in transport	9.4
in institutional and residential uses	2.7
in other activities (agriculture, etc.)	1.4
Burning biomass for energy	-
Manufacturing processes	1.0

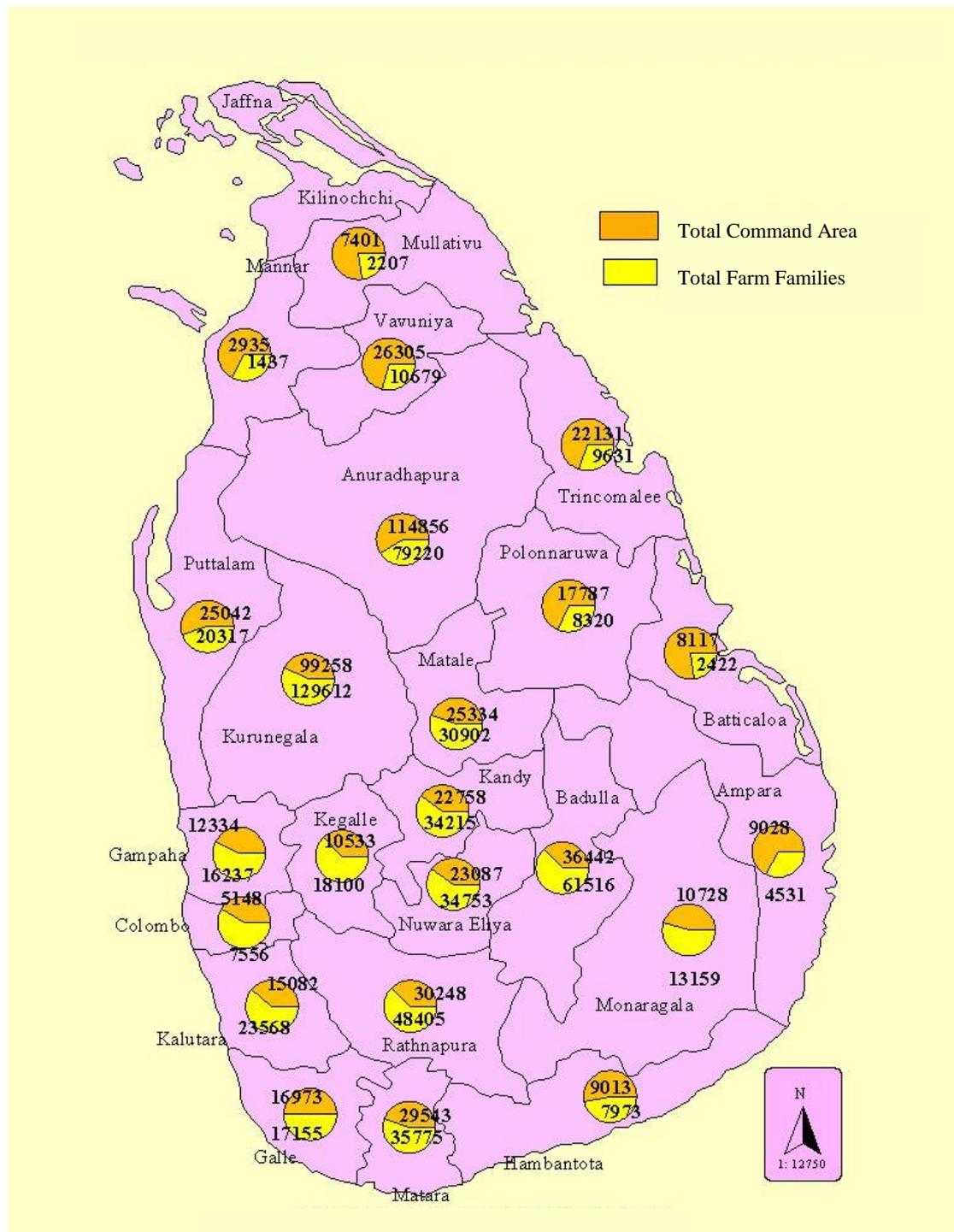
Source: Peiris G.H. (2006), Sri Lanka Challenges of the New Millennium, Kandy Books, Colombo, Sri Lanka.

Map 02: Number of Tanks and Anicuts by Districts



Source: Prepared by APPE Division, HARTI on the basis of Department of Agrarian Services Data.

Map 03: Total Command Area and Farm Families under Tanks and Anicuts by Districts



Source: Prepared by APPE Division, HARTI on the basis of Department of Agrarian Services Data.

Table 13: Groups and Types of Wetland Ecosystems in Sri Lanka

Groups	Sub-Groups	Types
Marine and Coastal Wetlands	Marine	Shallow marine waters and marine beds; coral reefs; rocky/sandy/shingle shores
	Estuarine	Estuarine waters, tidal mudflats, salt marshes and mangroves
	Lacustrine and Palustrine	Coastal brackish/saline lagoons, coastal freshwater lagoons
Inland Natural Wetlands	Riverine	Deltas, rivers, floodplain wetlands
	Lacustrine	Permanent freshwater lakes, seasonal freshwater lakes
	Palustrine	Permanent/seasonal marshes (saline, brackish or freshwater), peatlands, shrub- or tree- dominated wetlands, freshwater springs
Inland Man-made Wetlands	Agricultural, aquacultural, utility/ornamental	Reservoirs, Irrigation tanks, farm ponds
		Ponds
		Water supply reservoirs, ornamental water bodies
		Ponds
		Water supply reservoirs, ornamental water bodies

Source: Peiris G.H. (2006), Sri Lanka Challenges of the New Millennium, Kandy Books, Colombo, Sri Lanka.

Table 14: Soil Erosion Rates under Types of Land Use

Agro-Ecological Region	Type of Agriculture	Soil Loss (Kg/Ha/Year)
Wet Zone Up-Country	Clean – weeded VP tea	52,600
	One-year old tea with mulch	70
Wet Zone Mid-Country	Seedling tea (no conservation)	40,000
	Well-managed tea (with conservation)	240
	Home gardens with mixed vegetation	50
	Tobacco (no conservation)	70,000
Intermediate Zone Mid-Country	Capsicum (no conservation)	38,000
	Carrot (no conservation)	8,000
	Sorghum - pigeon pea intercrop	21,000
Dry Zone Low Country	Cotton	22,000

Source: Krishnaraja (1984)

CHAPTER THREE

Transformation of Production in the Paddy Sector

Table 15: Average Paddy Extent (Ha.) Cultivated by Irrigation System, 1960-2010

Period	Major	Minor	Rain-fed	Total
1960-63	194,084	164,063	252,783	610,930
1964-68	214,788	169,689	266,163	650,640
1969-73	246,413	186,498	292,691	725,601
1974-78	265,747	189,050	331,005	790,098
1979-83	345,528	185,154	314,975	845,657
1984-88	400,081	193,293	290,061	883,475
1989-93	360,396	162,665	238,173	791,903
1994-98	432,537	178,828	222,929	834,293
1999-03	473,363	187,554	219,774	880,690
2004-08	488,397	177,696	209,313	875,406
2008-10	525,772	243,238	252,097	1,021,213

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Annual Report-2007, Central Bank of Sri Lanka, Colombo
Statistics and Data Processing Unit, HARTI

Table 16: Average Sown Extent of Paddy, 1952-2010

Period	Sown Extent (Ha'000)		
	<i>Maha</i>	<i>Yala</i>	Annual
1952-56	308.6	176.4	485.0
1957-61	350.0	205.4	555.4
1962-66	405.6	223.0	628.6
1967-71	463.2	246.0	709.2
1972-76	479.6	259.8	739.4
1977-81	572.2	280.4	852.6
1982-86	576.0	310.8	886.8
1987-91	510.0	299.2	809.2
1992-96	548.2	298.2	870.7
1997-01	524.4	304.8	829.2
2002-06	561.0	331.4	892.4
2007-10	596.3	381.7	978.0

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 17: Average Harvested Extent of Paddy, 1952-2010

Period	Average Harvested Extent (Ha'000)		
	<i>Maha</i>	<i>Yala</i>	Annual
1952-56	287.0	165.6	452.6
1957-61	319.8	196.3	518.8
1962-66	380.8	211.0	591.8
1967-71	434.4	232.0	666.4
1972-76	431.8	236.4	668.2
1977-81	545.8	265.8	811.6
1982-86	526.2	295.2	821.4
1987-91	474.2	286.0	760.2
1992-96	519.2	287.2	806.4
1997-01	508.4	289.2	797.6
2002-06	536.8	316.4	853.2
2007-10	582.1	375.7	957.8

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 18: Average Paddy Extent (Ha) Harvested by Irrigation Schemes in Sri Lanka

Period	Major	Minor	Rain-fed	Total
1960-63	189,416	159,300	239,829	588,544
1964-68	203,905	158,702	243,723	606,330
1969-73	236,285	170,055	262,879	669,219
1974-78	254,733	172,753	293,550	730,286
1979-83	333,046	169,450	288,860	791,356
1984-88	380,559	176,602	259,158	816,319
1989-93	353,262	155,978	229,045	765,656
1994-98	423,665	166,189	203,189	793,042
1999-03	457,637	176,927	205,425	839,989
2004-06	479,666	168,176	195,769	843,611
2007-10	512,746	225,313	219,728	957,793

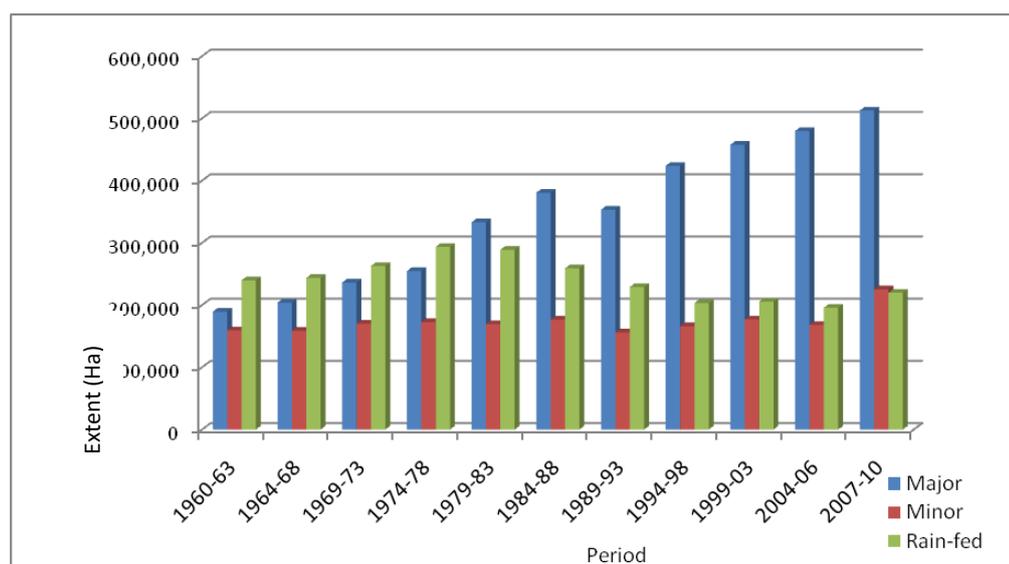
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 19: Average Yield of Paddy, 1952-2010

Period	Average Yield (Kg/Ha)
1952-56	1,547.4
1957-61	1,800.0
1962-66	1,902.2
1967-71	2,417.8
1972-76	2,314.4
1977-81	2,724.0
1982-86	3,362.0
1987-91	3,206.0
1992-96	3,455.0
1997-01	3,764.0
2002-06	3,974.0
2007-10	4,359.5

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 02: Average Paddy Extent Harvested by Type of Irrigation in Sri Lanka, 1960-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics Statistics and Data Processing Unit, HARTI

Table 20: Average Yield of Paddy by Seasons, 1952 – 2010

Period	Average Yield (Kg/Ha)	
	<i>Maha</i>	<i>Yala</i>
1952-56	1,560	1,544
1957-61	1,782	1,817
1962-66	1,902	1,901
1967-71	2,441	2,395
1972-76	2,421	2,168
1977-81	2,834	2,613
1982-86	3,380	3,342
1987-91	3,502	3,265
1992-96	3,699	3,406
1997-01	3,962	3,829
2002-06	3,935	3,987
2007-10	4,369	4,342

Source: Statistical Abstract, Various Issues, Department of Census and Statistics Statistics and Data Processing Unit, HARTI

Table 21: Average Production of Paddy, 1952-2010

Period	Average Production (Mt '000)		
	<i>Maha</i>	<i>Yala</i>	Annual
1952-56	384.6	222.0	606.6
1957-61	487.8	308.0	795.8
1962-66	617.4	343.0	960.4
1967-71	904.8	473.2	1378.0
1972-76	893.4	435.8	1,329.2
1977-81	1,361.0	610.0	1,971.2
1982-86	1,588.0	872.0	2,460.4
1987-91	1,492.0	827.0	2,318.8
1992-96	1,617.0	876.0	2,492.8
1997-01	1,674.0	995.0	2,668.6
2002-06	1,897.0	1,131.0	3,028.0
2007-10	2,277.9	1,416.7	3,739.6

Source: Statistical Abstract, Various Issues, Department of Census and Statistics Statistics and Data Processing Unit, HARTI

Table 22: Sown and Harvested Extent, Average Yield and Production of Paddy in Maha Seasons, 1952 – 2010

Year	Sown Extent (000 Ha)	Harvested (000 Ha)	Average Yield (Kgs. Per Ha.)	Production ('000 Mt.)
1951/52	299	283	1,591	385
1952/53	265	237	1,363	276
1953/54	312	301	1,550	403
1954/55	334	321	1,658	454
1955/56	333	293	1,591	405
1956/57	316	295	1,685	422
1957/58	340	290	1,756	443
1958/59	343	307	1,755	458
1959/60	373	347	1,861	550
1960/61	378	360	1,853	566
1961/62	388	379	1,960	631
1962/63	405	398	1,951	660
1963/64	411	397	1,990	672
1964/65	399	322	1,759	482
1965/66	425	408	1,852	642
1966/67	427	407	2,106	730
1967/68	464	436	2,449	909
1968/69	479	437	2,641	982
1969/70	482	451	2,692	1,034
1970/71	464	441	2,315	869
1971/72	480	419	2,480	885
1972/73	476	439	2,348	878
1973/74	534	521	2,460	1,100
1974/75	444	354	2,385	720
1975/76	464	426	2,432	884
1976/77	538	506	2,658	1,146
1977/78	575	553	2,734	1,288
1978/79	578	551	2,820	1,395
1979/80	573	554	2,951	1,453
1980/81	597	565	3,005	1,522
1981/82	567	478	3,150	1,363
1982/83	583	558	3,638	1,786
1983/84	606	509	3,031	1,353
1984/85	569	559	3,498	1,751
1985/86	555	527	3,585	1,688
1986/87	508	433	3,678	1,392
1987/88	545	499	3,440	1,525
1988/89	469	440	3,429	1,342
1989/90	527	516	3,564	1,647
1990/91	501	483	3,620	1,554
1991/92	548	523	3,512	1,630
1992/93	546	538	3,516	1,692
1993/94	581	561	3,345	1,670
1994/95	567	549	3,604	1,761
1995/96	499	425	3,534	1,331
1996/97	473	443	3,671	1,457
1997/98	574	563	3,555	1,781
1998/99	547	539	3,612	1,736
1999/00	549	526	3,798	1,781
2000/01	479	471	3,860	1,613
2001/02	510	499	3,990	1,774
2002/03	602	560	3,794	1,895
2003/04	521	469	4,002	1,670

Table 22: Sown and Harvested Extent, Average Yield and Production of Paddy in Maha Seasons, 1952 – 2010 (Cond..)

Year	Sown Extent (000 Ha)	Harvested (000 Ha)	Average Yield (Kgs. Per Ha.)	Production ('000 Mt.)
2004/05	581	570	3,955	2,013
2005/06	591	586	4,069	2,135
2006/07	525	512	4,298	1,971
2007/08	582	568	4,175	2,120
2008/09	632	605	4,336	3,652
2009/10	646	643	4,528	4,301

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Economic and Social Statistics of Sri Lanka-2011, Central Bank of Sri Lanka

Table 23: Sown and Harvested Extent, Average Yield and Production of Paddy in Yala Seasons, 1952 – 2010

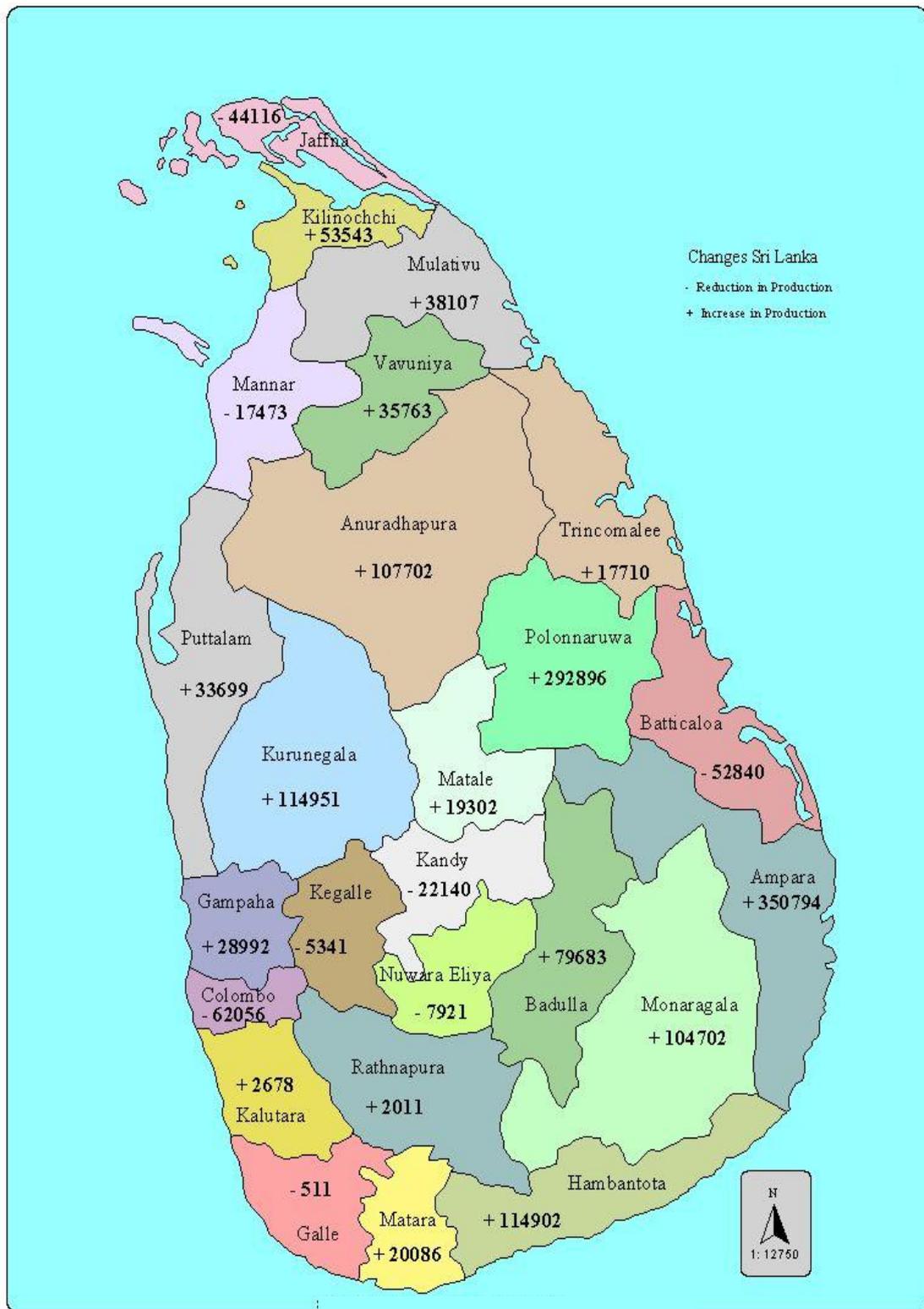
Year	Sown Extent (' 000 Ha)	Harvested Extent ('000 Ha)	Average Yield (Kg per Ha)	Production (' 000 Mt.)
1952	172	163	1,583	219
1953	160	148	1,439	182
1954	196	185	1,544	247
1955	211	199	1,698	293
1956	143	133	1,456	169
1957	173	166	1,638	232
1958	219	212	1,798	322
1959	195	190	1,873	303
1960	222	217	1,898	349
1961	218	210	1,880	334
1962	234	225	1,943	372
1963	228	220	1,961	368
1964	232	225	2,007	384
1965	191	181	1,789	276
1966	230	204	1,807	315
1967	237	227	2,166	418
1968	241	225	2,296	439
1969	213	187	2,487	395
1970	277	268	2,567	584
1971	262	253	2,457	530
1972	247	220	2,296	430
1973	248	233	2,206	437
1974	291	276	2,152	505
1975	253	243	2,106	436
1976	260	210	2,078	371
1977	290	277	2,268	534
1978	300	287	2,403	606
1979	261	232	2,575	524
1980	271	261	2,887	681
1981	280	272	2,934	707
1982	277	267	3,332	793
1983	241	219	3,604	698
1984	384	377	3,146	1,060

Table 23: Sown and Harvested Extent, Average Yield and Production of Paddy in Yala Seasons, 1952 – 2010 (cont..)

Year	Sown Extent (' 000 Ha)	Harvested Extent (' 000 Ha)	Average Yield (Kg per Ha)	Production (' 000 Mt.)
1985	312	305	3,343	910
1986	340	308	3,287	900
1987	273	246	3,362	735
1988	323	317	3,370	952
1989	258	250	3,279	721
1990	326	309	3,266	891
1991	316	308	3,048	835
1992	255	243	3,253	710
1993	289	282	3,481	878
1994	349	336	3,394	1,013
1995	348	340	3,427	1,049
1996	250	235	3,477	730
1997	257	247	3,526	782
1998	274	266	3,807	911
1999	345	333	3,752	1,121
2000	329	306	3,958	1,079
2001	319	294	4,102	1,082
2002	342	321	3,742	1,086
2003	381	351	3,708	1,172
2004	258	251	4,244	958
2005	357	345	3,976	1,233
2006	319	314	4,263	1,206
2007	291	283	4,543	1,158
2008	471	464	4,195	1,750
2009	345	338	4,186	1,268
2010	419	416	4,444	1,671

Source: Statistics Abstract, Various Issues, Department of Census and Statistics
Economic and Social Statistics of Sri Lanka-2011, Central Bank of Sri Lanka

Map 04: Changes of Paddy Production (Mt.) by Districts, (1977-2007)



Source: Prepared by APPE Division, HARTI on the basis of Department of Agrarian Services Data.

Table 24: Paddy Production, Distribution and Local Rice Production, 1980-2009

Year	Local Paddy Production (Mt'000)	Distribution		Local Rice Production Equivalent(Mt'000)
		Seeds (Mt'000)	Waste and Others (Mt'000)	
1980	2133.00	87.10	81.84	1,286.4
1981	2230.00	90.41	84.60	1,431.3
1982	2156.00	87.10	82.22	N.A.
1983	2483.00	84.98	88.29	N.A.
1984	2420.00	102.11	92.38	N.A.
1985	2,661.41	89.16	175.59	1,629.73
1986	2,588.00	92.40	163.77	1,585.64
1987	2,127.00	80.56	151.10	1,288.83
1988	2,477.00	89.49	163.72	1,512.18
1989	2,063.44	74.96	150.41	1,249.89
1990	2,538.00	88.34	167.85	1,551.63
1991	2,389.00	84.21	164.34	1,455.51
1992	2,339.70	82.82	162.40	1,424.25
1993	2,510.17	86.03	161.76	1,538.42
1994	2,683.69	95.86	165.44	1,647.23
1995	2,809.89	94.36	161.15	1,736.98
1996	2,061.52	77.21	161.68	1,239.39
1997	2,239.37	75.26	166.76	1,358.20
1998	2,692.34	87.47	172.22	1,654.20
1999	2,857.10	91.99	189.18	1,751.63
2000	2,859.90	90.54	171.73	1,766.39
2001	2,695.80	82.32	171.47	1,660.57
2002	2,859.48	87.91	180.63	1,761.84
2003	3,071.21	101.32	187.13	1,892.28
2004	2,628.00	80.28	177.02	1,612.08
2005	3,246.19	96.64	198.98	2,006.39
2006	3,342.00	93.89	201.19	3,058.14
2007	3,131.00	84.22	195.36	2,018.07
2008	3,875.00	108.58	239.59	2,478.25
2009	3,552.00	100.80	223.31	2,310.35

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Central Bank Annual Report – 2007, 2006
Economic and Social Statistics of Sri Lanka-2011, Central Bank of Sri Lanka
Ministry of Agricultural Development and Research, 1981

N.A - Not Available

CHAPTER FOUR

Transformation in the Other Food Crops Sub-Sector

Table 25: Average Cultivated Extent (Ha) of *Kurakkan* by Major Growing Districts

Period	Sri Lanka	Kurunegala	Ratnapura	Monaragala	A'pura	Hambantota
1970-1973	23,497	4,314	1,324	3,556	2,234	2,502
1974-1978	37,683	5,921	2,456	4,992	7,700	2,918
1979-1983	20,864	2,140	1,842	2,989	3,834	1,477
1984-1988	13,437	940	948	1,511	2,811	903
1989-1993	9,892	859	415	970	1,846	949
1994-1998	6,924	360	543	963	1,428	1,066
1999-2003	6,300	405	429	1,060	1,448	767
2004-2006	5,743	359	391	814	1,587	706
2007-2010	5,988	393	344	927	1,529	662

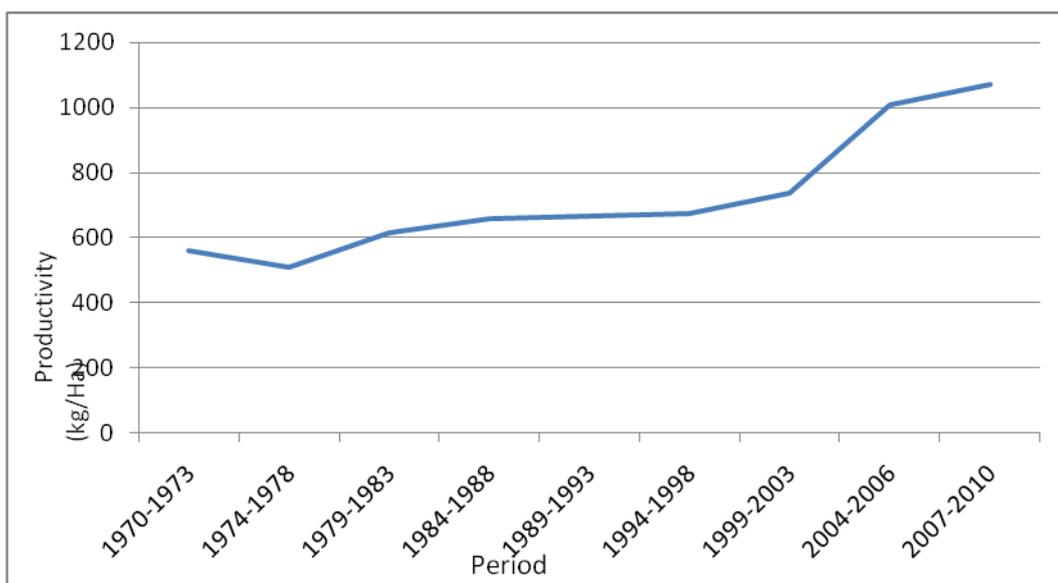
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
 Statistics and Data Processing Unit, HARTI

Table 26: Average Productivity (Kg/Ha.) of *Kurakkan*, 1970-2010

Period	Sri Lanka	Kurunegala	Ratnapura	Monaragala	A'pura	Hambantota
1970-1973	559.14	534.54	762.08	584.65	550.13	683.45
1974-1978	507.76	554.64	496.74	576.12	417.53	559.29
1979-1983	614.74	600.00	649.29	613.92	604.59	534.19
1984-1988	656.99	546.81	697.26	669.09	596.58	853.82
1989-1993	664.68	520.37	732.53	716.49	647.35	896.73
1994-1998	674.18	591.67	948.43	707.17	665.97	700.75
1999-2003	736.19	896.30	601.40	1,073.58	697.51	526.73
2004-2006	1,010.62	1,000.00	746.80	1,138.82	1,350.98	655.81
2007-2010	1,073.14	1,020.35	921.51	1,203.88	948.30	1,220.54

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
 Statistics and Data Processing Unit, HARTI

Figure 03: Average Productivity of *Kurakkan* in Sri Lanka, 1970-2010



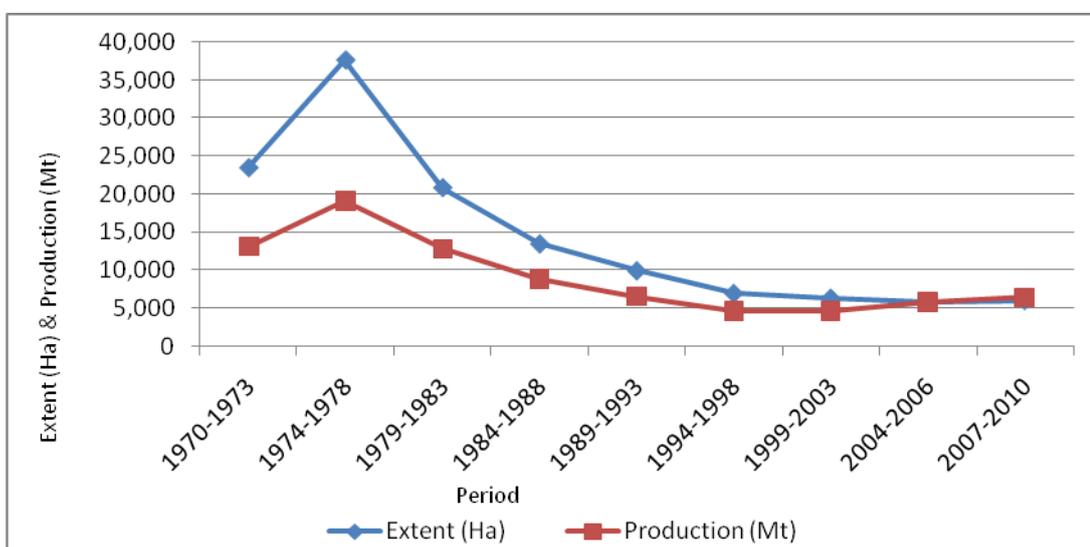
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 27: Average Production (Mt) of *Kurakkan* by Major Growing Districts

Period	Sri Lanka	Kurunegala	Ratnapura	Monaragala	A'pura	Hambantota
1970-1973	13,138	2,306	1,009	2,079	1,229	1,710
1974-1978	19,134	3,284	1,220	2,876	3,215	1,632
1979-1983	12,826	1,284	1,196	1,835	2,318	789
1984-1988	8,828	514	661	1,011	1,677	771
1989-1993	6,575	447	304	695	1,195	851
1994-1998	4,668	213	515	681	951	747
1999-2003	4,638	363	258	1,138	1,010	404
2004-2006	5,804	359	292	927	2,144	463
2007-2010	6,426	401	317	1,116	1,450	808

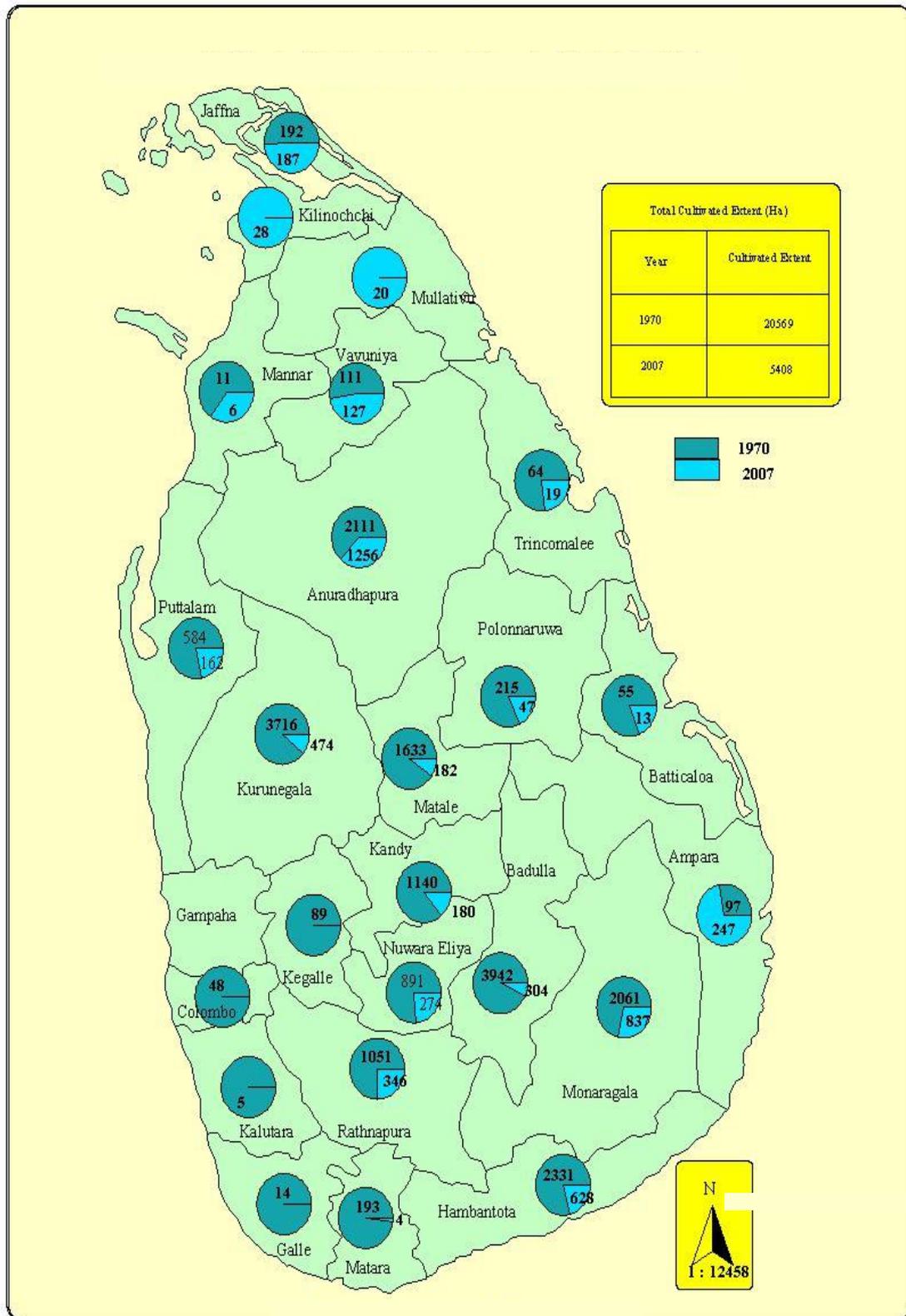
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 04: Average Extent and Production of *Kurakkan* in Sri Lanka



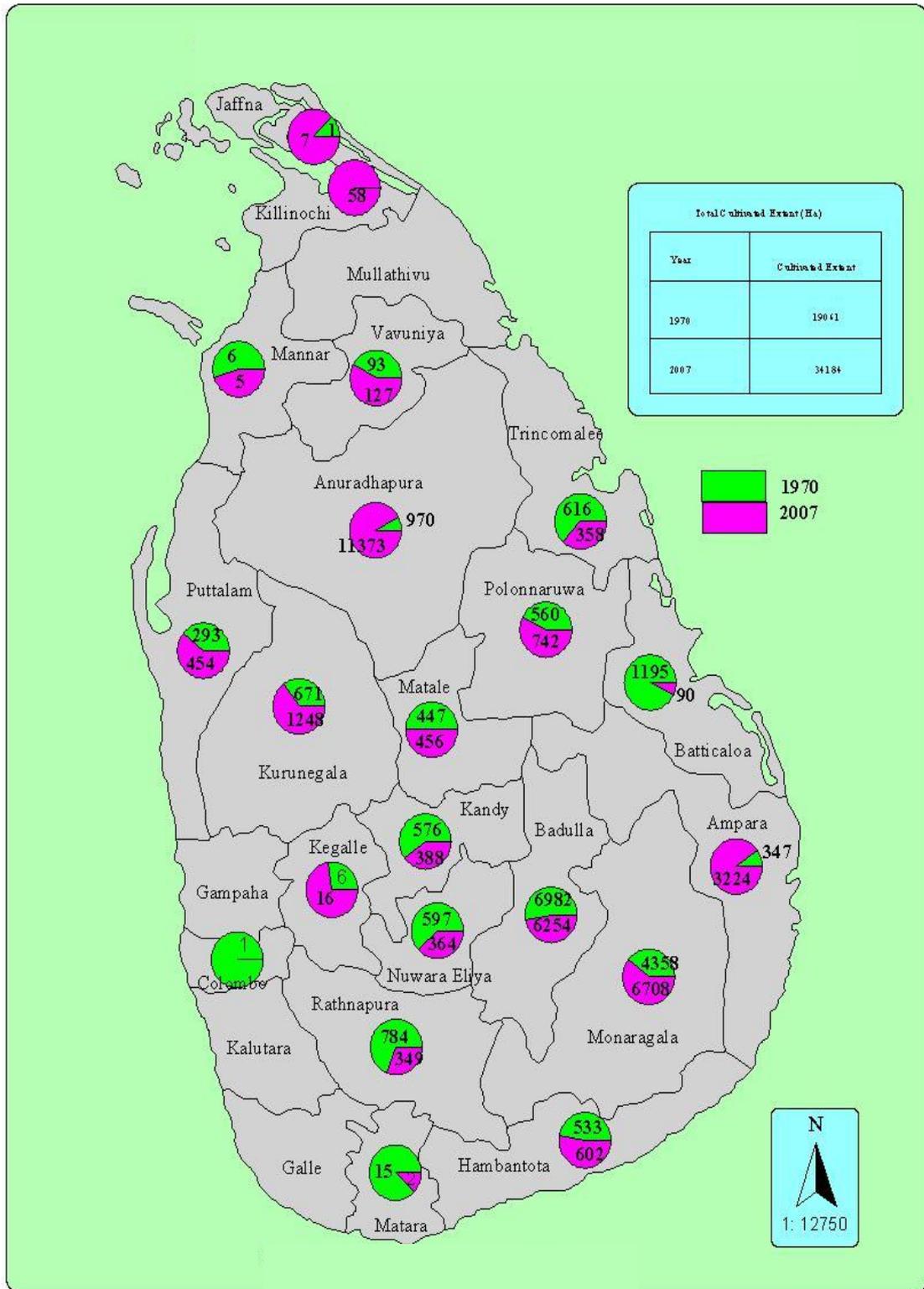
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Map 05: Cultivated Extent (Ha.) of *Kurakkan* by Districts, 1970 and 2007



Source: Prepared by APPE Division, HARTI on the basis of Department of Agrarian Services Data.

Map 06: Cultivated Extent (Ha.) of Maize by Districts in 1970 and 2007



Source: Prepared by APPE Division, HARTI on the basis of Department of Agrarian Services Data.

Table 28: Average Cultivated Extent (Ha.) of Maize by Major Growing Districts

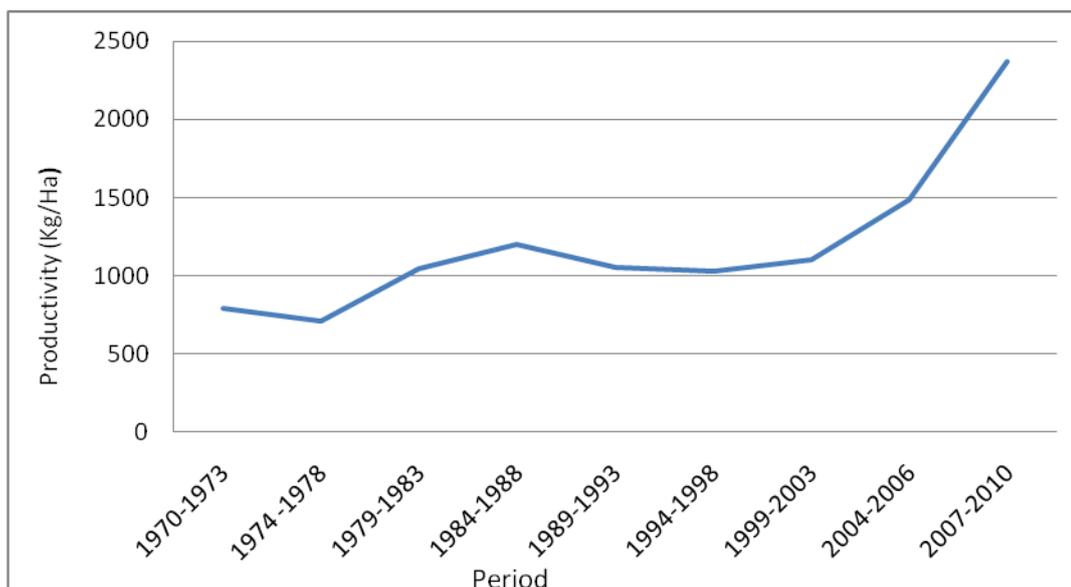
Period	Sri Lanka	Badulla	Monaragala	Anuradhapura	Ampara
1970-1973	20,230	6,878	5,201	836	800
1974-1978	32,803	5,659	7,541	3,796	2,200
1979-1983	23,187	4,364	4,146	3,425	2,865
1984-1988	33,724	5,671	4,729	7,253	5,251
1989-1993	30,013	5,070	5,245	5,897	5,331
1994-1998	30,783	4,899	4,256	8,332	6,450
1999-2003	26,747	5,775	3,731	5,872	4,623
2004-2006	27,941	5,929	5,140	6,927	4,079
2007-2010	48,567	7,571	10,001	17,498	4,801

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 29: Average Productivity (Kg/Ha.) of Maize, 1970-2010

Period	Sri Lanka	Badulla	Monaragala	Anuradhapura	Ampara
1970-1973	793.13	700.35	832.15	668.66	986.25
1974-1978	712.65	701.89	715.16	584.56	840.45
1979-1983	1,044.42	983.04	1,128.56	863.36	1,333.68
1984-1988	1,199.80	1,039.15	1,235.14	1,442.58	1,212.53
1989-1993	1,056.98	1,001.78	990.28	986.60	1,321.14
1994-1998	1,031.87	899.16	978.62	859.82	1,397.21
1999-2003	1,101.73	952.90	1,362.64	880.79	1,502.05
2004-2006	1,485.59	1,556.42	1,295.53	1,865.74	1,410.89
2007-2010	2,368.83	2,490.15	2,384.46	2,535.20	2,777.96

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

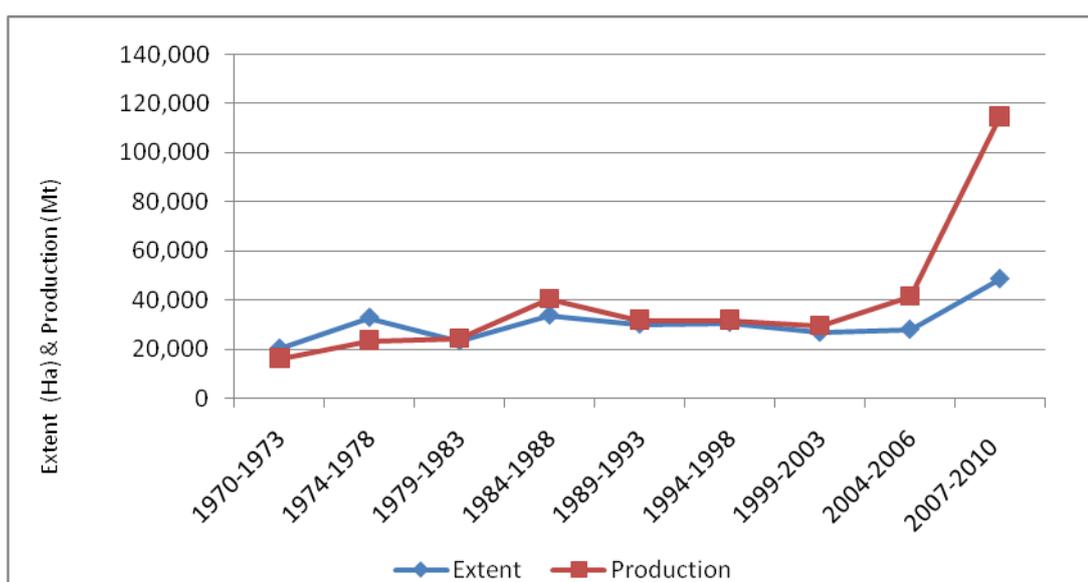
Figure 05: Average Productivity of Maize in Sri Lanka, 1970-2010

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 30: Average Production (Mt) of Maize by Major Growing Districts

Period	Sri Lanka	Badulla	Monaragala	Anuradhapura	Ampara
1970-1973	16,045	4,817	4,328	559	789
1974-1978	23,377	3,972	5,393	2,219	1,849
1979-1983	24,217	4,290	4,679	2,957	3,821
1984-1988	40,462	5,893	5,841	10,463	6,367
1989-1993	31,723	5,079	5,194	5,818	7,043
1994-1998	31,764	4,405	4,165	7,164	9,012
1999-2003	29,468	5,503	5,084	5,172	6,944
2004-2006	41,509	9,228	6,659	12,924	5,755
2007-2010	115,047	18,853	23,147	44,361	13,337

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 06: Average Extent and Production of Maize in Sri Lanka, 1970-2010

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 31: Average Cultivated Extent (Ha.) of Cowpea by Major Growing Districts (Ha)

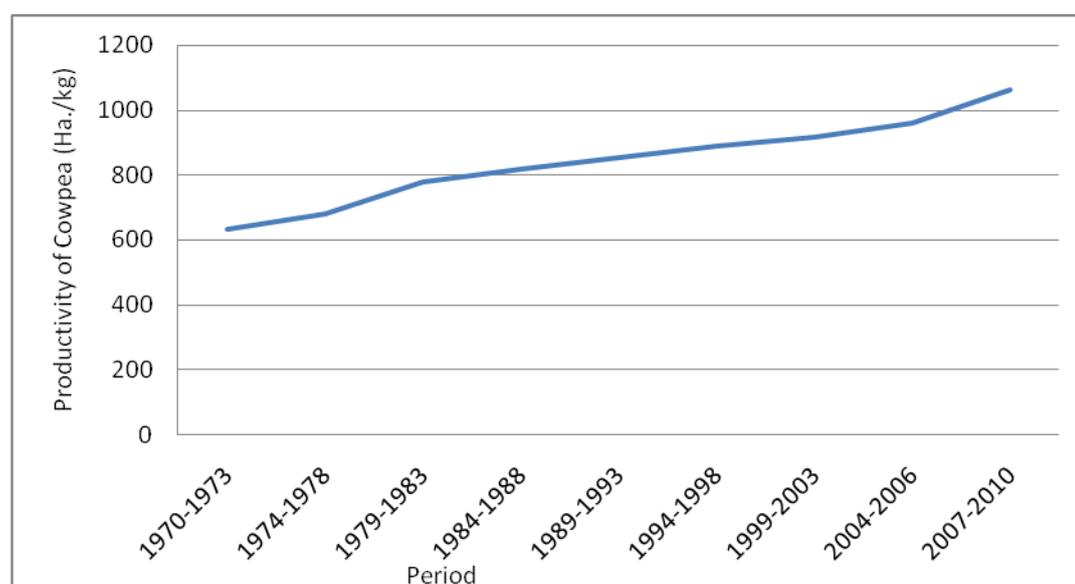
Period	Sri Lanka	Kurunegala	Monaragala	Anuradhapura	Ampara
1970-1973	4,766	838	742	135	42
1974-1978	11,343	2,846	993	1,388	328
1979-1983	25,533	8,279	1,394	3,666	921
1984-1988	27,423	9,381	2,647	3,387	1,401
1989-1993	23,646	7,268	2,634	2,137	2,662
1994-1998	17,800	2,727	2,087	2,288	4,312
1999-2003	12,500	1,264	1,690	1,483	3,475
2004-2006	10,558	1,059	1,860	936	3,228
2007-2010	11,273	1,319	1,922	1,144	3,662

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 32: Average Productivity (Kg/Ha.) of Cowpea, 1970-2010

Period	Sri Lanka	Kurunegala	Monaragala	Anuradhapura	Ampara
1970-1973	634.28	706.44	459.57	592.59	1047.62
1974-1978	680.86	825.72	696.88	476.22	710.37
1979-1983	778.01	701.90	1,259.68	768.14	647.12
1984-1988	819.06	734.46	846.62	1,057.28	981.44
1989-1993	855.83	753.16	1,018.60	955.08	867.39
1994-1998	888.54	673.27	1,081.46	836.98	798.47
1999-2003	918.40	683.54	1,043.79	819.96	828.78
2004-2006	961.26	610.95	1,164.52	1,118.59	788.41
2007-2010	1,062.27	561.78	1,176.37	1,149.47	1,066.35

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 07: Average Productivity (Kg/Ha.) of Cowpea, 1970-2010

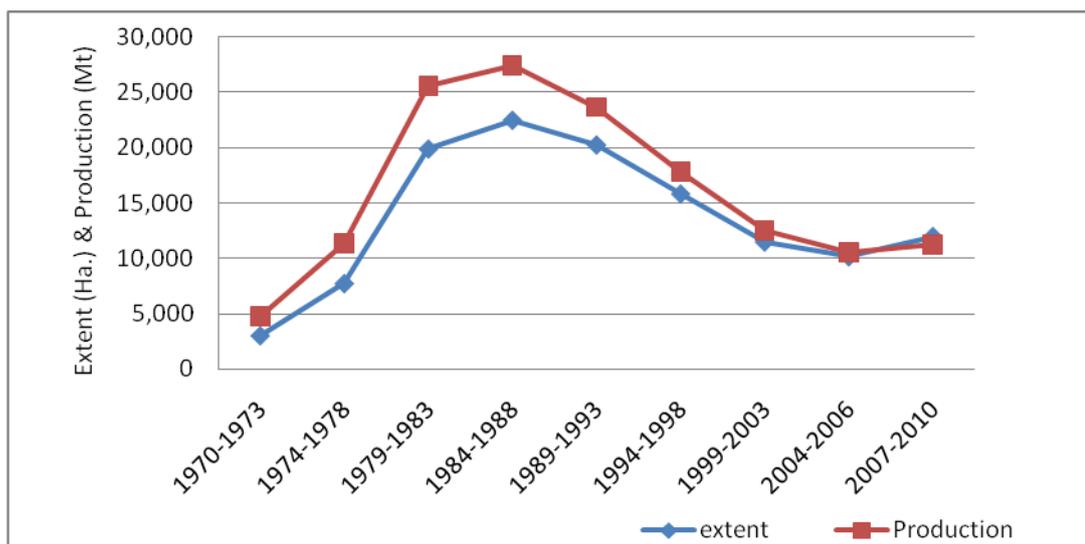
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 33: Average Production (Mt.) of Cowpea by Major Growing Districts

Period	Sri Lanka	Kurunegala	Monaragala	Anuradhapura	Ampara
1970-1973	3,023	592	341	80	44
1974-1978	7,723	2,350	692	661	233
1979-1983	19,865	5,811	1,756	2,816	596
1984-1988	22,461	6,890	2,241	3,581	1,375
1989-1993	20,237	5,474	2,683	2,041	2,309
1994-1998	15,816	1,836	2,257	1,915	3,443
1999-2003	11,480	864	1,764	1,216	2,880
2004-2006	10,149	647	2,166	1,047	2,545
2007-2010	11,975	741	2,261	1,315	3,905

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 08: Average Extent and Production of Cowpea in Sri Lanka, 1970-2010



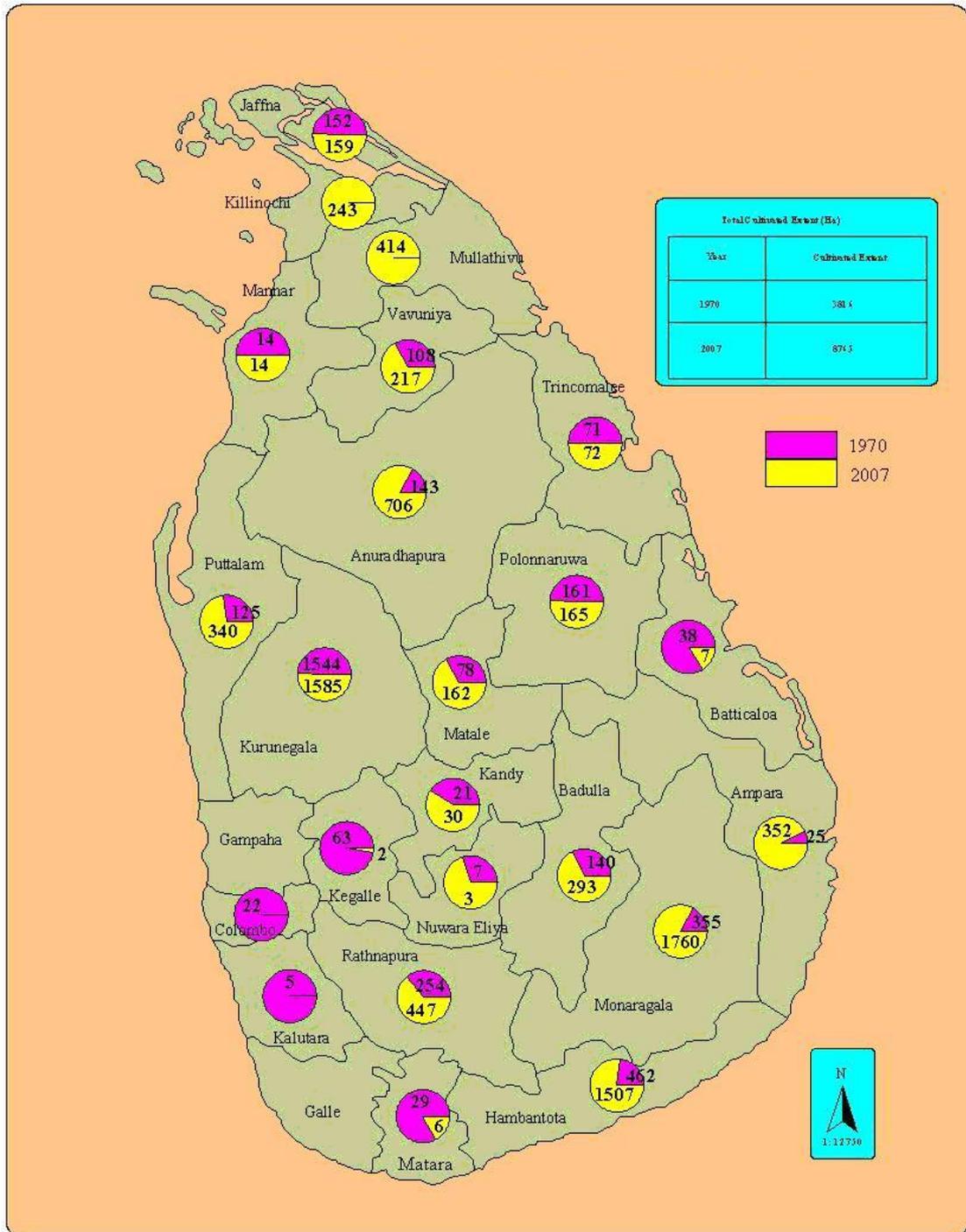
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 34: Average Cultivated Extent (Ha.) of Green Gram by Major Growing Districts

Period	Sri Lanka	Kurunegala	Ratnapura	Monaragala	A'pura	Hambantota
1970-1973	4,727	1,655	401	620	171	557
1974-1978	12,127	3,044	788	1,085	874	2,420
1979-1983	15,920	5,919	1,242	1,052	1,077	2,058
1984-1988	24,996	10,729	1,964	2,398	1,180	1,675
1989-1993	28,991	9,063	1,788	6,532	927	3,705
1994-1998	18,590	3,555	1,099	3,570	862	4,027
1999-2003	12,532	1,669	976	2,491	708	2,874
2004-2006	8,983	1,973	532	1,831	619	1,447
2007-2010	9,243	1,775	450	1,825	720	1,606

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Map 07: Cultivated Extent (Ha.) of Green Gram by Districts in 1970 and 2007

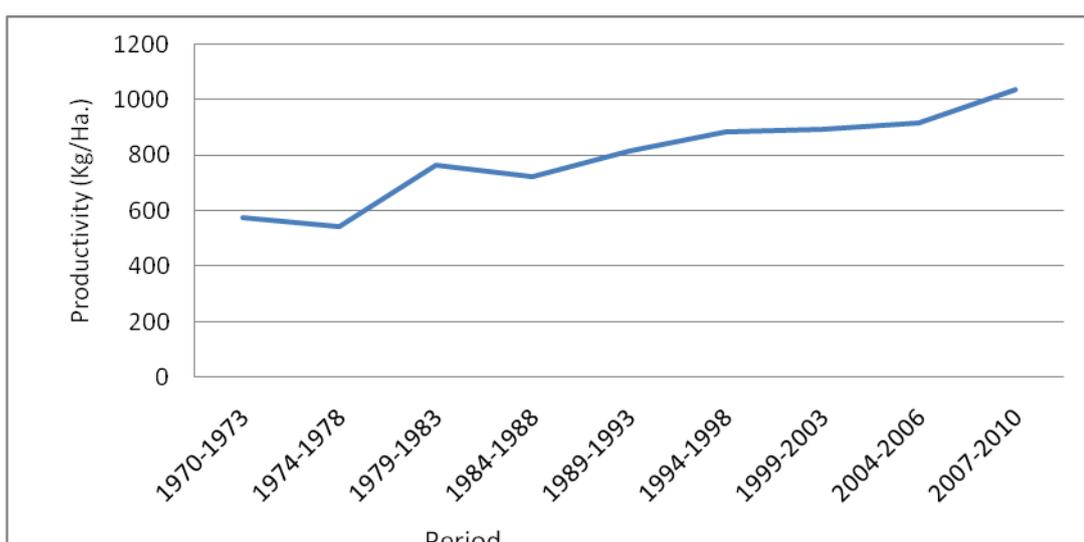


Source: Prepared by APPE Division, HARTI on the basis of Department of Census and Statistics Data

Table 35: Average Productivity (Kg./Ha.) of Green Gram, 1970-2010

Period	Sri Lanka	Kurunegala	Ratnapura	Monaragala	A'pura	Hambantota
1970-1973	576.69	632.02	625.94	496.77	555.56	662.48
1974-1978	543.42	565.37	548.22	564.98	456.52	602.07
1979-1983	767.09	588.95	721.42	821.29	766.95	887.27
1984-1988	725.00	619.07	1,058.04	809.84	855.93	1,006.57
1989-1993	815.63	620.43	881.43	976.58	928.80	1,097.98
1994-1998	885.15	606.47	797.09	1,003.64	986.08	1,055.13
1999-2003	896.35	687.84	764.34	1,052.59	836.16	1,004.18
2004-2006	919.51	529.14	1,069.55	1,112.51	885.30	966.14
2007-2010	1,037.32	582.53	962.22	1,049.31	1,030.55	1,311.33

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 09: Average Productivity (Kg./Ha.) of Green Gram 1970-2010

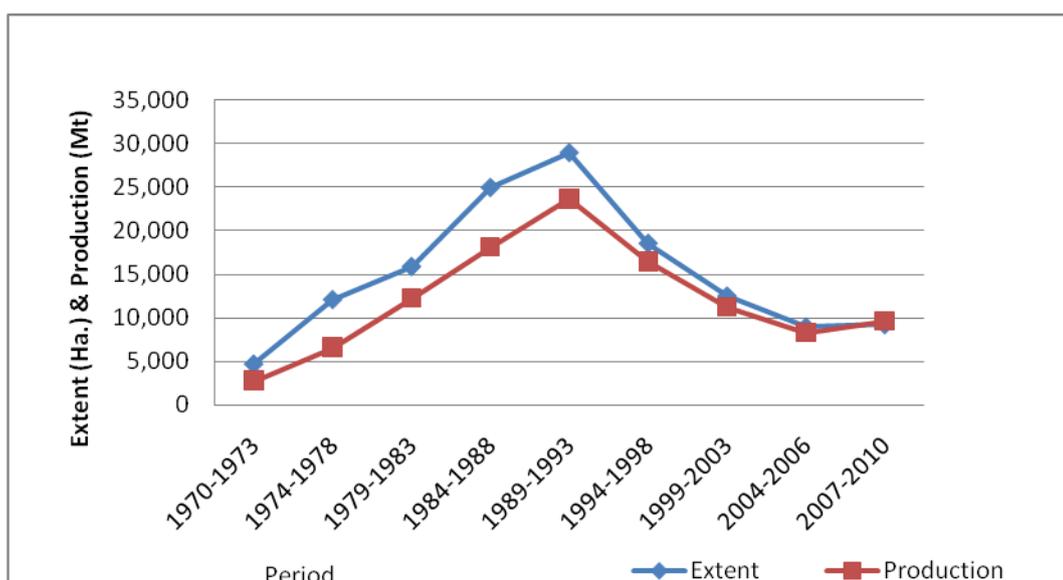
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 36: Average Production (Mt.) of Green Gram by Major Growing Districts

Period	Sri Lanka	Kurunegala	Ratnapura	Monaragala	A'pura	Hambantota
1970-1973	2,726	1,046	251	308	95	369
1974-1978	6,590	1,721	432	613	399	1,457
1979-1983	12,212	3,486	896	864	826	1,826
1984-1988	18,122	6,642	2,078	1,942	1,010	1,686
1989-1993	23,646	5,623	1,576	6,379	861	4,068
1994-1998	16,455	2,156	876	3,583	850	4,249
1999-2003	11,233	1,148	746	2,622	592	2,886
2004-2006	8,260	1,044	569	2,037	548	1,398
2007-2010	9,588	1,034	433	1,915	742	2,106

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 10: Average Extent and Production of Green Gram in Sri Lanka, 1970-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 37: Average Cultivated Extent (Ha.) of Gingerly by Major Growing Districts

Period	Sri Lanka	Kurunegala	Monaragala	Anuradhapura	Hambantota
1970-1973	12,271	4,353	474	3,307	658
1974-1978	20,786	5,541	2,696	6,559	1,508
1979-1983	27,790	5,738	2,493	7,548	3,493
1984-1988	13,725	3,905	1,337	3,845	696
1989-1993	9,702	1,717	994	3,602	618
1994-1998	9,440	628	1,050	4,583	807
1999-2003	7,725	407	1,193	2,289	1,204
2004-2006	8,656	763	1,196	2,907	1,273
2007-2010	12,013	519	1,037	6,906	829

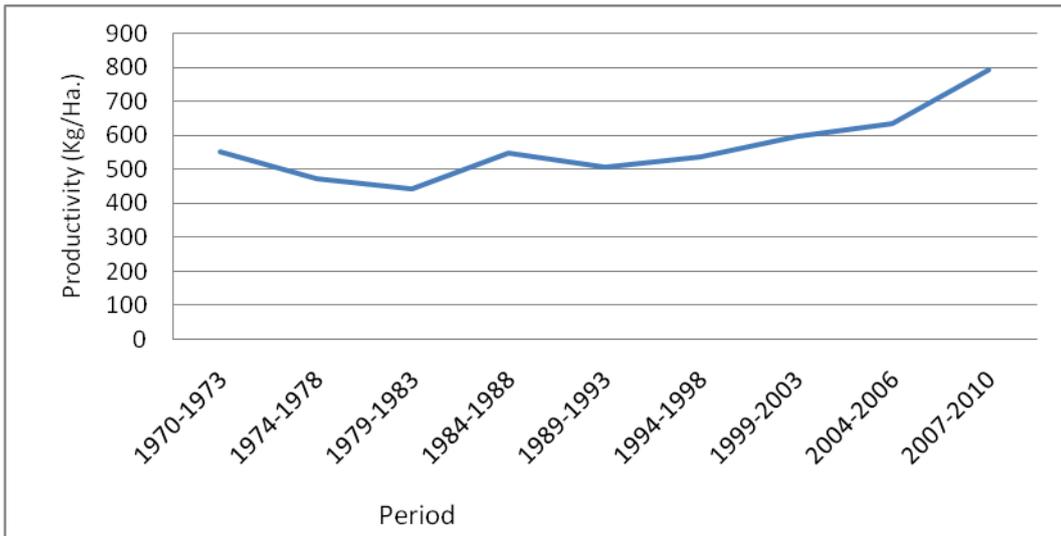
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 38: Average Productivity (Kg/Ha.) of Gingerly, 1970-2010

Period	Sri Lanka	Kurunegala	Monaragala	Anuradhapura	Hambantota
1970-1973	553.50	522.40	447.26	575.45	598.78
1974-1978	473.01	435.84	589.02	368.20	459.55
1979-1983	443.18	521.61	490.97	375.60	452.33
1984-1988	548.71	469.14	684.37	577.37	735.63
1989-1993	506.08	538.73	717.30	400.33	677.99
1994-1998	536.44	628.98	732.38	461.05	615.86
1999-2003	598.96	663.39	689.02	528.62	591.36
2004-2006	634.59	423.33	671.40	711.73	582.09
2007-2010	793.14	400.77	722.27	906.31	537.99

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 11: Average Productivity (Kg./Ha.) of Gingerly, 1970-2010



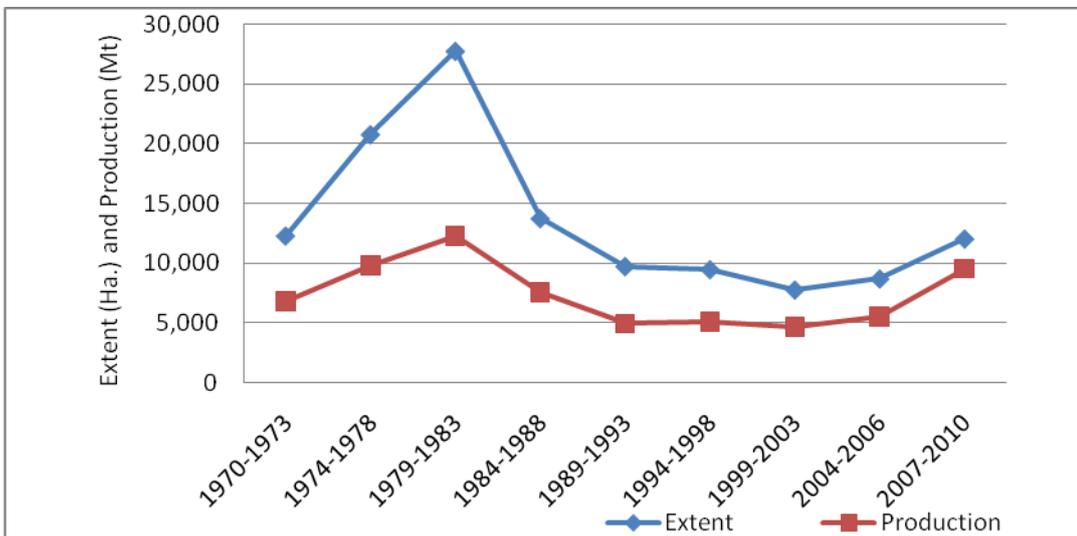
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 39: Average Production (Mt.) of Gingerly by Major Growing Districts

Period	Sri Lanka	Kurunegala	Monaragala	Anuradhapura	Hambantota
1970-1973	6,792	2,274	212	1,903	394
1974-1978	9,832	2,415	1,588	2,415	693
1979-1983	12,316	2,993	1,224	2,835	1,580
1984-1988	7,531	1,832	915	2,220	512
1989-1993	4,910	925	713	1,442	419
1994-1998	5,064	395	769	2,113	497
1999-2003	4,627	270	822	1,210	712
2004-2006	5,493	323	803	2,069	741
2007-2010	9,528	208	749	6,259	446

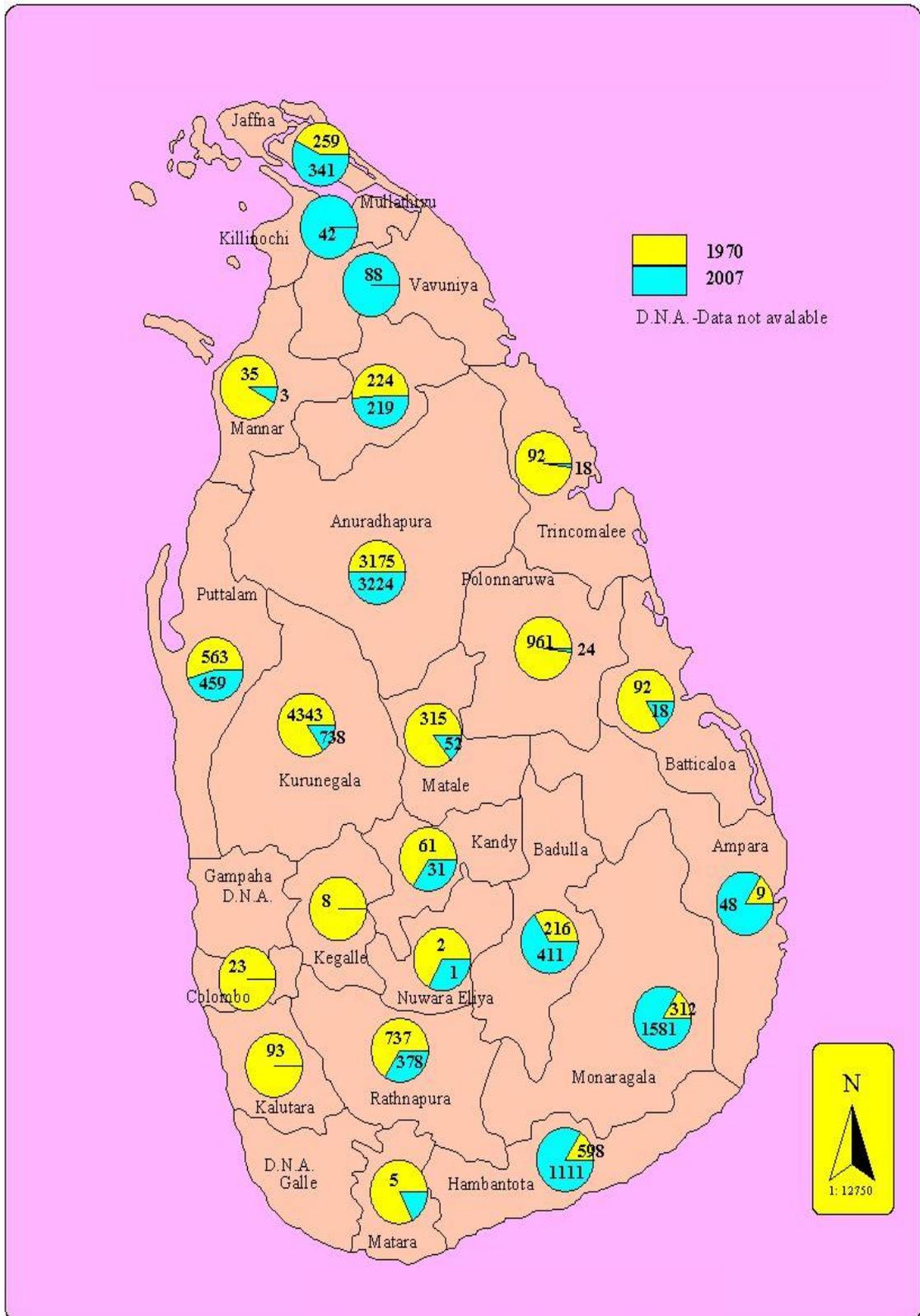
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 12: Average Extent and Production of Gingerly in Sri Lanka (1970-2010)



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Map 08: Cultivated Extent (Ha.) of Gingerly by Districts in 1970 and 2007



Source: Prepared by APPE Division, HARTI on the basis of Department of Census and Statistics Data

Table 40: Average Cultivated Extent (Ha.) of Groundnut by Major Growing Districts

Period	Sri Lanka	Puttalam	Kurunegala	Monaragala	Mullaitivu	Hambantota
1970-1973	13,308	77	548	3,777	N.A.	540
1974-1978	9,521	447	446	2,092	N.A.	1,720
1979-1983	13,027	1,774	880	2,211	1,967	1,190
1984-1988	9,866	1,792	992	1,663	633	664
1989-1993	9,309	1,229	1,031	2,505	518	817
1994-1998	9,682	1,033	1,152	2,284	947	973
1999-2003	10,198	957	779	2,329	1,225	762
2004-2006	10,853	771	1,029	2,543	1,869	488
2007-2010	9,793	747	1,616	2,638	1,928	318

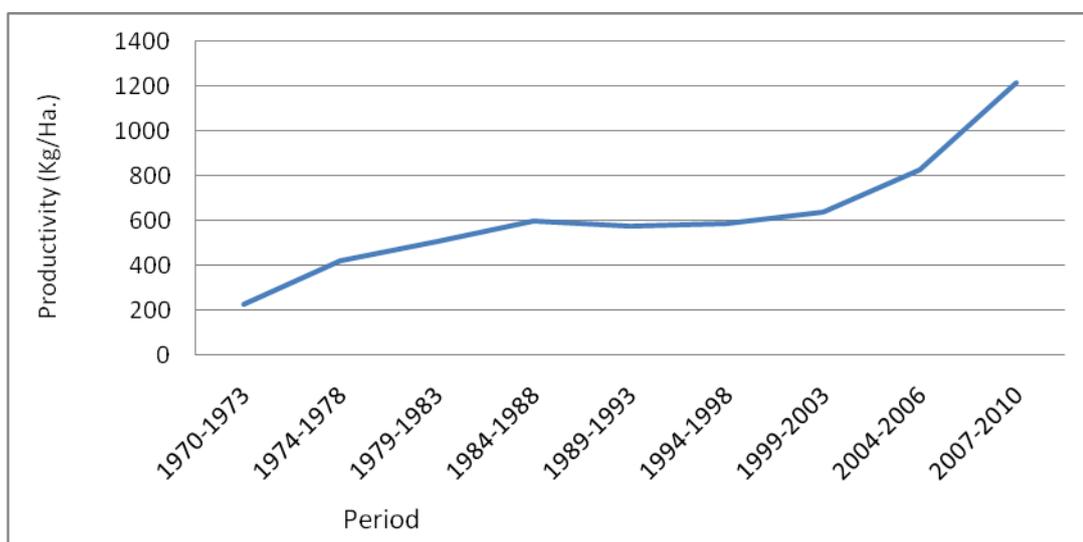
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 41: Average Productivity (Kg/Ha.) of Groundnut, 1970-2010

Year	Sri Lanka	Puttalam	Kurunegala	Monaragala	Mullaitivu	Hambantota
1970-1973	227.91	220.78	173.36	157.00	-	333.33
1974-1978	421.59	445.19	434.98	456.02	-	484.88
1979-1983	506.10	285.23	320.45	466.30	327.91	1,135.29
1984-1988	596.90	269.53	413.31	846.06	483.41	695.78
1989-1993	574.50	410.09	466.54	706.99	362.93	482.25
1994-1998	584.07	511.13	460.94	662.43	298.84	551.90
1999-2003	635.22	447.23	422.34	1,066.12	227.76	484.25
2004-2006	822.91	1,237.35	576.29	1,119.15	291.06	1,348.36
2007-2010	1,212.90	1,188.75	813.73	1,553.44	234.95	1,962.26

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 13: Average Productivity (Kg/Ha.) of Groundnut, 1970-2010

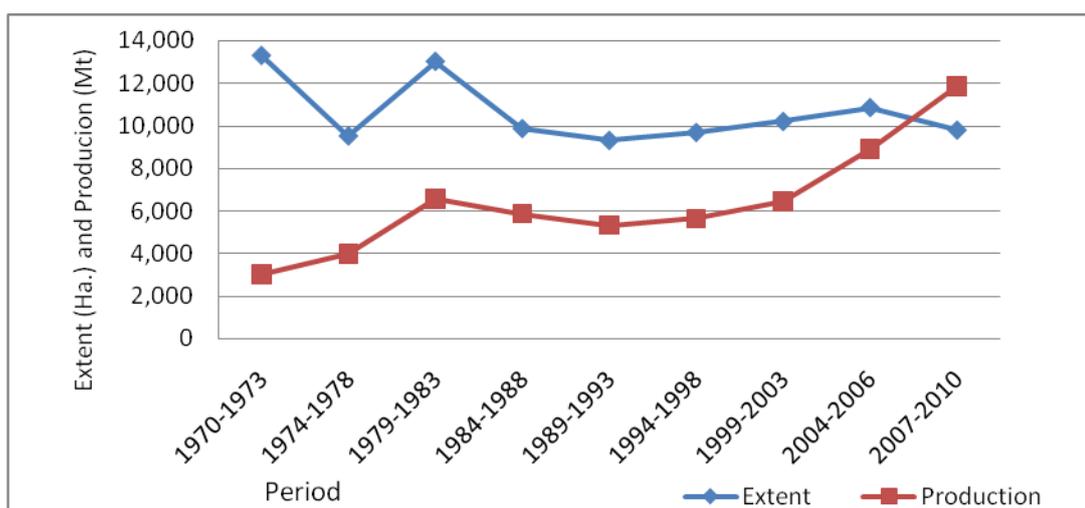


Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 42: Average Production (Mt.) of Groundnut by Major Growing Districts

Period	Sri Lanka	Puttalam	Kurunegala	Monaragala	Mullaitivu	Hambantota
1970-1973	3,033	17	95	593	N.A.	180
1974-1978	4,014	199	194	954	N.A.	834
1979-1983	6,593	506	282	1,031	645	1,351
1984-1988	5,889	483	410	1,407	306	462
1989-1993	5,348	504	481	1,771	188	394
1994-1998	5,655	528	531	1,513	283	537
1999-2003	6,478	428	329	2,483	279	369
2004-2006	8,931	954	593	2,846	544	658
2007-2010	11,878	888	1,315	4,098	453	624

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 14: Average Extent and Production of Groundnut in Sri Lanka, 1970-2010

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 43: Average Cultivated Extent (Ha.) of Sorghum by Major Growing Districts

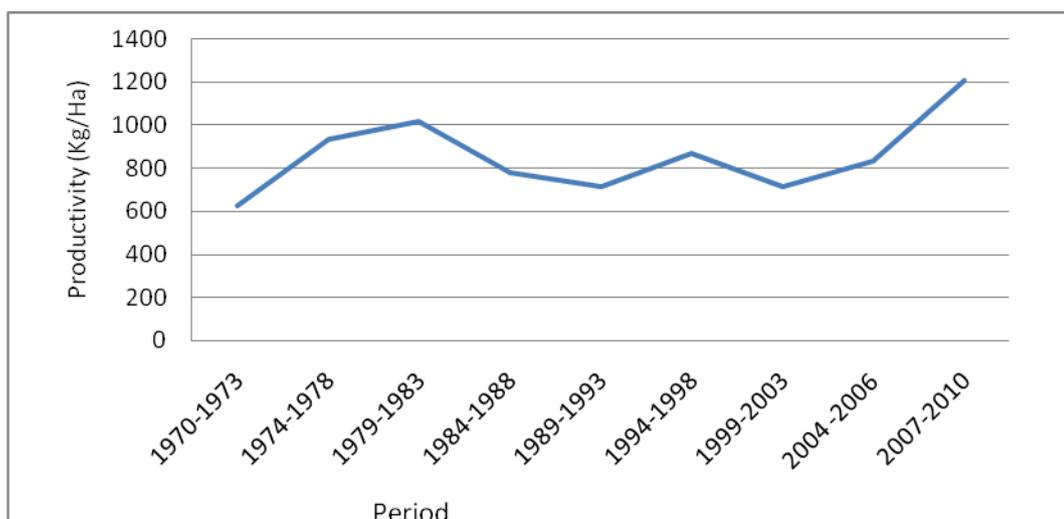
Period	Sri Lanka	Ratnapura	Trincomalee	Hambantota
1970-1973	995	76	14	204
1974-1978	3,455	197	69	342
1979-1983	529	174	9	48
1984-1988	297	161	2	16
1989-1993	99	11	3	68
1994-1998	179	66	15	91
1999-2003	184	36	12	48
2004-2006	263	21	4	27
2007-2010	135	19	8	12

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 44: Average Productivity (Kg/Ha.) of Sorghum, 1970-2010

Period	Sri Lanka	Ratnapura	Trincomalee	Hambantota
1970-1973	626.13	592.11	1,214.29	754.90
1974-1978	932.85	802.03	1,231.88	1,713.45
1979-1983	1,017.01	787.36	2,000.00	3000.00
1984-1988	781.14	726.71	1,000.00	812.50
1989-1993	717.17	818.18	1,333.33	661.76
1994-1998	871.51	1,272.73	1,000.00	615.38
1999-2003	717.39	888.89	1,000.00	562.50
2004 -2006	836.50	952.38	750.00	740.74
2007-2010	1207.40	1315.78	125.00	916.66

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 15: Average Productivity (Kg/Ha.) of Sorghum, 1970-2010

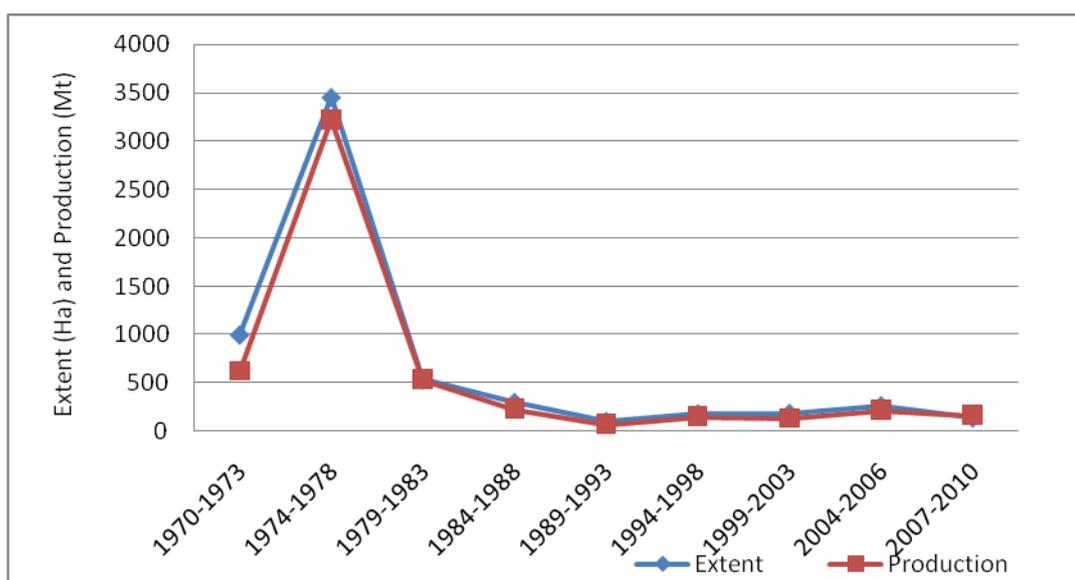
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 45: Average Production (Mt.) of Sorghum by Major Growing Districts

Period	Sri Lanka	Ratnapura	Trincomalee	Hambantota
1970-1973	623	45	17	154
1974-1978	3,223	158	85	586
1979-1983	538	137	18	144
1984-1988	232	117	2	13
1989-1993	71	9	4	45
1994-1998	156	84	15	56
1999-2003	132	32	12	27
2004-2006	220	20	3	20
2007-2010	163	25	1	11

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 16: Average Extent and Production of Sorghum in Sri Lanka, 1970-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 46: Average Cultivated Extent (Ha.) of *Meneri* by Major Growing Districts

Period	Sri Lanka	Ratnapura	Monaragala	Hambantota
1970-1973	1,310	369	77	478
1974-1978	3,417	682	881	994
1979-1983	2,532	732	907	570
1984-1988	1,035	236	517	204
1989-1993	757	127	437	172
1994-1998	312	66	129	110
1999-2003	146	58	55	33
2004-2006	90	25	42	6
2007-2010	44	15	9	6

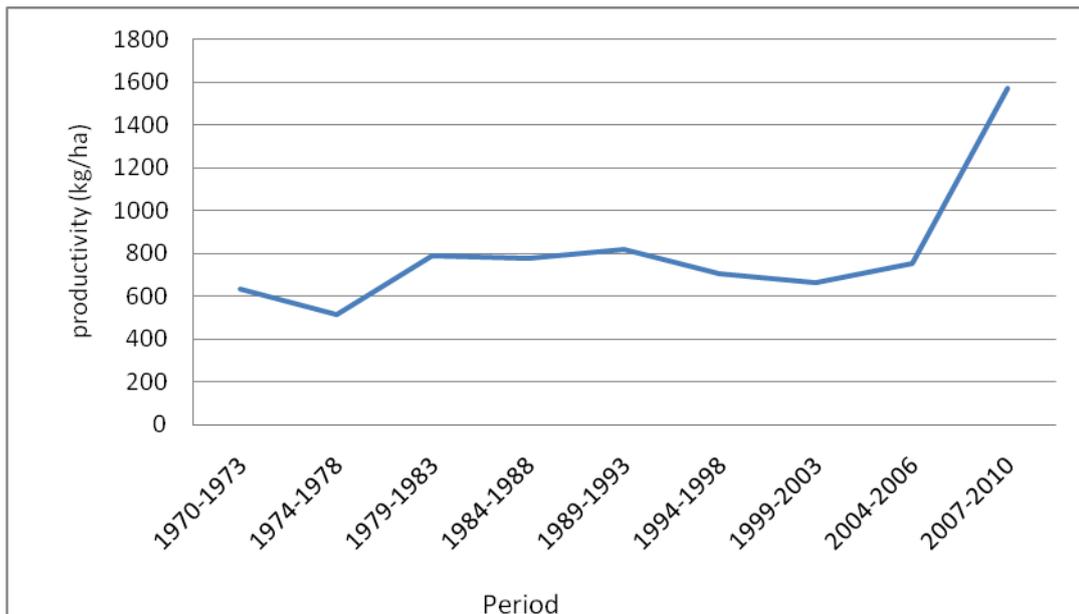
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 47: Average Productivity (Kg/Ha.) of *Meneri*, 1970-2010

Period	Sri Lanka	Ratnapura	Monaragala	Hambantota
1970-1973	632.82	769.65	558.44	608.79
1974-1978	515.36	514.66	561.86	438.63
1979-1983	791.86	609.29	1,229.33	466.67
1984-1988	776.81	1,843.22	839.46	955.88
1989-1993	820.34	590.55	887.87	860.47
1994-1998	705.13	681.82	798.45	600.00
1999-2003	664.38	637.93	854.55	424.24
2004-2006	755.56	720.00	880.95	666.67
2007-2010	1571.42	1875.00	1125.00	1500.00

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 17: Average Productivity (Kg/Ha.) of *Meneri* in Sri Lanka, 1970-2010



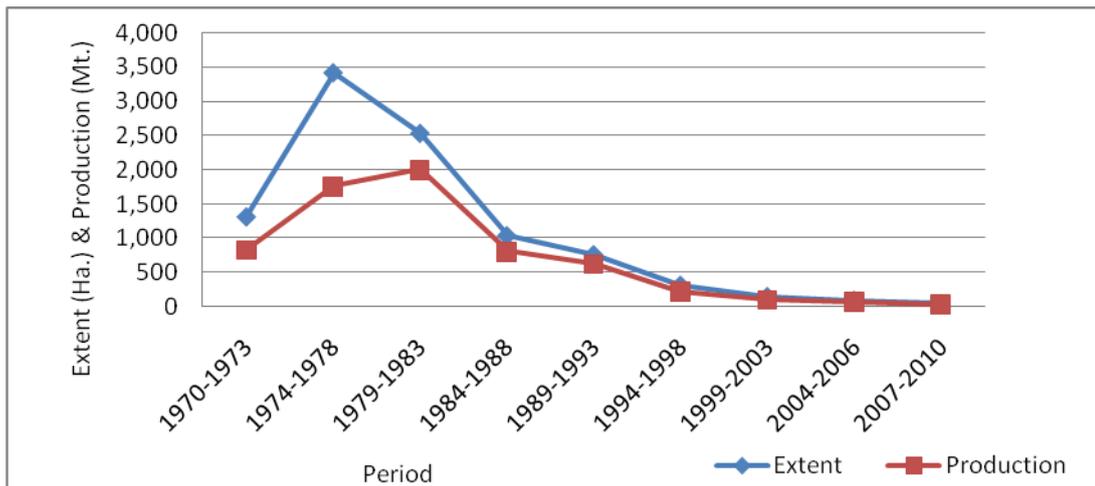
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 48: Average Production (Mt.) of *Meneri* by Major Growing Districts

Period	Sri Lanka	Ratnapura	Monaragala	Hambantota
1970-1973	829	284	43	291
1974-1978	1,761	351	495	436
1979-1983	2,005	446	1,115	266
1984-1988	804	435	434	195
1989-1993	621	75	388	148
1994-1998	220	45	103	66
1999-2003	97	37	47	14
2004-2006	68	18	37	4
2007-2010	28	8	8	4

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 18: Average Extent and Production of Meneri in Sri Lanka, 1970-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 49: Average Cultivated Extent (Ha.) of Soya Bean by Major Growing Districts

Period	Sri Lanka	Matale	Anuradhapura	Mahaweli-H
1984-1988	3,709	471	2,494	195
1989-1993	1,947	254	1,140	205
1994-1998	1,061	107	478	320
1999-2003	1,193	68	472	569
2004-2006	2,479	128	524	1,788
2007-2010	2,559	86	357	2,032

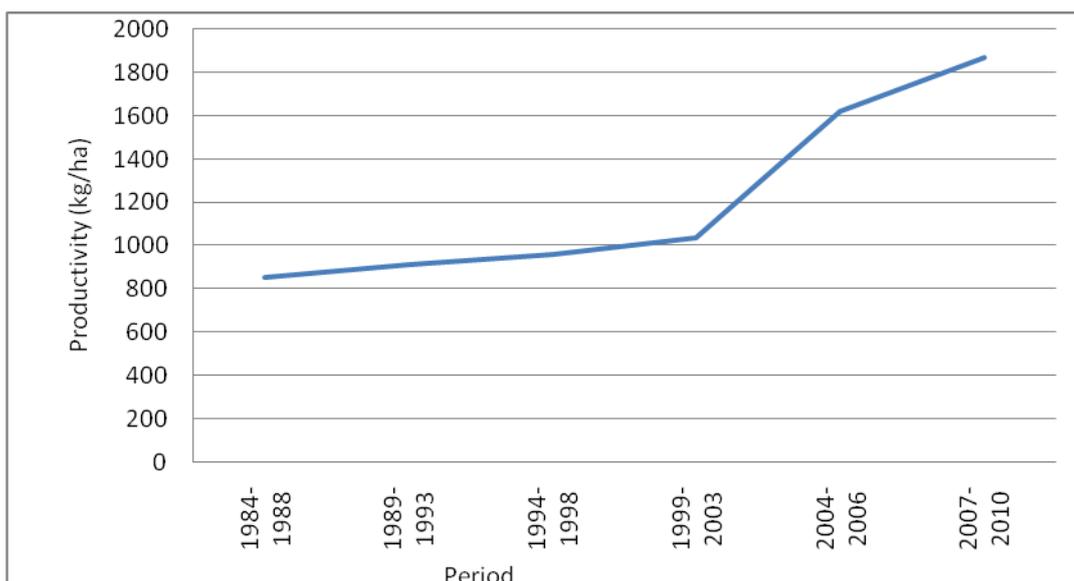
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 50: Average Productivity (Kg/Ha.) of Soya Bean, 1984-2010

Period	Sri Lanka	Matale	Anuradhapura	Mahaweli-H
1984-1988	851.44	830.15	787.89	1,133.33
1989-1993	910.63	917.32	814.91	1,321.95
1994-1998	957.59	822.43	711.30	1,346.88
1999-2003	1,036.04	838.24	733.05	1,347.98
2004-2006	1,621.22	1,203.13	1,129.77	1,808.17
2007-2010	1,869.87	1,209.30	1,616.24	1,963.03

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 19: Average Productivity (Kg/Ha.) of Soya Bean in Sri Lanka, 1984 to 2010



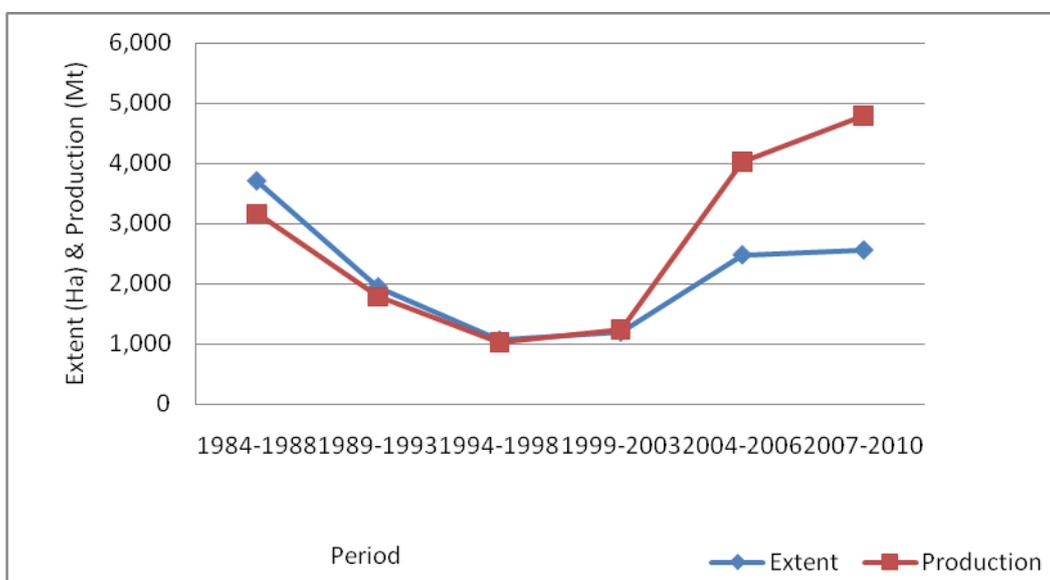
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 51: Average Production (Mt.) of Soya Bean by Major Growing Districts

Period	Sri Lanka	Matale	Anuradhapura	Mahaweli-H
1984-1988	3,158	391	1,965	221
1989-1993	1,773	233	929	271
1994-1998	1,016	88	340	431
1999-2003	1,236	57	346	767
2004-2006	4,019	154	592	3,233
2007-2010	4,785	104	577	3,989

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 20: Average Extent and Production of Soya Bean in Sri Lanka, 1984-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 52: Average Cultivated Extent (Ha.) of Black Gram by Major Growing Districts

Period	Sri Lanka	Vavuniya	Mullaitivu	Anuradhapura
1984-1988	8,785	1,988	577	3,362
1989-1993	7,251	2,229	594	3,289
1994-1998	10,182	2,086	767	5,321
1999-2003	7,077	1,377	1,594	2,660
2004-2006	5,918	1,024	1,543	2,322
2007-2010	8,202	1,531	820	4,689

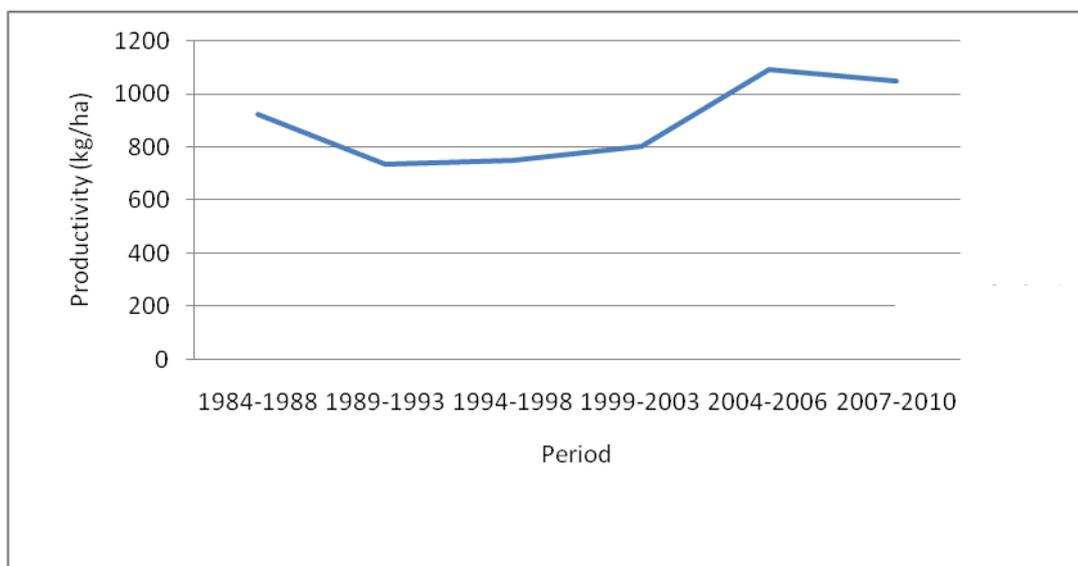
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 53: Average Productivity (Kg/Ha.) of Black Gram, 1984-2010

Period	Sri Lanka	Vavuniya	Mullaitivu	Anuradhapura
1984-1988	921.34	769.11	668.98	1,143.66
1989-1993	734.93	686.41	744.11	738.83
1994-1998	750.44	651.49	873.53	682.39
1999-2003	800.06	653.59	903.39	826.69
2004-2006	1,090.06	1,458.98	863.90	1,131.35
2007-2010	1,044.98	1,026.12	854.87	1,097.67

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 21: Average Productivity of Black Gram in Sri Lanka, 1984-2010

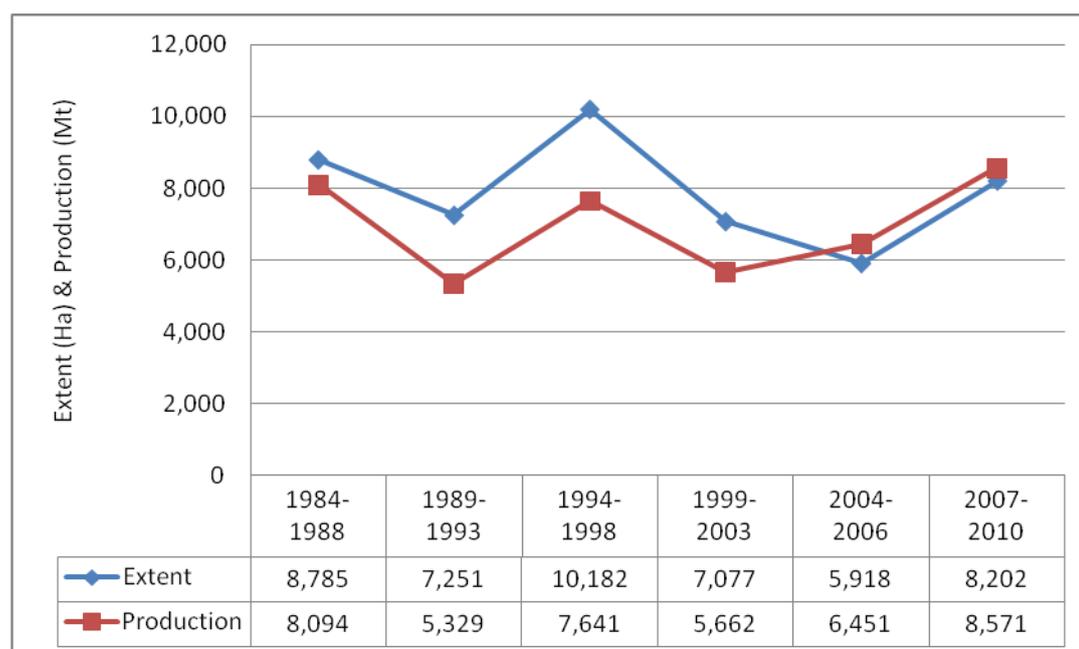


Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 54: Average Production (Mt.) of Black Gram by Major Growing Districts

Period	Sri Lanka	Vavuniya	Mulativu	Anuradhapura
1984-1988	8,094	1,529	386	3,845
1989-1993	5,329	1,530	442	2,430
1994-1998	7,641	1,359	670	3,631
1999-2003	5,662	900	1,440	2,199
2004-2006	6,451	1,494	1,333	2,627
2007-2010	8,571	1,571	701	5,147

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 22: Average Extent and Production of Black Gram in Sri Lanka, 1984-2010

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 55: Average Cultivated Extent (Ha.) of Red Onion by Major Growing Districts

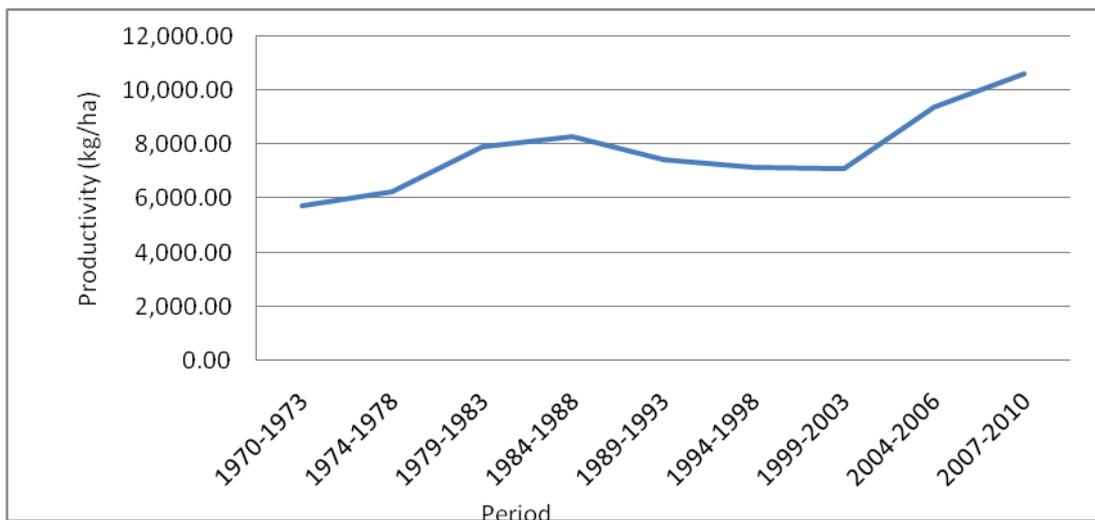
Period	Sri Lanka	Puttalam	Jaffna
1970-1973	7,624	268	2,867
1974-1978	8,887	320	3,577
1979-1983	9,048	238	4,117
1984-1988	6,074	681	1,998
1989-1993	7,644	1,254	2,303
1994-1998	6,530	1,419	1,078
1999-2003	5,447	1,167	991
2004-2006	5,470	1,787	1,033
2007-2010	5,053	1,911	1,217

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 56: Average Productivity (Kg/Ha.) of Red Onion, 1970-2010

Period	Sri Lanka	Puttalam	Jaffna
1970-1973	5,710.13	6,246.27	1,1067.67
1974-1978	6,226.17	4,037.50	9,483.93
1979-1983	7,886.16	6,193.28	10,990.77
1984-1988	8,262.43	5,591.78	10,121.62
1989-1993	7,417.19	4,988.84	9,969.17
1994-1998	7,148.70	5,153.63	9,778.29
1999-2003	7,081.33	5,090.83	9,812.31
2004-2006	9,380.62	11,592.05	10,424.98
2007-2010	10,606.37	10,851.38	9,000.00

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 23: Average Productivity (Kg/Ha.) of Red Onion in Sri Lanka, 1970-2010

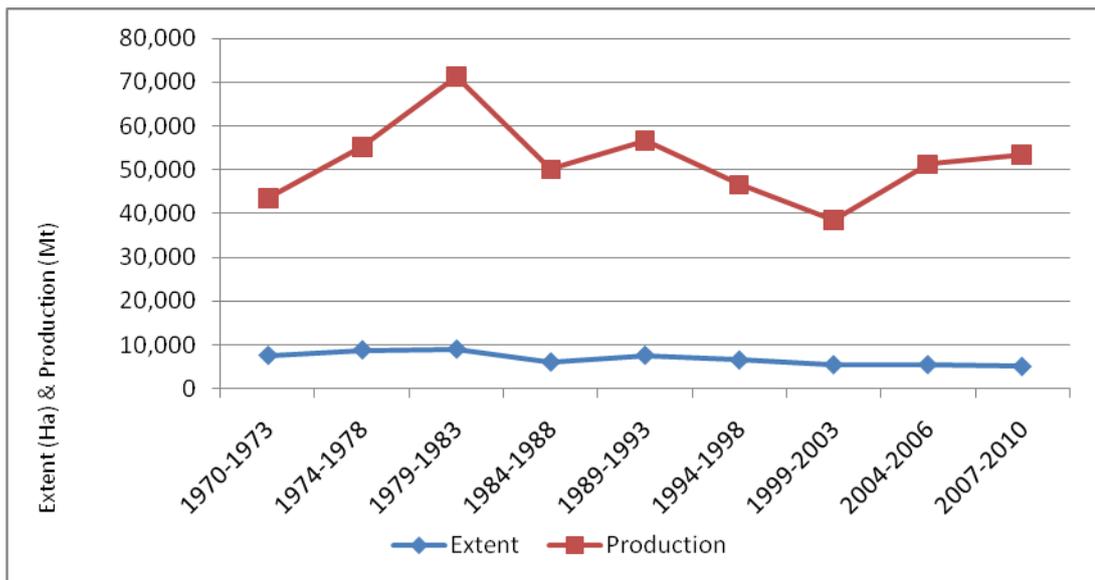
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 57: Average Production (Mt.) of Red Onion by Major Growing Districts

Period	Sri Lanka	Puttalam	Jaffna
1970-1973	43,534	1,674	31,731
1974-1978	55,332	1,292	33,924
1979-1983	71,354	1,474	45,249
1984-1988	50,186	3,808	20,223
1989-1993	56,697	6,256	22,959
1994-1998	46,681	7,313	10,541
1999-2003	38,572	5,941	9,724
2004-2006	51,312	20,715	10,769
2007-2010	53,594	20,737	10,953

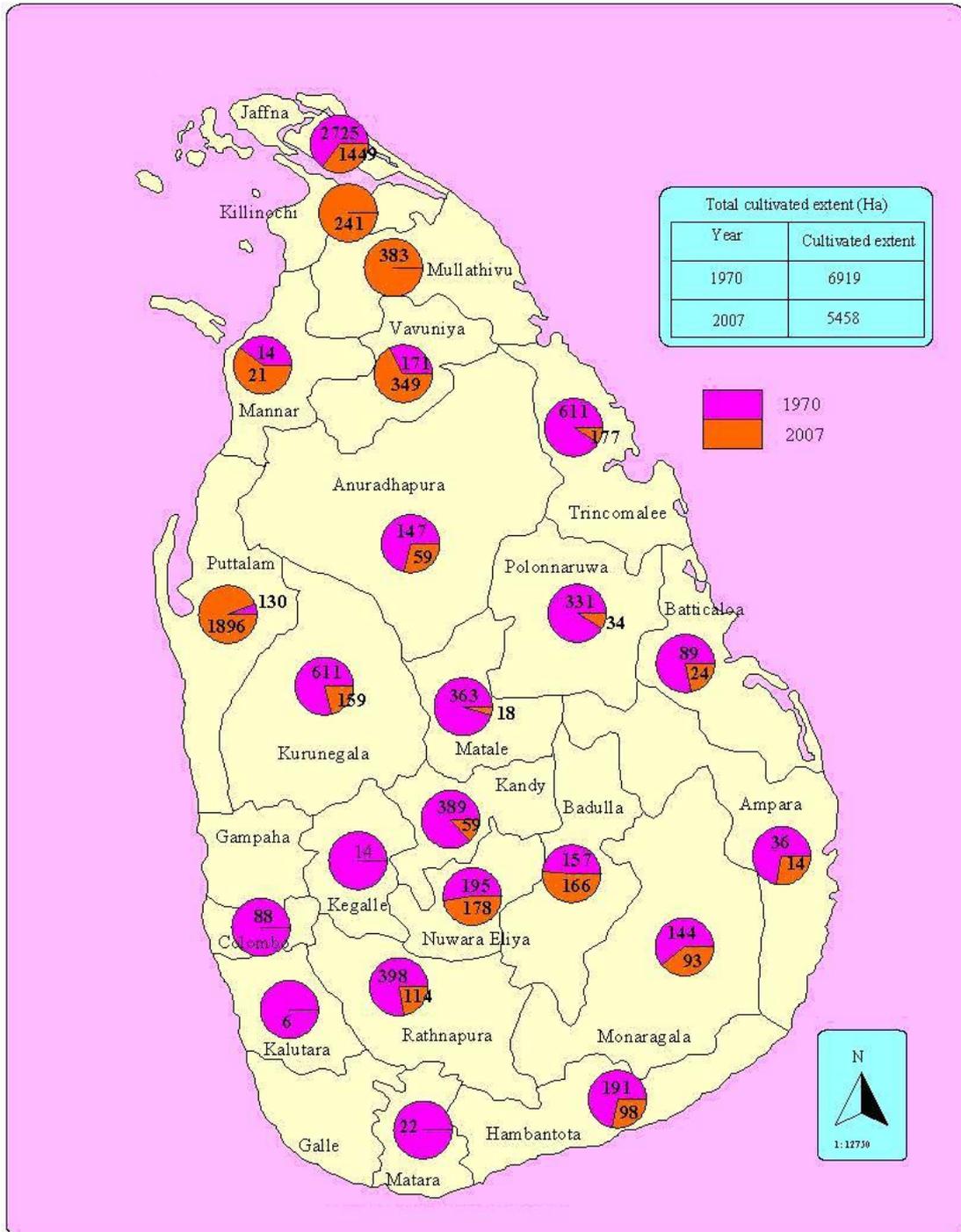
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 24: Average Extent and Production of Red Onion in Sri Lanka, 1970-2010



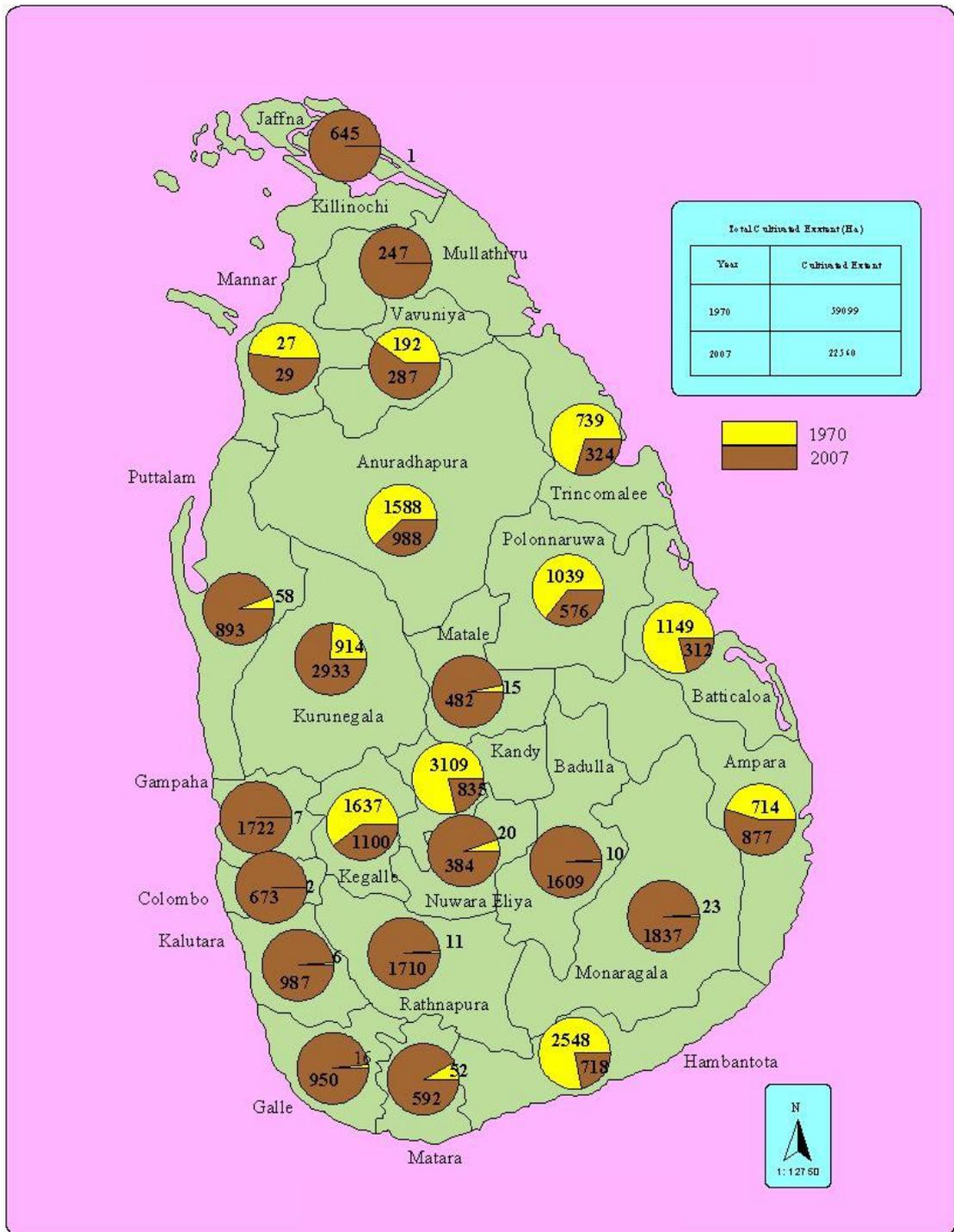
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Map 09: Cultivated Extent (Ha.) of Red Onion by Districts in 1970 and 2007



Source: Prepared by APPE Division, HARTI on the basis of Department of Census and Statistics Data.

Map 10: Cultivated Extent (Ha.) of Manioc by Districts in 1970 and 2007



Source: Prepared by APPE Division, HARTI on the basis of Department of Census and Statistics Data.

Table 58: Average Cultivated Extent (Ha.) of Manioc by Major Growing Districts

Period	Sri Lanka	Gampaha	Kurunegala	Ratnapura	Badulla	Monaragala
1970-1973	75,207	N.A.	14,155	6,152	3,059	3,589
1974-1978	1,20,978	N.A.	27,384	9,177	4,688	8,384
1979-1983	55,051	4,358	8,174	4,517	2,530	3,897
1984-1988	51,150	3,183	8,472	4,137	1,631	3,358
1989-1993	39,632	2,901	6,223	2,730	1,430	1,799
1994-1998	31,217	2,418	3,788	2,908	1,645	1,597
1999-2003	27,787	1,999	3,276	2,550	1,667	1,935
2004-2006	23,386	1,813	2,769	1,628	1,494	1,872
2007-2010	23,451	1,808	3,126	1,688	1,708	1,924

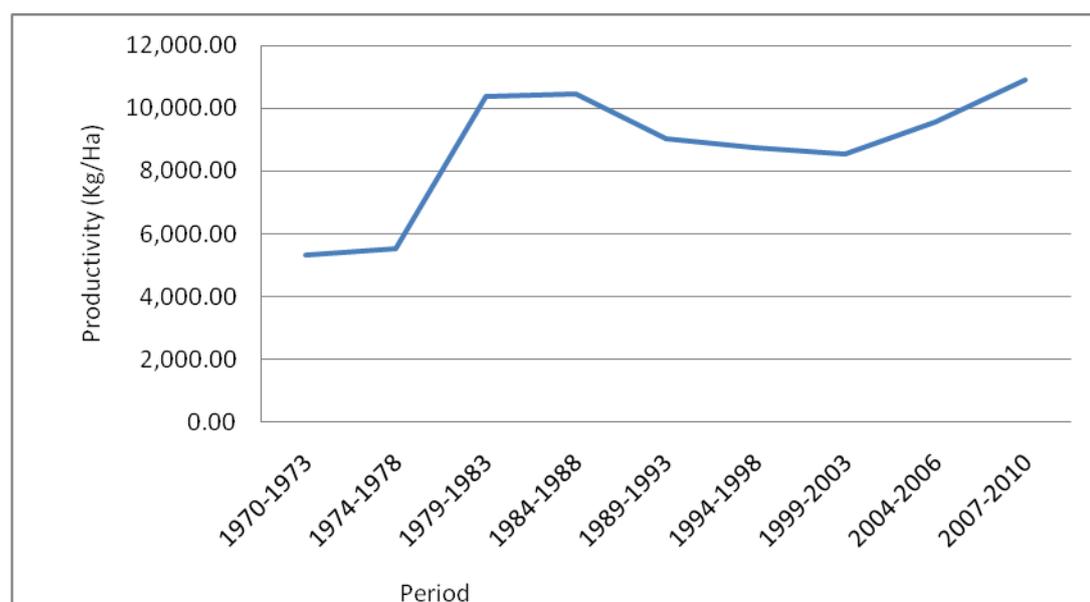
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

N.A. Not Available

Table 59: Average Productivity (Kg/Ha.) of Manioc, 1970-2010

Year	Sri Lanka	Gampaha	Kurunegala	Ratnapura	Badulla	Monaragala
1970-1973	5,328.19	-	4,482.80	6,699.77	9,493.30	2,739.76
1974-1978	5,516.08	-	4,449.02	8,188.51	5,267.70	4,155.18
1979-1983	10,371.91	9,964.89	12,686.93	19,003.10	8,308.70	5,404.41
1984-1988	10,428.86	7,809.93	13,095.02	10,659.17	10,657.27	7,244.79
1989-1993	9,011.88	8,217.86	10,665.11	8,884.62	9,521.68	7,232.91
1994-1998	8,743.31	9,424.73	8,721.22	9,201.51	9,587.23	9,973.07
1999-2003	8,550.94	9,788.39	8,329.37	8,110.59	10,676.06	8,853.75
2004-2006	9,550.84	9,657.47	8,985.55	8,358.72	13,812.58	9,820.51
2007-2010	10,887.25	9,837.94	7,598.20	9,606.04	14,114.75	14,151.76

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 25: Average Productivity (Kg/Ha.) of Manioc in Sri Lanka, 1970-2010

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

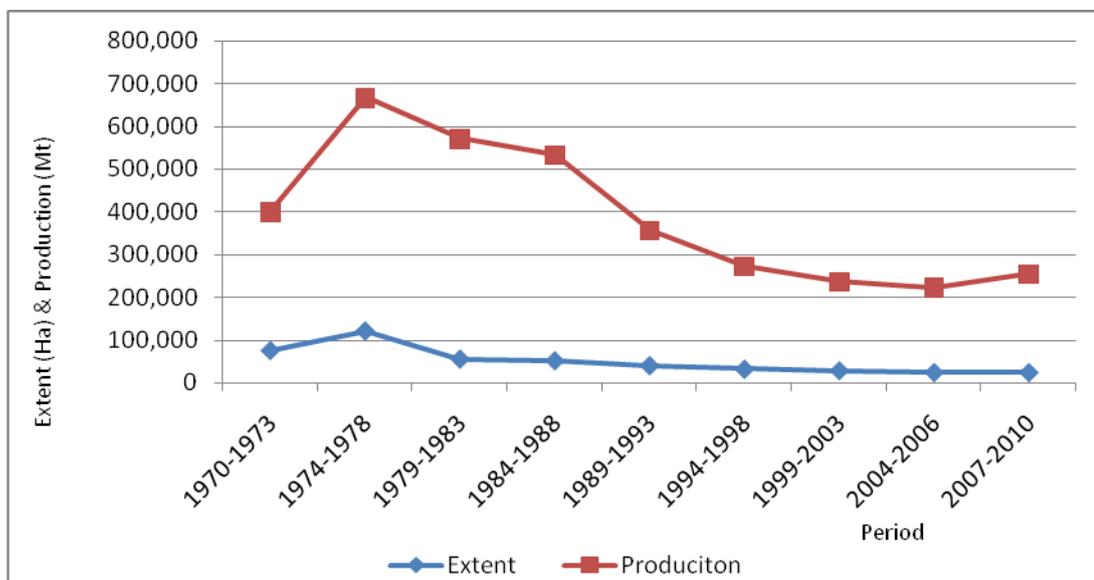
Table 60: Average Production (Mt.) of Manioc by Major Growing Districts

Period	Sri Lanka	Gampaha	Kurunegala	Ratnapura	Badulla	Monaragala
1970-1973	400,717	N.A.	63,454	41,217	29,040	9,833
1974-1978	667,324	N.A.	121,832	75,146	24,695	34,837
1979-1983	570,984	43,427	103,703	85,837	21,021	21,061
1984-1988	533,436	24,859	110,941	44,097	17,382	24,328
1989-1993	357,159	23,840	66,369	24,255	13,616	13,012
1994-1998	272,940	22,789	33,036	26,758	15,771	15,927
1999-2003	237,605	19,567	27,287	20,682	17,797	17,132
2004-2006	223,356	17,509	24,881	13,608	20,636	18,384
2007-2010	255,317	17,787	23,752	16,215	24,108	27,228

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
 Statistics and Data Processing Unit, HARTI

N.A. - Not Available

Figure 26: Average Cultivated Extent and Production of Manioc in Sri Lanka, 1970-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
 Statistics and Data Processing Unit, HARTI

Table 61: Average Cultivated Extent (Ha.) of Sweet Potato by Major Growing Districts

Period	Sri Lanka	Gampaha	Kalutara	Kurunegala	Kegalle	Ratnapura	Matale
1970-1973	18,108	N.A.	910	2,351	1,301	1,852	550
1974-1978	36,655	N.A.	1,739	5,943	3,212	3,729	1,421
1979-1983	15,602	1,412	1,041	2,362	1,267	1,724	539
1984-1988	13,922	1,077	867	1,875	984	2,236	569
1989-1993	10,742	733	671	1,340	858	1,632	443
1994-1998	8,967	541	580	844	678	1,474	445
1999-2003	7,953	405	528	888	524	1,190	689
2004-2006	6,563	289	277	844	354	469	913
2007-2010	6,328	250	234	958	343	406	902

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

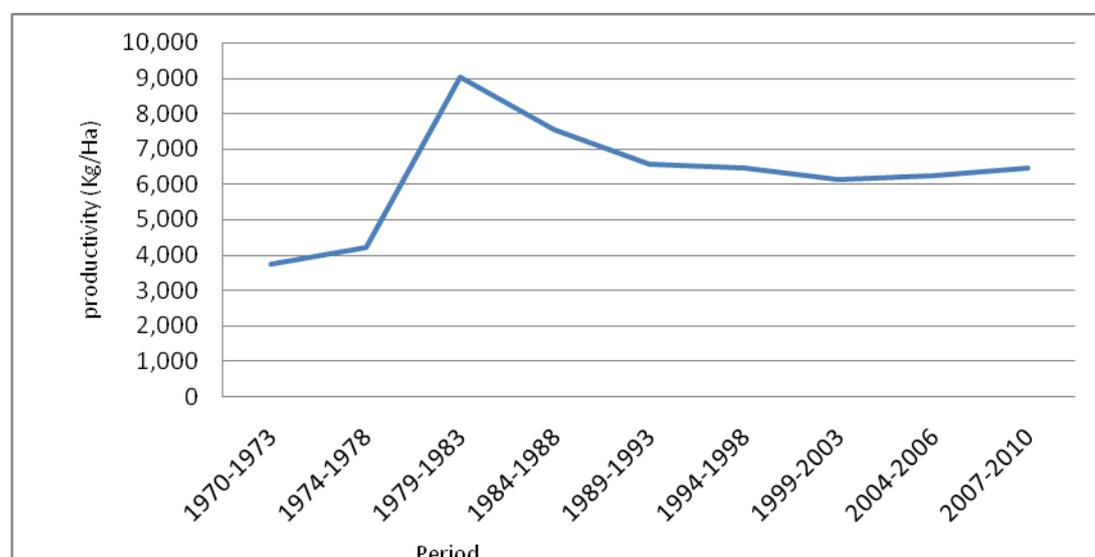
N.A. - Not Available

Table 62: Average Productivity (Kg/Ha.) of Sweet Potato, 1970-2010

Year	Sri Lanka	Gampaha	Kalutara	Kurunegala	Kegalle	Ratnapura	Matale
1970-1973	3,733	-	3,169	3,835	2,197	4,828	4,429
1974-1978	4,192	-	3,224	4,371	3,845	6,114	5,081
1979-1983	9,035	5,605	5,975	7,033	9,450	26,181	7,308
1984-1988	7,556	4,090	9,646	7,910	7,498	10,926	6,369
1989-1993	6,579	4,952	7,782	7,351	5,855	8,673	5,447
1994-1998	6,454	5,233	8,905	5,993	5,978	9,252	4,470
1999-2003	6,123	5,748	9,508	6,153	6,088	8,302	4,524
2004-2006	6,227	6,219	7,120	6,414	5,841	8,458	6,124
2007-2010	6,454	6,736	6,726	5,952	7,554	9,059	7,451

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 27: Average Productivity (Kg/Ha.) of Sweet Potato, 1970-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI.

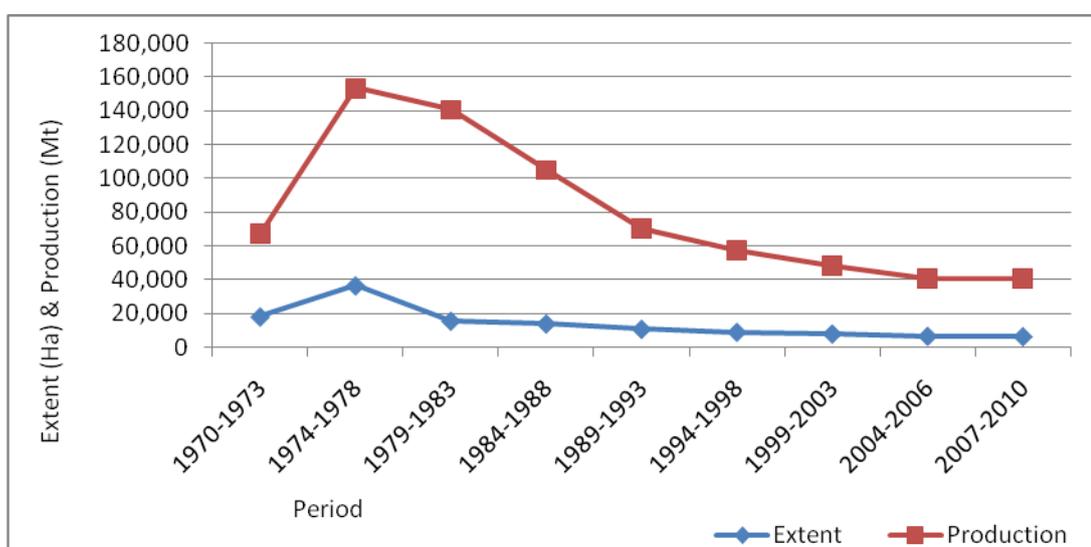
Table 63: Average Production (Mt.) of Sweet Potatoes by Major Growing Districts

Period	Sri Lanka	Gampaha	Kalutara	Kurunegala	Kegalle	Ratnapura	Matale
1970-1973	67,592	N.A.	2,884	9,017	2,859	8,941	2,436
1974-1978	153,670	N.A.	5,607	25,976	12,350	22,799	7,220
1979-1983	140,968	7,914	6,220	16,612	11,973	45,137	3,939
1984-1988	105,197	4,405	8,363	14,831	7,378	24,430	3,624
1989-1993	70,669	3,630	5,222	9,851	5,024	14,155	2,413
1994-1998	57,871	2,831	5,165	5,058	4,053	13,638	1,989
1999-2003	48,693	2,328	5,020	5,464	3,190	9,879	3,117
2004-2006	40,836	1,841	1,951	5,503	2,243	4,466	5,450
2007-2010	40,839	1,684	1,574	5,702	2,591	3,678	6,721

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

N.A. - Not Available

Figure 28: Average Cultivated Extent and Production of Sweet Potato in Sri Lanka, 1970-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 64: Average Cultivated Extent (Ha.) of Chillies by Major Growing Districts

Period	Sri Lanka	Kurunegala	Anuradhapura	Hambantota	Mahaweli-H
1970-1973	30,170	3,030	4,056	4,080	-
1974-1978	51,854	5,470	11,811	6,276	-
1979-1983	37,433	4,087	6,324	3,249	2,051
1984-1988	29,638	3,133	5,142	1,302	4,862
1989-1993	30,273	2,668	6,571	2,006	4,777
1994-1998	27,795	1,949	8,138	1,816	3,272
1999-2003	18,228	1,214	5,450	1,155	1,264
2004-2006	15,315	1,133	4,385	777	475
2007-2010	13,918	1,268	3,174	972	366

Note: The average cultivated extent of chillies reported as 415 ha in Ampara, 1,487 ha. in Puttalam and 1,006 in Monaragala districts in 2007-2010.

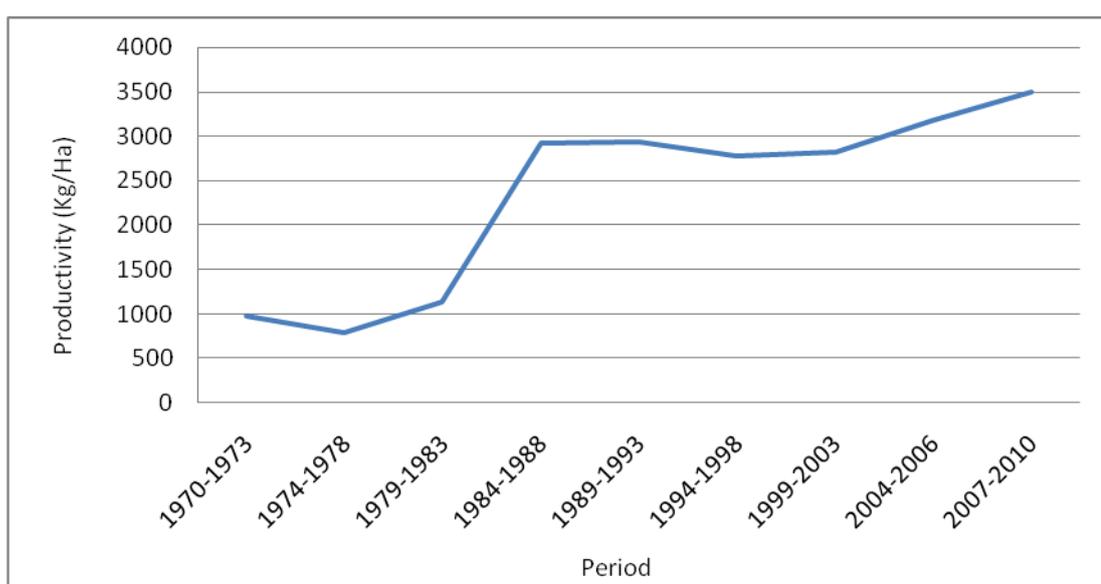
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 65: Average Productivity (Kg/Ha.) of Chillies, 1970-2010

Period	Sri Lanka	Kurunegala	Anuradhapura	Hambantota	Mahaweli-H
1970-1973	977.63	828.38	656.31	874.26	-
1974-1978	788.89	688.12	565.24	775.97	-
1979-1983	1,132.26	674.82	718.22	709.76	1,300.83
1984-1988	2,930.80	2,719.12	1,918.32	1,751.15	4,753.81
1989-1993	2,936.54	2,808.47	2,951.61	2,150.05	3,692.69
1994-1998	2,784.24	2,611.08	3,373.68	2,021.48	1,336.49
1999-2003	2,824.99	2,278.42	3,520.55	2,239.83	1,288.77
2004-2006	3,182.96	1,476.61	4,215.96	2,963.96	1,322.11
2007-2010	3,504.81	1,150.63	4,780.40	3,196.50	1,598.36

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 29: Average Productivity (Kg/Ha.) of Chillies, 1970-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

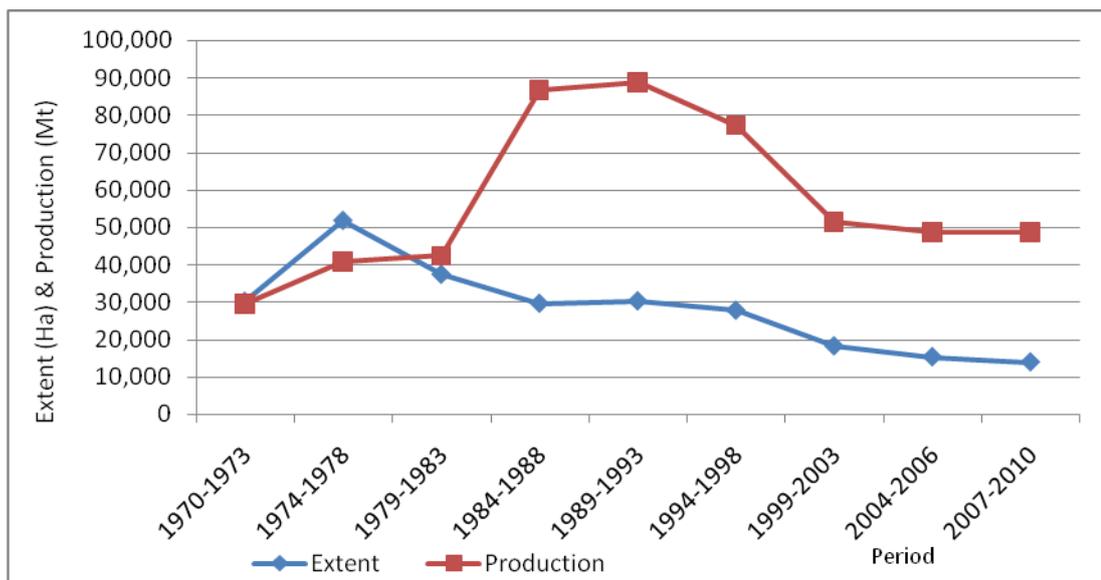
Table 66: Average Production (Mt.) of Chillies by Major Growing Districts

Period	Sri Lanka	Kurunegala	Anuradhapura	Hambantota	Mahaweli-H
1970-1973	29,495	2,510	2,662	3,567	-
1974-1978	40,907	3,764	6,676	4,870	-
1979-1983	42,384	2,758	4,542	2,306	2,668
1984-1988	86,863	8,519	9,864	2,280	23,113
1989-1993	88,898	7,493	19,395	4,313	17,640
1994-1998	77,388	5,089	27,455	3,671	4,373
1999-2003	51,494	2,766	19,187	2,587	1,629
2004-2006	48,747	1,673	18,487	2,303	628
2007-2010	48,780	1,459	15,173	3,107	585

Note: The average production of chillies reported as 1,130 Mt. in Ampara, 6,769 Mt. in Puttalam and 4,033 Mt. in Monaragala districts in 2007-2010.

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 30: Average Cultivated Extent (Ha) and Production (Mt) of Chillies in Sri Lanka (1970-2010)



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 67: Average Cultivated Extent (Ha.) of Turmeric by Major Growing Districts

Period	Sri Lanka	Gampaha	Kurunegala	Kegalle	Kandy
1970-1973	1,952	N.A.	299	390	503
1974-1978	4,453	N.A.	911	996	554
1979-1983	2,919	582	727	738	333
1984-1988	2,632	578	515	492	444
1989-1993	1,734	352	188	307	315
1994-1998	1,303	185	155	250	206
1999-2003	1,089	135	76	242	227
2004-2006	695	59	54	145	167
2007-2010	919	68	70	129	256

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

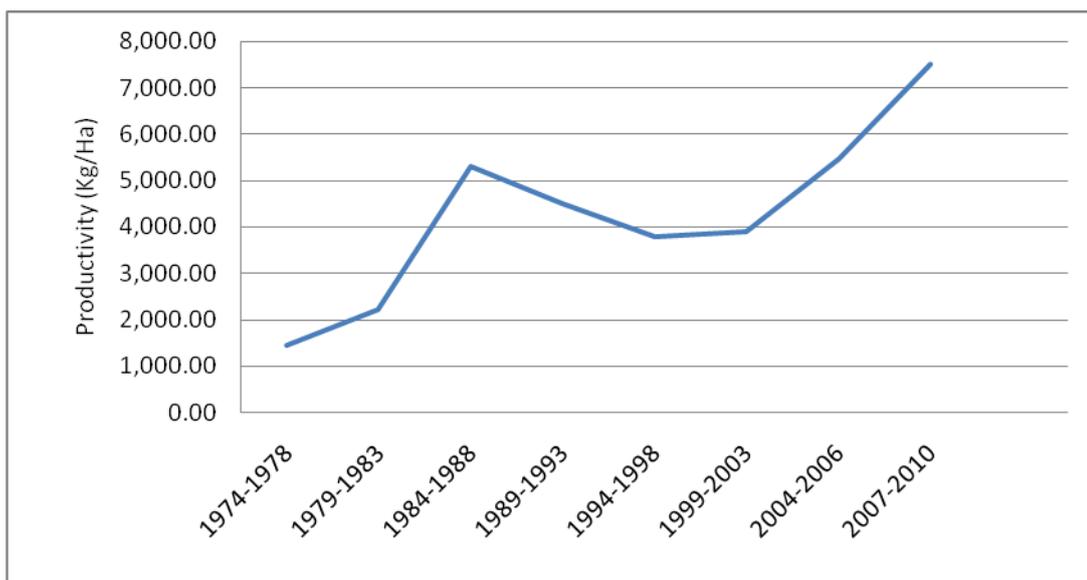
N.A. - Not Available

Table 68: Average Productivity (Kg/Ha.) of Turmeric, 1970-2010

Period	Sri Lanka	Gampaha	Kurunegala	Kegalle	Kandy
1970-1973	1,475.41	-	963.21	1,423.08	1,266.40
1974-1978	1,432.74	-	1,075.74	1,243.98	1,891.70
1979-1983	2,201.78	2,487.97	2,441.54	1,636.86	2,540.54
1984-1988	5,303.19	4,456.75	4,854.37	8,060.98	3,450.45
1989-1993	4,486.74	4,730.11	5,377.66	7,026.06	2,111.11
1994-1998	3,782.04	3,421.62	3,193.55	7,096.00	1,466.02
1999-2003	3,901.74	4,229.63	3,078.95	6,979.34	1,718.06
2004-2006	5,467.63	5,949.15	1,944.44	6,841.38	7,323.35
2007-2010	7,502.72	9,985.29	1,385.71	8,565.89	9550.78

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 31: Average Productivity (Kg/Ha.) of Turmeric, 1970-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

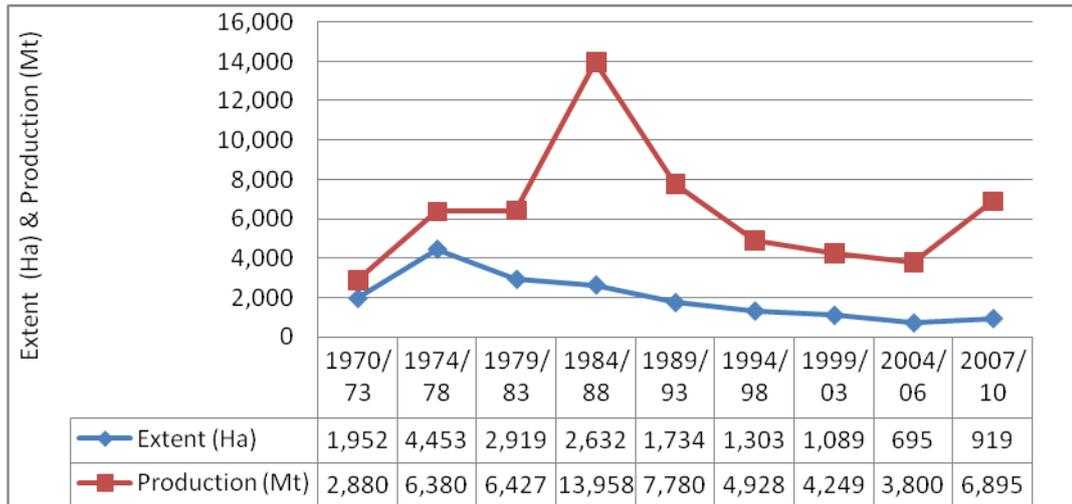
Table 69: Average Production (Mt.) of Turmeric by Major Growing Districts

Period	Sri Lanka	Gampaha	Kurunegala	Kegalle	Kandy
1970-1973	2,880	N.A.	288	555	637
1974-1978	6,380	N.A.	980	1,239	1,048
1979-1983	6,427	1,448	1,775	1,208	846
1984-1988	13,958	2,576	2,500	3,966	1,532
1989-1993	7,780	1,665	1,011	2,157	665
1994-1998	4,928	633	495	1,774	302
1999-2003	4,249	571	234	1,689	390
2004-2006	3,800	351	105	992	1,223
2007-2010	6,895	679	97	1,105	2,445

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

N.A. - Not Available

Figure 32: Average Cultivated Extent and Production of Turmeric in Sri Lanka, 1970-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 70: Average Cultivated Extent (Ha.) of Mustard by Major Growing Districts

Period	Sri Lanka	Puttalam	Matale	Anuradhapura
1970-1973	2,548	454	414	498
1974-1978	3,423	247	598	697
1979-1983	1,724	184	302	389
1984-1988	1,508	228	286	570
1989-1993	1,081	124	301	372
1994-1998	708	134	113	346
1999-2003	284	39	29	160
2004-2006	339	32	31	194
2007-2010	373	11	23	254

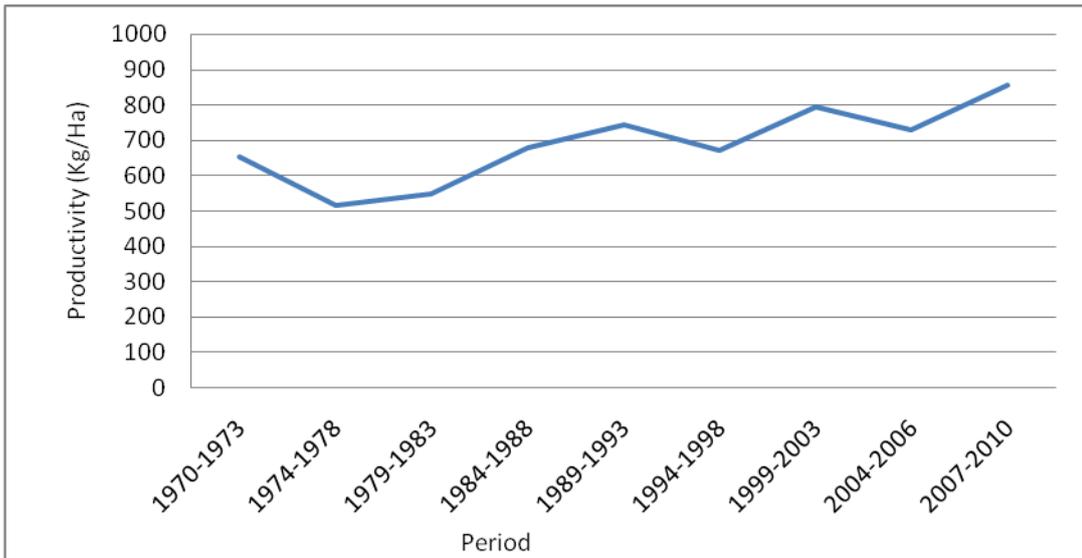
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 71: Average Productivity (Kg/Ha.) of Mustard, 1970-2010

Period	Sri Lanka	Puttalam	Matale	Anuradhapura
1970-1973	655.02	678.41	666.67	596.39
1974-1978	515.34	574.90	600.33	477.76
1979-1983	549.88	494.57	711.92	565.55
1984-1988	678.38	771.93	1,038.46	536.84
1989-1993	746.53	500.00	1086.38	637.10
1994-1998	673.73	417.91	955.75	687.86
1999-2003	795.77	641.03	1,034.48	812.50
2004-2006	731.56	1125.00	709.68	675.26
2007-2010	857.90	7,454.54	782.60	822.83

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 33: Average Productivity (Kg./Ha.) of Mustard, 1970-2010



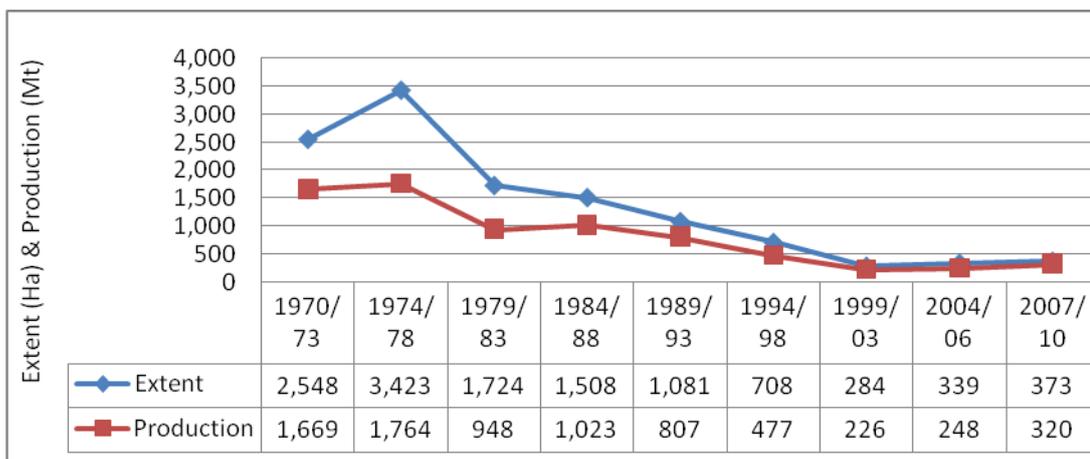
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 72: Average Production (Mt.) of Mustard by Major Growing Districts

Period	Sri Lanka	Puttalam	Matale	Anuradhapura
1970-1973	1,669	308	276	297
1974-1978	1,764	142	359	333
1979-1983	948	91	215	220
1984-1988	1,023	176	297	306
1989-1993	807	62	327	237
1994-1998	477	56	108	238
1999-2003	226	25	30	130
2004-2006	248	36	22	131
2007-2010	320	82	18	209

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 34: Average Cultivated Extent and Production of Mustard in Sri Lanka, 1970-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 73: Average Cultivated Extent (Ha.) of Beans, 1973-2010

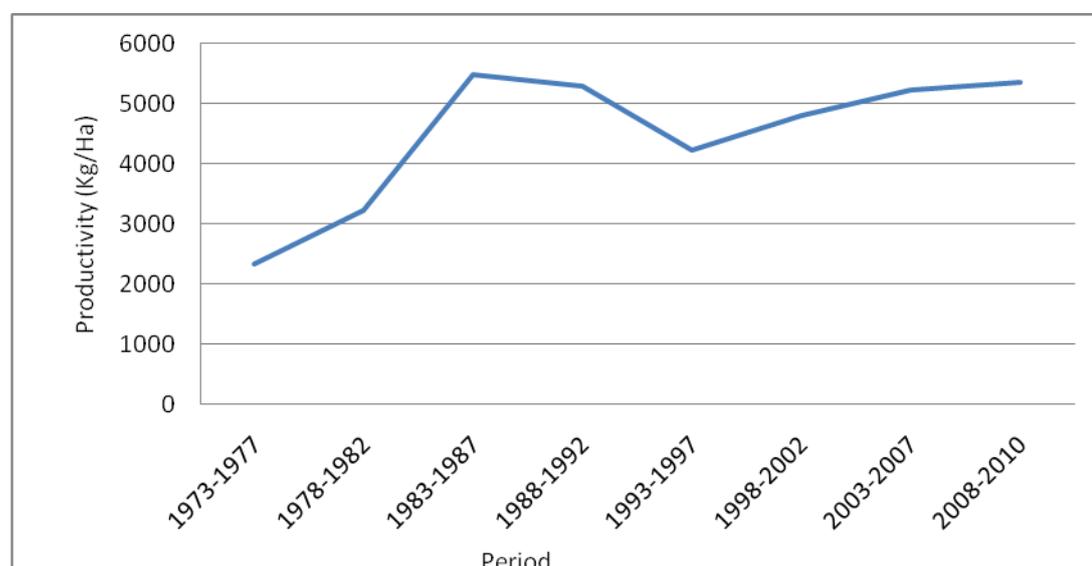
Year	Sri Lanka	Ratnapura	Kandy	Matale	Nuwara Eliya	Badulla
1973-1977	4,467	288	814	914	494	1,527
1978-1982	5,301	300	1,119	1,474	658	1,604
1983-1987	6,504	370	1,098	1,528	1,203	2,120
1988-1992	6,817	290	835	1,499	1,538	2,389
1993-1997	6,685	552	636	1,157	1,869	2,074
1998-2002	6,601	550	701	1,011	1,450	2,712
2003-2007	7,436	554	873	717	1,572	3,406
2008-2010	7,851	604	1,071	644	1,729	3,314

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 74: Average Productivity (Kg/Ha.) of Beans by Major Growing Districts, 1973-2010

Period	Sri Lanka	Ratnapura	Kandy	Matale	Nuwara-Eliya	Badulla
1973-1977	2,342	3,101	1,770	2,547	1,745	3,239
1978-1982	3,229	3,367	3,313	2,836	2,017	4,110
1983-1987	5,470	5,454	2,568	7,701	6,371	5,289
1988-1992	5,284	6,031	3,147	5,546	6,846	4,848
1993-1997	4,214	6,123	2,725	4,315	3,613	4,827
1998-2002	4,799	6,185	2,472	4,585	4,037	5,618
2003-2007	5,217	5,848	3,380	3,775	3,757	6,723
2008-2010	5,340	5,722	5,344	4,958	3,980	6,188

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 35: Average Productivity (Kg/Ha.) of Beans, 1973-2010

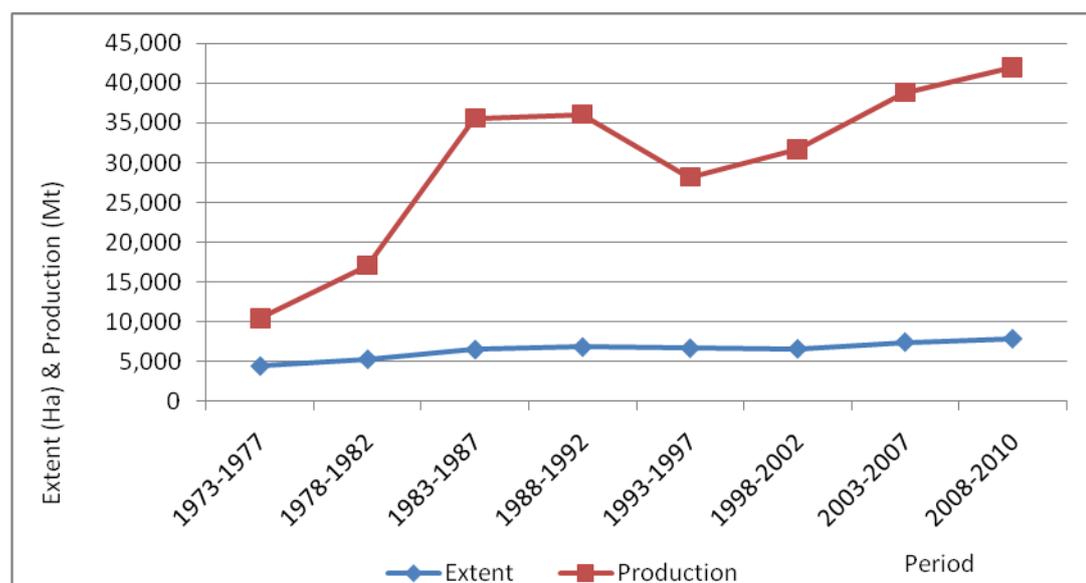
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 75: Average Production (Mt.) of Beans by Major Growing Districts

Period	Sri Lanka	Ratnapura	Kandy	Matale	Nuwara-Eliya	Badulla
1973-1977	10,464	893	1,441	2,328	862	4,946
1978-1982	17,118	1,010	3,707	4,180	1,327	6,592
1983-1987	35,580	2,018	2,820	11,767	7,664	10,661
1988-1992	36,023	1,749	2,628	83,14	10,530	11,583
1993-1997	28,172	3,380	1,733	4,992	6,752	10,012
1998-2002	31,679	3,402	1,625	4,635	5,854	15,236
2003-2007	38,792	3,240	2,951	2,707	5,906	22,898
2008-2010	41,922	3,456	5,724	3,193	6,882	20,508

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 36: Average Cultivated Extent and Production (Mt.) of Beans in Sri Lanka, 1973-2007



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 76: Average Cultivated Extent (Ha.) of Cabbage by Major Growing Districts

Period	Sri Lanka	Kandy	Matale	Nuwara Eliya	Badulla	Jaffna
1973-1977	2,625	264	54	771	1,374	11
1978-1982	2,739	392	27	949	1,207	54
1983-1987	2,719	279	78	1,015	1,086	82
1988-1992	2,682	251	186	1,033	987	96
1993-1997	3,117	442	116	1,489	870	64
1998-2002	3,755	479	189	1,631	1,237	63
2003-2007	4,029	497	208	1,590	1,282	69
2008-2010	4,064	473	248	1,446	1,182	72

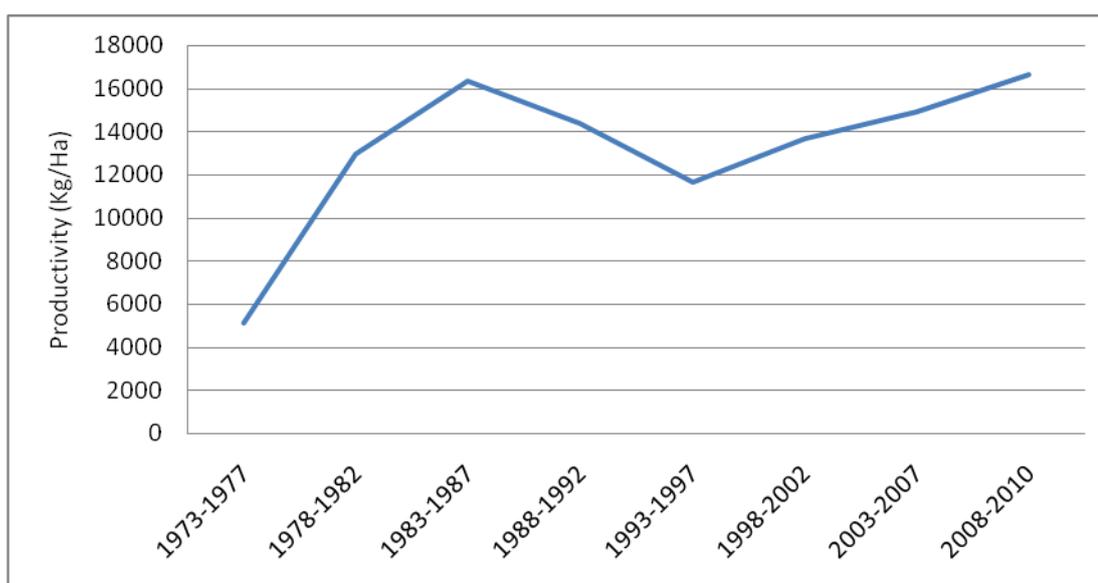
Note: 80 acres of cabbage cultivation reported in Matara district in 1961/62, 07 acres were reported in Jaffna district in 1973 and it was increased to 131 Ha. in 1990. And also 35 acres were reported from Anuradhapura district in 1980.

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 77: Average Productivity (Kg/Ha.) of Cabbage, 1973-2010

Period	Sri Lanka	Kandy	Matale	Nuwara Eliya	Badulla	Jaffna
1973-1977	5,093	3,655	2,463	6,185	5,121	4,454
1978-1982	12,925	14,329	2,630	11,280	15,001	2,815
1983-1987	16,290	7,326	9,333	21,075	16,441	9,195
1988-1992	14,364	6,916	14,758	14,063	17,873	9,594
1993-1997	11,631	1,882	10,267	13,683	14,455	7,969
1998-2002	13,662	3,363	9,518	14,348	18,715	7,762
2003-2007	14,884	11,748	13,630	15,562	17,624	8,188
2008-2010	16,612	16,852	13,189	16,537	20,736	12,569

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 37: Average Productivity (Kg/Ha.) of Cabbage, in Sri Lanka, 1973-2010

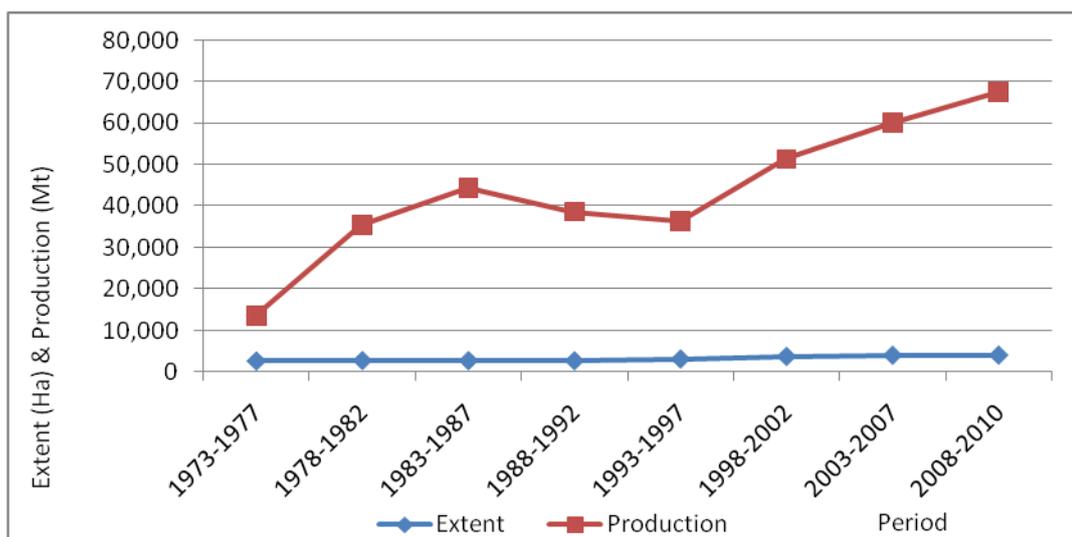
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 78: Average Production (Mt.) of Cabbage by Major Growing Districts

Year	Sri Lanka	Kandy	Matale	Nuwara Eliya	Badulla	Jaffna
1973-1977	13,368	965	133	4,769	7,037	49
1978-1982	35,401	5,617	71	10,705	18,106	152
1983-1987	44,292	2,044	728	21,392	17,855	754
1988-1992	38,524	1,736	2,745	14,527	17,641	921
1993-1997	36,253	832	1,191	20,374	12,576	510
1998-2002	51,302	1,611	1,799	23,402	23,151	489
2003-2007	59,969	5,839	2,835	24,743	22,594	565
2008-2010	67,511	7,971	3,271	23,913	24,510	905

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 38: Average Cultivated Extent and Production of Cabbage in Sri Lanka, 1973-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 79: Average Cultivated Extent (Ha.) of Tomato by Major Growing Districts

Period	Sri Lanka	Kandy	Matale	Nuwara Eliya	Badulla	Moneragala	A'pura	Hamban tota
1973-1977	5,013	921	682	225	338	553	460	682
1978-1982	4,812	712	765	220	393	440	455	665
1983-1987	4,364	593	571	259	983	219	256	302
1988-1992	4,640	533	716	370	1,176	245	283	342
1993-1997	4,961	579	695	442	1,028	199	265	262
1998-2002	5,427	569	687	776	1,375	294	219	318
2002-2007	6,288	859	823	1,019	1,677	193	247	214
2008-2010	7,377	909	812	1,285	1,609	252	408	338

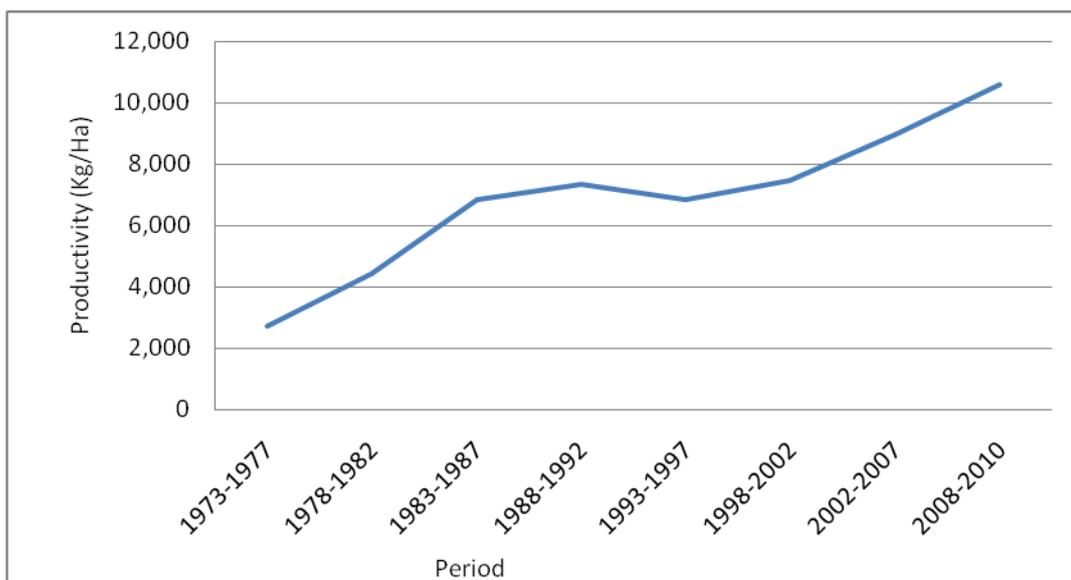
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 80: Average Productivity (Kg/Ha.) of Tomato, 1970-2010

Period	Sri Lanka	Kandy	Matale	Nuwara Eliya	Badulla	Monaragala	A'pura	Hamban tota
1973-1977	2,700	2,002	2,374	2,044	2,080	2,940	2,170	4,589
1978-1982	4,396	5,963	4,212	1,836	3,132	6,186	2,308	4,573
1983-1987	6,819	4,664	6,685	6,475	8,303	7,904	6,906	7,520
1988-1992	7,314	5,325	8,526	6,011	8,677	7,429	5,198	9,523
1993-1997	6,834	5,195	8,639	8,532	7,548	7,920	4,136	7,763
1998-2002	7,429	4,532	8,341	9,774	9,021	6,194	4,105	5,506
2002-2007	8,964	7,898	8,769	10,824	10,665	7,347	7,227	7,519
2008-2010	10,571	10,225	10,270	13,668	11,438	9,278	6,287	11,476

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 39: Average Productivity (Kg/Ha.) of Tomato, 1970-2010



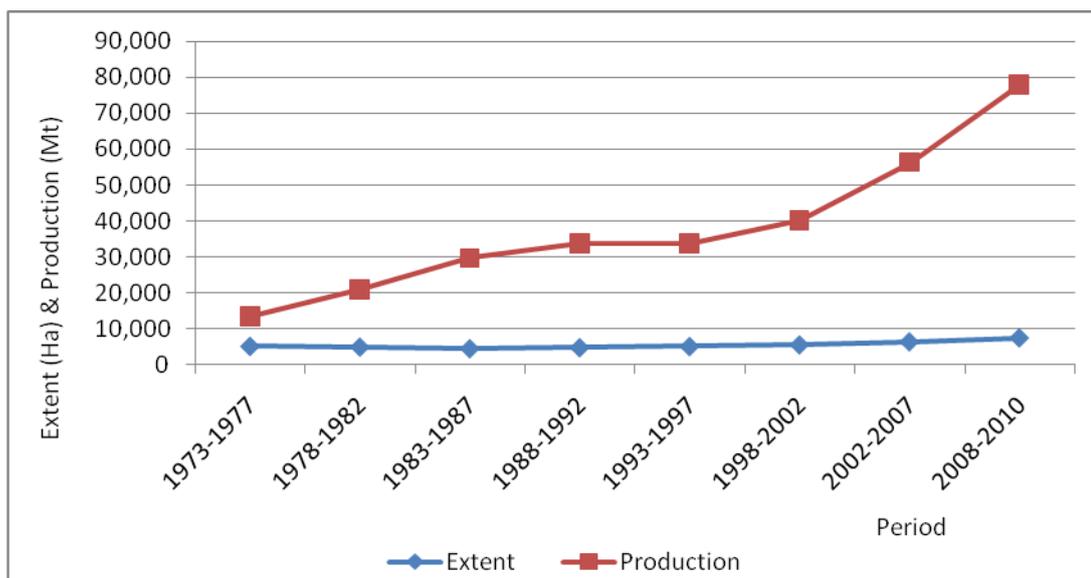
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 81: Average Production (Mt.)of Tomato by Major Growing Districts

Period	Sri Lanka	Kandy	Matale	Nuwara Eliya	Badulla	Moneragala	A'pura	Hambantota
1973-1977	13,533	1,844	1,619	460	703	1,626	998	3,130
1978-1982	21,156	4,246	3,222	404	1,231	2,722	1,050	3,041
1983-1987	29,759	2,766	3,817	1,677	8,162	1,731	1,768	2,271
1988-1992	33,937	2,838	6,105	2,224	10,204	1,820	1,471	3,257
1993-1997	33,904	3,008	6,004	3,771	7,759	1,576	1,096	2,034
1998-2002	40,315	2,579	5,730	7,585	12,404	1,821	899	1,751
2003-2007	56,367	6,784	7,217	11,030	17,885	1,418	1,785	1,609
2008-2010	77,983	9,295	8,340	17,564	18,404	2,343	2,565	3,879

Source: Statistical Abstract, Various Issues, Department of Census and Statistics.
Statistics and Data Processing Unit, HARTI

Figure 40: Average Cultivated Extent and Production of Tomato in Sri Lanka, 1973-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 82: Average Cultivated Extent (Ha) of Potato by Major Growing Districts

Period	Sri Lanka	Nuwara Eliya	Badulla
1970-1973	3,316	1,392	1,177
1974-1978	3,080	897	1,404
1979-1983	5,388	1,635	3,117
1984-1988	6,913	2,127	4,490
1989-1993	7,082	2,553	4,379
1994-1998	6,272	2,164	3,917
1999-2003	4,596	853	3,644
2004-2006	5,463	1,549	3,835
2007-2010	4,547	950	3,556

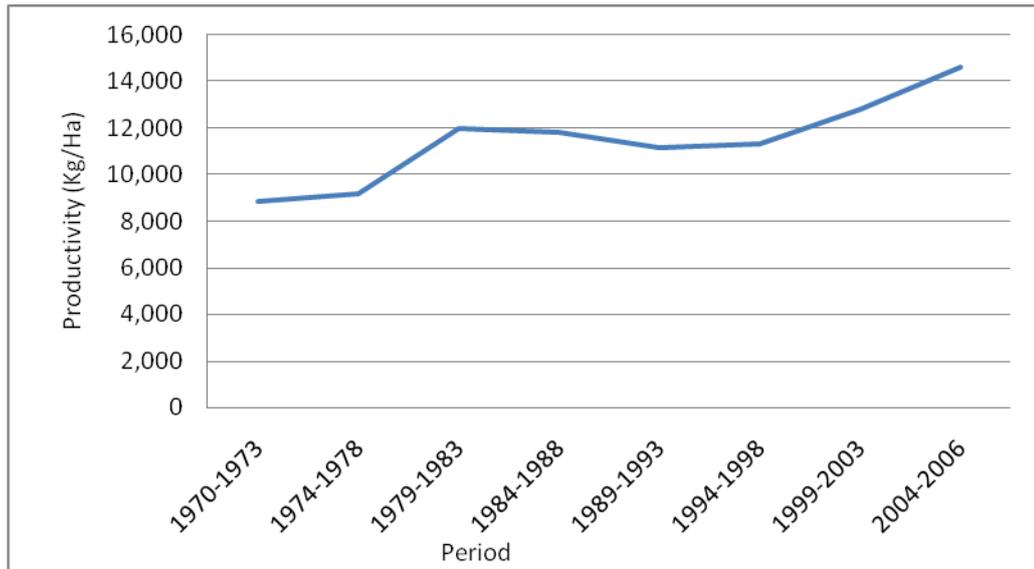
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 83: Average Productivity (Kg/Ha.) of Potato, 1973-2010

Period	Sri Lanka	Nuwara Eliya	Badulla
1970-1973	8,822	8,669	8,554
1974-1978	9,141	10,304	7,598
1979-1983	11,940	14,159	10,479
1984-1988	11,799	14,917	10,735
1989-1993	11,130	12,670	10,402
1994-1998	11,294	13,652	10,198
1999-2003	12,781	13,735	12,718
2004-2006	14,595	15,813	14,225
2007-2010	14,616	9,793	14,285

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 41: Average Productivity (Kg/Ha.) of Potato, 1970-2010



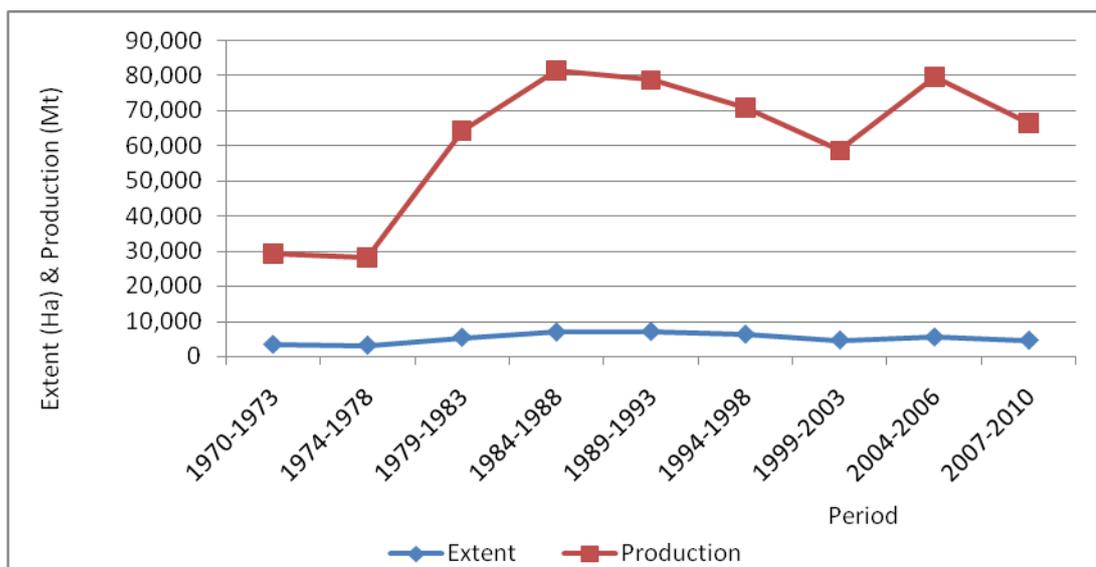
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 84: Average Production (Mt.) of Potato by Major Growing Districts

Period	Sri Lanka	Nuwara Eliya	Badulla
1970-1973	29,253	12,067	10,068
1974-1978	28,153	9,243	10,668
1979-1983	64,333	23,150	32,662
1984-1988	81,564	31,729	48,201
1989-1993	78,822	32,347	45,549
1994-1998	70,836	29,544	39,945
1999-2003	58,743	11,716	46,344
2004-2006	79,734	24,495	54,553
2007-2010	66,459	9,303	50,797

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 42: Average Cultivated Extent and Production of Potato in Sri Lanka, 1970-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 85: Average Cultivated Extent (Ha) of Capsicum Chillies, 1983-2010

Period	Sri Lanka	Kurunegala	Badulla	Matale	Nuwara-Eliya	Kandy	Puttalam
1983-1987	3,375	738	399	509	211	159	225
1988-1992	3,019	587	381	356	249	147	253
1993-1997	2,889	455	504	254	339	341	154
1998-2002	2,774	326	484	236	579	203	122
2003-2007	3,004	371	573	209	696	102	189
2008-2010	3,290	413	546	183	526	124	322

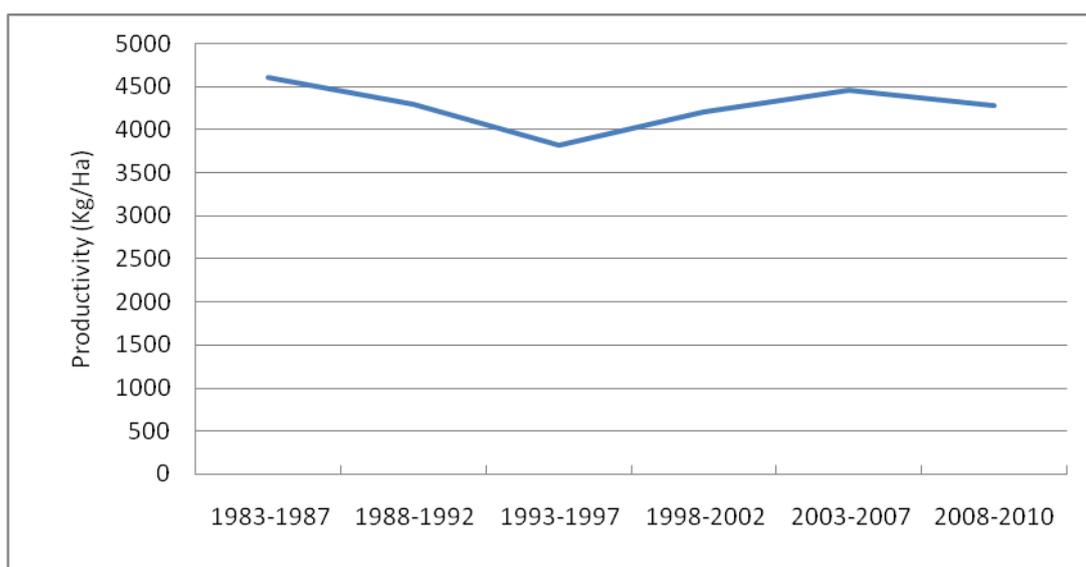
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 86: Average Productivity (Kg/Ha.) of Capsicum Chillies, 1983-2010

Period	Sri Lanka	Kurunegala	Badulla	Matale	Nuwara Eliya	Kandy	Puttalam
1983-1987	4,614	5,680	3,897	7,061	7,171	2,113	2,209
1988-1992	4,307	5,295	3,543	7,435	4,385	1,850	3,352
1993-1997	3,824	4,941	3,726	5,965	3,525	1,457	3,526
1998-2002	4,212	4,386	5,045	5,661	3,199	1,808	3,467
2003-2007	4,469	3,604	6,227	3,718	4,020	3,372	4,645
2008-2010	4,292	2,993	5,637	2,945	4,509	4,210	4,810

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 43: Average Productivity (Kg/Ha.) of Capsicum Chillies, 1983-2010



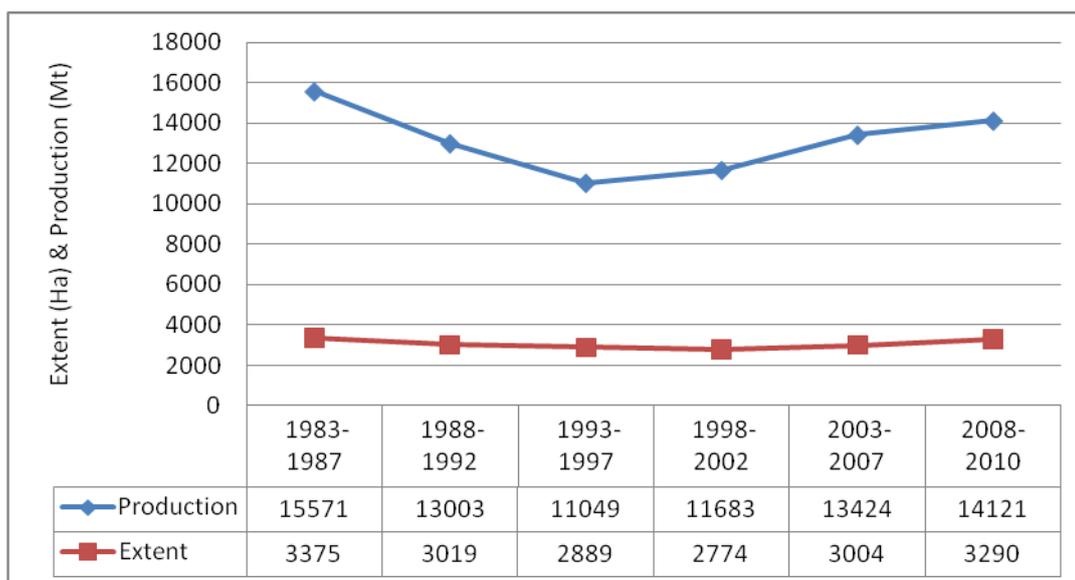
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 87: Average Production (Mt.) of Capsicum Chillies, 1983-2010

Period	Sri Lanka	Kurunegala	Badulla	Matale	Nuwara Eliya	Kandy	Puttalam
1983-1987	15,571	4,192	1,555	3,594	1,513	336	497
1988-1992	13,003	3,108	1,350	2,647	1,092	272	848
1993-1997	11,049	2,248	1,878	1,515	1,195	497	543
1998-2002	11,683	1,430	2,442	1,336	1,852	367	423
2003-2007	13,424	1,337	3,568	777	2,798	344	878
2008-2010	14,121	1,236	3,078	539	2,372	522	1,549

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 44: Average Cultivated Extent and Production of Capsicum Chillies in Sri Lanka, 1983-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 88: Average Cultivated Extent (Ha.) of Brinjals, 1973-2010

Period	Sri Lanka	Monaragala	Matale	Kurunegala	A'pura	Badulla	Ratnapura	Kandy
1973-1977	12,617	1,714	1,036	1,092	1,028	603	558	759
1978-1982	10,473	1,189	844	804	839	831	486	782
1983-1987	9,666	466	656	978	697	646	584	559
1988-1992	9,421	466	811	1,011	622	562	393	491
1993-1997	9,143	506	626	853	779	598	568	403
1998-2002	9,845	786	686	571	1,033	992	741	379
2003-2007	10,014	844	453	578	1,470	1,076	621	397
2008-2010	11,092	720	332	856	1,673	1,122	642	421

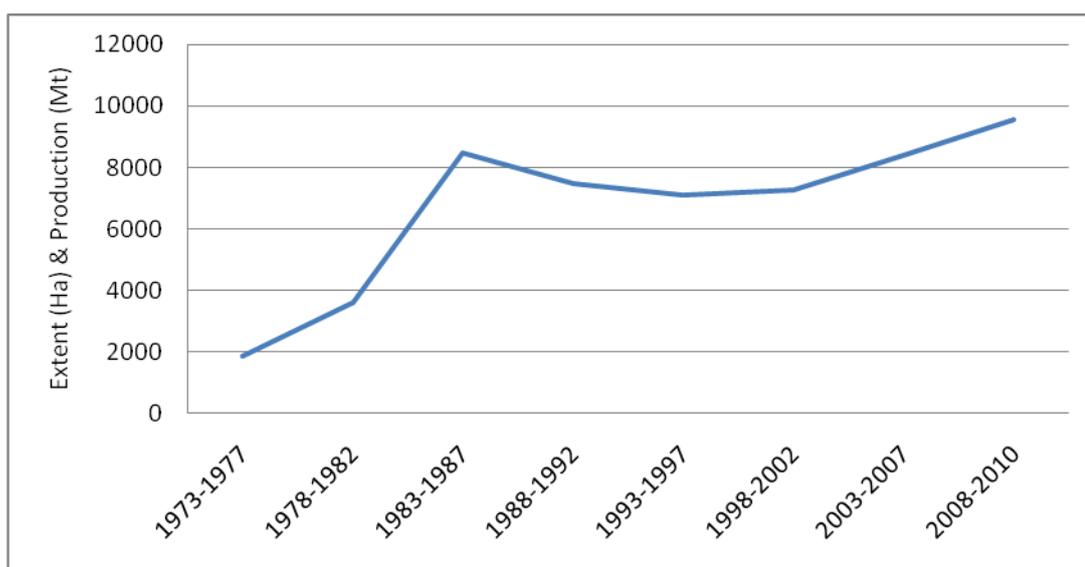
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 89: Average Productivity (Kg/Ha.) of Brinjals, 1973-2010

Period	Sri Lanka	Monaragala	Matale	Kurunegala	Anuradhapura	Badulla	Ratnapura	Kandy
1973-1977	1,880	1,695	1,496	2,269	3,348	2,886	5,862	1,148
1978-1982	3,640	2,616	1,787	8,397	2,061	4,615	6,383	2,979
1983-1987	8,467	12,414	9,098	9,032	7,252	9,358	12,094	5,368
1988-1992	7,487	10,384	7,739	6,987	7,572	8,674	8,303	3,727
1993-1997	7,110	10,213	6,670	6,319	4,399	8,592	7,306	3,628
1998-2002	7,270	9,609	6,664	6,431	4,100	9,473	7,641	3,158
2003-2007	8,384	10,607	8,084	5,683	7,406	11,975	8,573	8,710
2008-2010	9,561	12,283	6,395	4,556	7,059	12,904	10,746	11,981

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 45: Average Productivity (Kg/Ha.) of Brinjal, 1973-2010



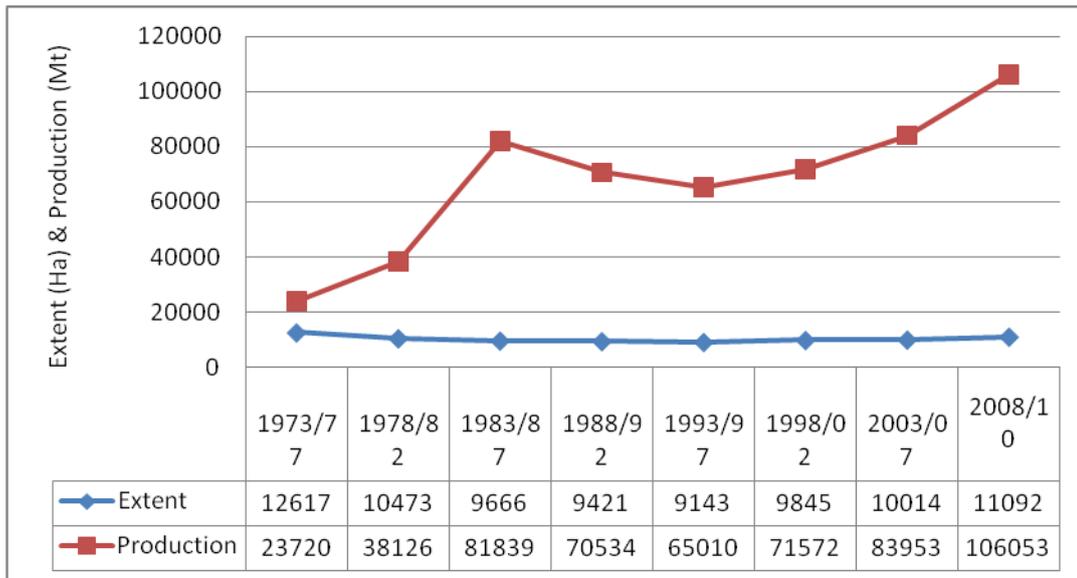
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 90: Average Production (Mt) of Brinjal, 1973-2010

Period	Sri Lanka	Monaragala	Matale	Kurunegala	Anuradhapura	Badulla	Ratnapura	Kandy
1973-1977	23,720	2,906	1,550	2,478	3,441	1,740	3,271	871
1978-1982	38,126	3,110	1,508	6,751	1,729	3,835	3,102	2,330
1983-1987	81,839	5,785	5,968	8,833	5,055	6,045	7,063	3,001
1988-1992	70,534	4,839	6,276	7,064	4,710	4,875	3,263	1,830
1993-1997	65,010	5,168	4,174	5,390	3,427	5,138	4,150	1,462
1998-2002	71,572	7,553	4,574	3,672	4,235	9,397	5,662	1,197
2003-2007	83,953	8,952	3,662	3,287	10,889	12,885	5,324	3,458
2008-2010	106,053	8,844	2,123	3,900	11,810	14,478	6,899	5,044

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 46: Average Cultivated Extent and Production of Brinjal in Sri Lanka, 1973-2008



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 91: Average Cultivated Extent (Ha.) of Pineapple, 1973-2010

Period	Sri Lanka	Gampaha	Colombo	Kurunegala	Monaragala	Puttalam
1973-1977	3,684	-	1,433	823	121	178
1978-1982	3,880	1,446	395	991	115	235
1983-1987	3,639	1,167	50	1,240	94	130
1988-1992	4,225	1,190	57	1,914	74	135
1993-1997	4,517	1,571	41	2,044	108	148
1998-2002	4,730	1,442	45	2,123	162	211
2003-2007	5,002	1,936	61	1,916	213	210
2008-2010	4,900	1,758	95	1,614	247	198

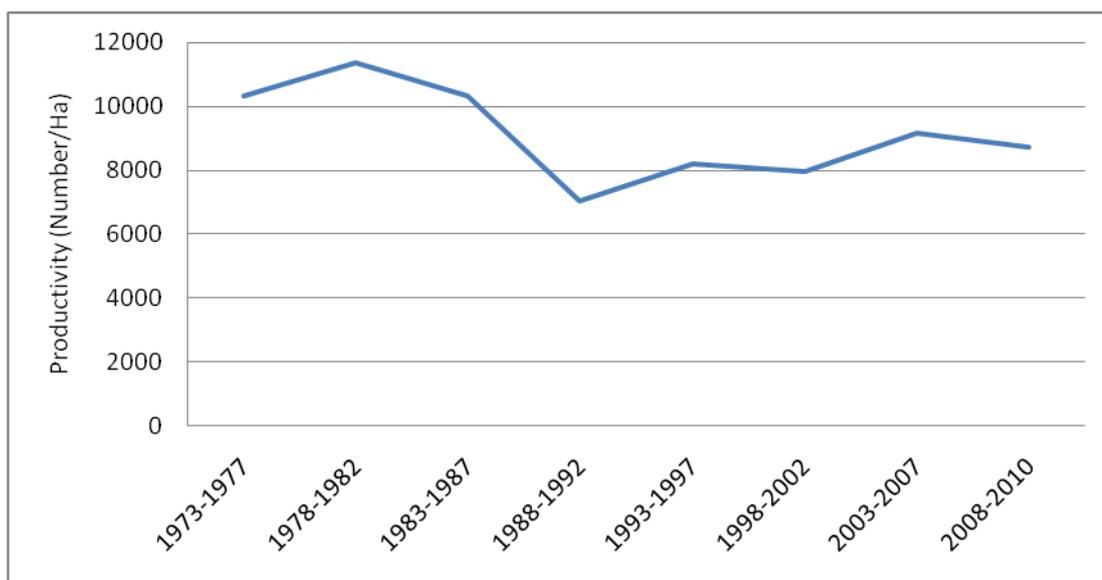
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 92: Average Productivity (No./Ha.) of Pineapple, 1973-2010

Period	Sri Lanka	Gampaha	Colombo	Kurune-gala	Monara-gala	Puttalam
1973-1977	10,335.23	-	11,410.33	8,206.56	7,504.13	11,252.81
1978-1982	11,367.01	9,674.23	6,802.53	11,677.09	11,991.30	9,093.62
1983-1987	10,314.65	5,573.07	17,920.00	10,593.55	10,914.89	10,900.00
1988-1992	7,058.93	5,100.84	12,508.77	6,607.11	7,783.78	9,829.63
1993-1997	8,221.39	6,130.49	12,573.53	9,479.45	5,388.89	7,398.65
1998-2002	7,994.93	5,554.79	7,676.99	10,587.38	6,351.85	7,009.48
2003-2007	9,178.93	8,091.43	6,967.21	11,889.87	7,281.69	6,652.38
2008-2010	8,722.65	8,567.12	9,431.57	1,000.00	9,178.14	4,464.65

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 47: Average Productivity (No./Ha.) of Pineapple, 1973-2010



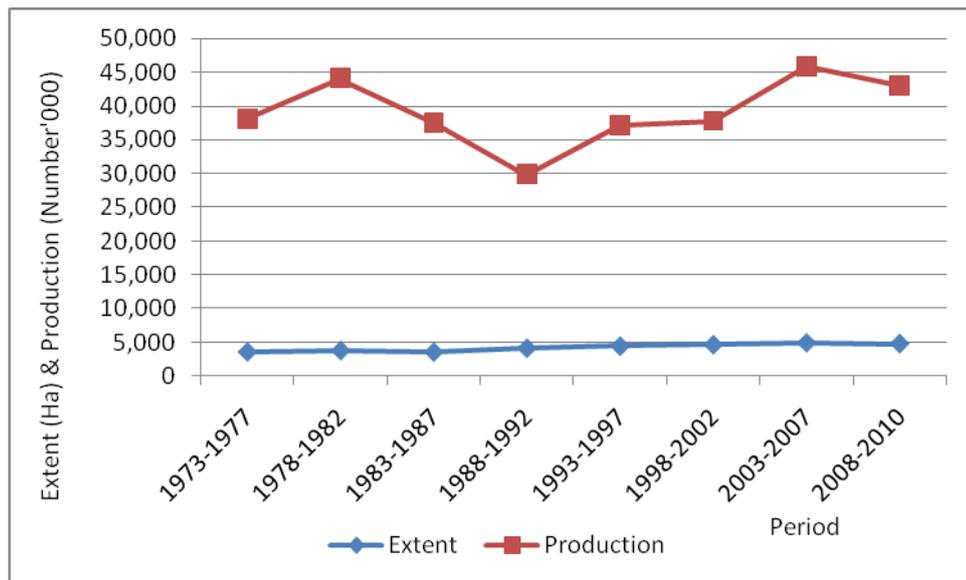
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 93: Average Production (No.'000) of Pineapple, 1973-2010

Period	Sri Lanka	Gampaha	Colombo	Kurunegala	Monaragala	Puttalam
1973-1977	38,075	-	16,351	6,754	908	2,003
1978-1982	44,104	13,987	2,687	11,572	1,379	2,137
1983-1987	37,535	6,506	896	13,136	1,026	1,417
1988-1992	29,824	6,070	713	12,646	576	1,327
1993-1997	37,136	9,631	513	19,376	582	1,095
1998-2002	37,816	8,010	347	22,477	1,029	1,479
2003-2007	45,913	15,665	425	22,781	1,551	1,397
2008-2010	42,986	15,061	896	1,614	2,267	884

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 48: Average Cultivated Extent and Production of Pineapple in Sri Lanka



Source: Statistical Abstract, Various Issues, Department of Census and Statistics Statistics and Data Processing Unit, HARTI

Table 94: Average Cultivated Extent (Ha.) of Papaw, 1973-2010

Period	Sri Lanka	Kurune-gala	Ratnapura	Kandy	Anuradh-apura	Polonna-ruwa	Hamban-tota	Gampaha
1973-1977	2,655	589	146	160	150	90	81	-
1978-1982	2,761	398	215	113	200	90	131	310
1983-1987	2,969	345	270	95	170	72	132	386
1988-1992	3,401	387	189	109	176	107	136	369
1993-1997	3,018	326	242	131	144	109	198	293
1998-2002	3,301	272	177	135	156	189	225	403
2003-2007	5,053	277	307	330	379	228	440	434
2008-2010	6,704	492	370	444	548	212	907	405

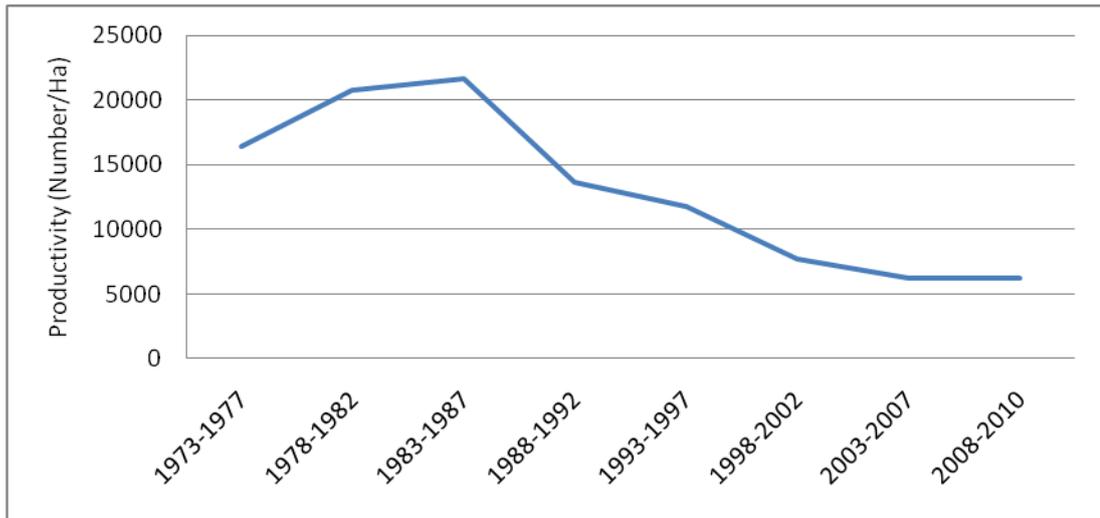
Source: Statistical Abstract, Various Issues, Department of Census and Statistics Statistics and Data Processing Unit, HARTI

Table 95: Average Productivity (No./Ha) of Papaw, 1973-2010

Period	Sri Lanka	Kurune-gala	Ratna-pura	Kandy	Anuradha-pura	Polonna-ruwa	Hamban-tota	Gampaha
1973-1977	16,380	23,114	23,699	10,544	10,407	10,644	23,506	-
1978-1982	20,732	41,306	16,121	7,018	15,995	16,089	48,397	9,361
1983-1987	21,603	31,806	48,485	4,558	20,859	12,125	22,992	4,502
1988-1992	13,606	13,475	28,428	4,267	13,517	7,729	24,198	7,022
1993-1997	11,747	19,460	14,640	2,527	12,812	7,899	13,793	4,467
1998-2002	77,245	10,963	7,604	2,348	11,519	5,153	6,880	4,930
2003-2007	6,220	8,448	6,156	3,224	7,071	4,965	6,759	3,993
2008-2010	6,229	6,606	5,965	4,968	4,589	4,500	8,281	3,259

Source: Statistical Abstract, Various Issues, Department of Census and Statistics Statistics and Data Processing Unit, HARTI

Figure 49: Average Productivity (Kg./Ha) of Papaw, 1973-2010



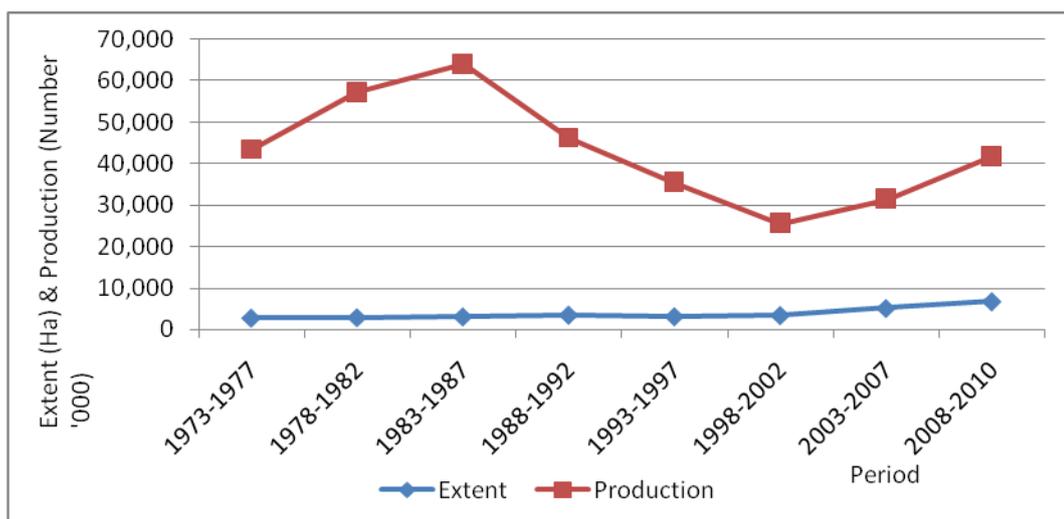
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 96: Average Production (No. '000) of Papaw, 1973-2010

Period	Sri Lanka	Kurunegala	Ratnapura	Kandy	Anuradhapura	Polonnaruwa	Hambantota	Gampaha
1973-1977	43,489	13,614	3,460	1,687	1,561	958	1,904	-
1978-1982	57,241	16,440	3,466	793	3,199	1,448	6,340	2,902
1983-1987	64,139	10,973	13,091	433	3,546	873	3,035	1,738
1988-1992	46,275	5,215	5,373	465	2,379	827	3,291	2,591
1993-1997	35,454	6,344	3,543	331	1,845	861	2,731	1,309
1998-2002	25,500	2,982	1,346	317	1,797	974	1,548	1,987
2003-2007	31,428	2,340	1,890	1,064	2,680	1,132	2,974	1,733
2008-2010	41,760	3,250	2,207	2,206	2,515	954	7,511	1,320

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 50: Average Cultivated Extent and Production of Papaw in Sri Lanka, 1973-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 97: Average Cultivated Extent (Ha.) of Mango, 1973-2010

Period	Sri Lanka	Jaffna	Kurunegala	Gampaha	Anuradhapura	Hambantota	Puttalam	Matara
1973-1977	5,979	617	1,029	-	195	292	226	289
1978-1982	7,444	719	1,014	836	360	403	572	280
1983-1987	10,192	663	1,561	1,174	472	616	739	401
1988-1992	12,928	534	2,182	1,348	561	756	843	616
1993-1997	26,528	450	6,525	2,905	699	1,027	963	1,321
1998-2002	26,065	415	5,308	2,577	889	1,151	1,006	1,217
2003-2007	26,549	459	5,117	2,147	1,536	1,378	1,019	1,675
2008-2010	26,349	390	4,505	1,878	1,741	1,344	951	1,456

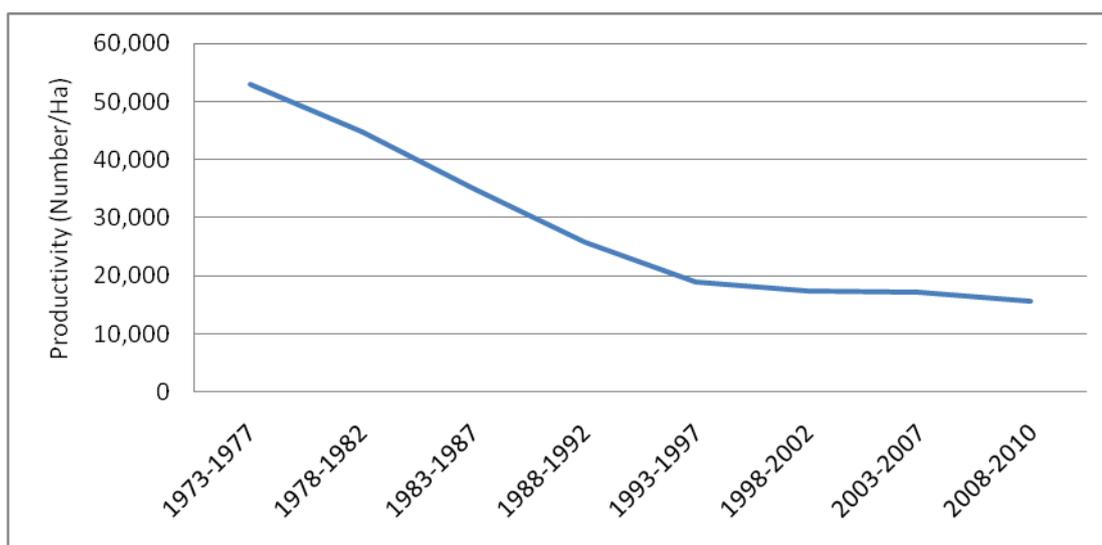
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 98: Average Productivity (No./Ha) of Mango, 1973-2010

Period	Sri Lanka	Jaffna	Kurunegala	Gampaha	Anuradhapura	Hambantota	Puttalam	Matara
1973-1977	53,047	23,173	36,260		74,415	69,632	46,174	149,394
1978-1982	44,782	10,320	31,606	33,687	33,918	136,036	43,400	37,427
1983-1987	35,040	14,697	50,716	8,869	46,268	71,149	22,193	28,177
1988-1992	25,863	5,248	36,472	21,731	33,016	28,124	21,877	22,513
1993-1997	19,015	5,841	19,946	20,077	19,111	25,010	17,246	14,590
1998-2002	17,504	597	20,910	16,997	19,531	19,311	14,211	12,051
2003-2007	17,144	9,357	20,733	17,930	19,025	20,717	13,732	13,168
2008-2010	15,677	11,708	15,929	13,162	13,996	18,936	14,259	12,207

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 51: Average Productivity (No./Ha) of Mango, 1973-2010



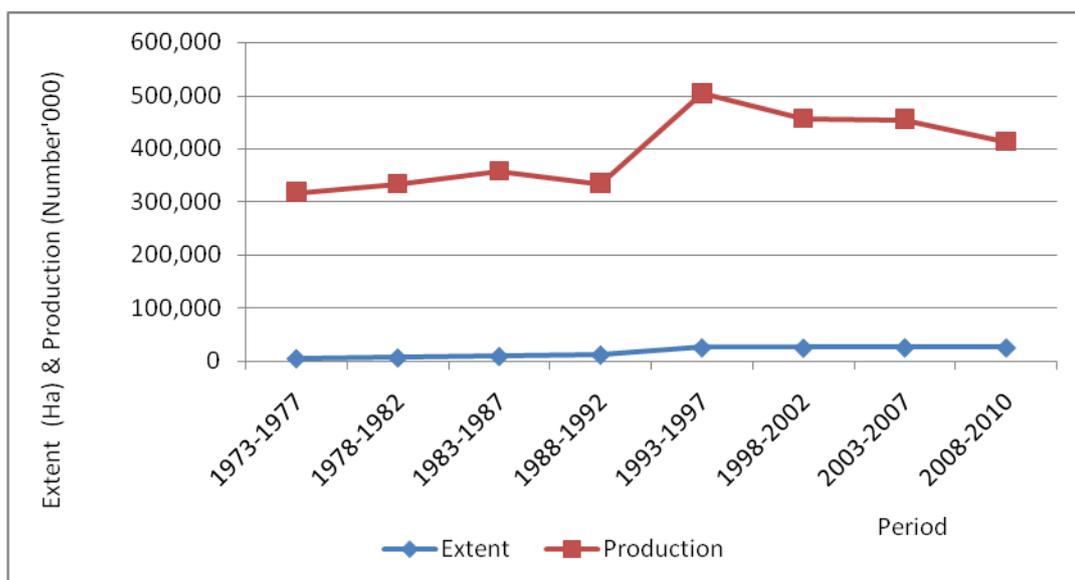
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 99: Average Production (No. '000) of Mango, 1973-2010

Period	Sri Lanka	Jaffna	Kurunegala	Gampaha	Anuradhapura	Hambantota	Puttalam	Matara
1973-1977	317,177	14,293	37,326	-	14,496	20,319	10,426	43,145
1978-1982	333,341	7,420	32,042	28,170	12,217	54,795	24,816	10,480
1983-1987	357,134	9,748	79,148	10,409	21,829	43,799	16,391	11,293
1988-1992	334,352	2,802	79,582	29,285	18,516	21,256	18,442	13,877
1993-1997	504,437	2,628	130,144	58,323	13,355	25,686	16,605	19,270
1998-2002	456,232	2,479	110,997	43,802	17,359	22,227	14,291	14,668
2003-2007	455,146	4,297	106,088	38,488	29,227	28,556	13,990	22,062
2008-2010	413,088	4,566	71,760	24,719	24,367	25,450	13,561	17,773

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 52: Average Cultivated Extent and Production of Mango in Sri Lanka, 1973-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics Statistics and Data Processing Unit, HARTI

Table 100: Average Cultivated Extent (Ha.) of Plantain, 1973-2010

Period	Sri Lanka	Kurunegala	Kegalle	Monaragala	Ratnapura	Anuradhapura	Hambantota	Badulla
1973-1977	33,943	3,891	4,164	3,022	2,450	635	1,178	589
1978-1982	29,466	3,662	3,481	2,939	2,869	723	1,255	635
1983-1987	36,834	6,178	3,990	3,654	3,005	872	1,959	825
1988-1992	39,120	7,283	3,390	3,305	2,886	986	1,780	1,175
1993-1997	49,547	12,604	3,899	3,869	3,761	859	2,684	1,498
1998-2002	47,488	9,299	3,838	3,943	4,463	1,154	2,405	1,677
2003-2007	49,895	8,818	3,593	4,460	5,479	2,094	3,794	1,771
2008-2010	49,368	8,175	2,712	5,025	5,928	2,325	3,125	2,028

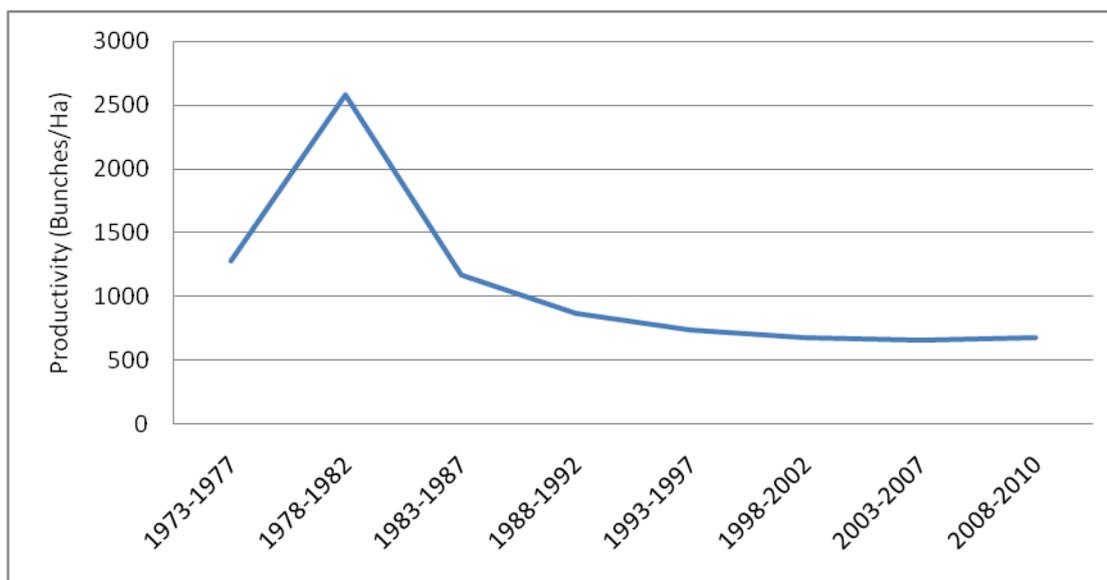
Source: Statistical Abstract, Various Issues, Department of Census and Statistics Statistics and Data Processing Unit, HARTI

Table 101: Average Productivity (Bunches/Ha) of Plantain, 1973-2010

Period	Sri Lanka	Kurunegala	Kegalle	Monaragala	Ratnapura	Anuradhapura	Hambantota	Badulla
1973-1977	1,281	2,128	1,051	1,641	1,559	1,049	2,236	1,602
1978-1982	2,585	1,832	1,724	1,394	2,878	1,188	2,429	2,774
1983-1987	1,176	887	1,172	1,479	748	714	1,323	859
1988-1992	871	554	734	948	762	490	2,269	784
1993-1997	744	692	711	762	859	547	651	1,079
1998-2002	678	682	664	640	788	555	757	600
2003-2007	660	730	646	568	776	513	862	618
2008-2010	681	779	581	865	882	337	930	612

Source: Statistical Abstract, Various Issues, Department of Census and Statistics Statistics and Data Processing Unit, HARTI

Figure 53: Average Productivity (Bunches/Ha) of Plantain, 1973-2010



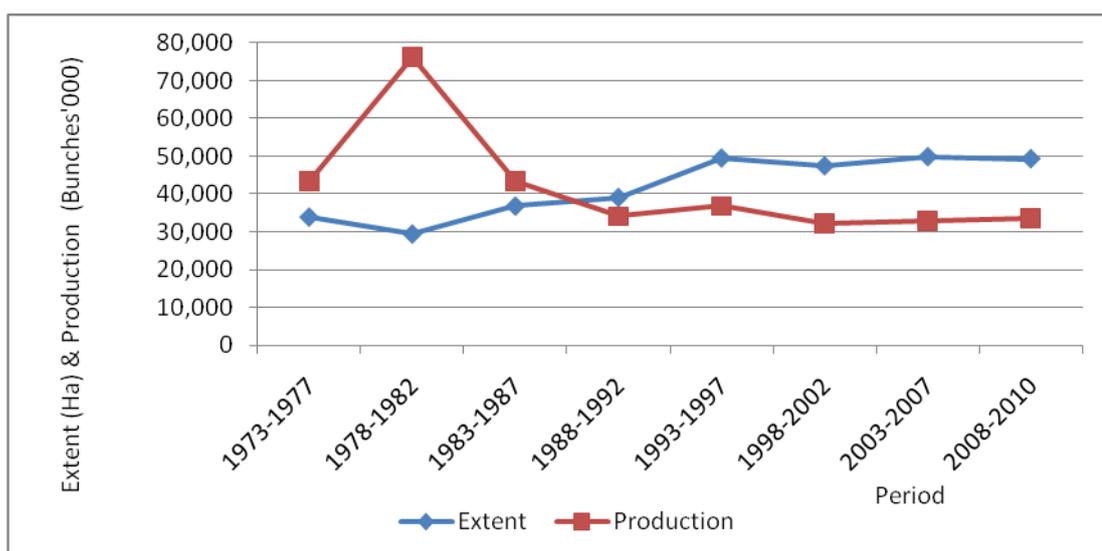
Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 102: Average Production (Bunches'000) of Plantain, 1973-2010

Period	Sri Lanka	Kurune-gala	Kegalle	Monara-gala	Ratnapura	Anuradha-pura	Hamban-tota	Badulla
1973-1977	43,494	8,278	4,378	4,959	3,819	666	2,633	943
1978-1982	76,163	6,707	6,000	4,098	8,256	859	3,048	1,761
1983-1987	43,300	5,477	4,676	5,404	2,247	623	2,591	709
1988-1992	34,089	4,034	2,489	3,134	2,199	483	4,038	922
1993-1997	36,845	8,723	2,773	2,947	3,231	470	1,747	1,616
1998-2002	32,218	6,344	2,547	2,525	3,517	641	1,820	1,007
2003-2007	32,955	6,434	2,319	2,535	4,249	1,074	3,269	1,094
2008-2010	33,626	6,368	1,577	4,347	5,230	783	2,906	1,242

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Figure 54: Average Cultivated Extent and Production of Plantain in Sri Lanka, 1973-2010



Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 103: Change in Extent under Cultivation of Selected Food Crops

Crop	Period	Extent (Ha)	Period	Extent (Ha)	Change between period	
					Number	Percentage
Paddy	1960-1963	610,930	2004-2006	875,406	264,476	43.2
Kurakkan	1970-1973	23,497	2004-2006	5,743	-17,754	-75.5
Maize	1970-1973	20,230	2004-2006	27,941	7,711	38.1
Cowpea	1970-1973	4,766	2004-2006	10,558	5,792	121.5
Green gram	1970-1973	4,227	2004-2006	8,983	4,756	112.5
Gingerly	1970-1973	12,271	2004-2006	8,656	-3,615	-29.4
Ground nut	1970-1973	13,308	2004-2006	10,853	-2,455	-18.4
Sorghum	1970-1973	995	2004-2006	263	-732	-73.6
Meneri	1970-1973	1,310	2004-2006	90	-1,220	-93.1
Soya beans	1984-1988	3,710	2004-2006	2,479	-1,231	-33.2
Black gram	1984-1988	8,785	2004-2006	5,918	-2,867	-32.6
Red onion	1970-1973	7,624	2004-2006	5,470	-2,154	-28.2
Manioc	1970-1973	75,207	2004-2006	23,386	-51,821	-68.9
Sweet potato	1970-1973	18,108	2004-2006	6,558	-11,550	-63.8
Chillies	1970-1973	30,107	2004-2006	15,315	-14,792	-49.1
Turmeric	1970-1973	1,952	2004-2006	695	-1,257	-64.4
Mustard	1970-1973	2,548	2004-2006	339	-2,209	-86.7
Beans	1973-1977	4,467	2003-2007	7,436	2,969	66.5
Cabbage	1973-1977	2,625	2003-2007	4,029	1,404	53.5
Tomato	1973-1977	2,700	2002-2007	8,694	5,994	222
Potato	1970-1973	3,316	2004-2006	5,463	2,147	64.7
Capsicum chillies	1983-1987	3,375	2003-2007	3,004	-371	-10.9
Brinjal	1973-1977	12,167	2003-2007	10,014	-2,153	-17.7
Pineapple	1973-1977	3,684	2003-2007	5,002	1,318	35.8
Papaw	1973-1977	2,655	2002-2007	5,053	2,398	90.3
Mango (Numbers/Ha)	1973-1977	5,979	2003-2007	26,549	20,570	344.0
Plantain(Bunches/Ha)	1973-1977	33,943	2003-2007	49,895	15,952	47.1

Source: Derived from Department of Census and Statistics by authors

Table 104: Change in Productivity of Selected OFCs

Crop	Period	Productivity (Kg/Ha)	Period	Productivity (Kg/Ha)	Change between period	
					Number	Percentage
<i>Kurakkan</i>	1970-1973	559.14	2004-2006	1,010.62	451	80.75
Maize	1970-1973	793.13	2004-2006	1,485.59	692	87.31
Cowpea	1970-1973	634.28	2004-2006	961.26	327	51.55
Green gram	1970-1973	576.69	2004-2006	919.51	343	59.45
Gingerly	1970-1973	553.50	2004-2006	634.59	81	14.65
Ground nut	1970-1973	227.91	2004-2006	822.91	595	261.07
Sorghum	1970-1973	626.13	2004-2006	836.50	210	33.60
<i>Meneri</i>	1970-1973	632.82	2004-2006	755.56	123	19.40
Soya beans	1984-1988	851.44	2004-2006	1,621.22	770	90.41
Black gram	1984-1988	921.34	2004-2006	1,090.06	169	18.31
Red onion	1970-1973	5,710.13	2004-2006	9,380.62	3,670	64.28
Manioc	1970-1973	5,328.19	2004-2006	9,550.84	4,223	79.25
Sweet potato	1970-1973	3,732.71	2004-2006	6,226.90	2,494	66.82
Chillies	1970-1973	977.63	2004-2006	3,182.96	2,205	225.58
Turmeric	1970-1973	1,475.41	2004-2006	5,467.63	3,992	270.58
Mustard	1970-1973	655.02	2004-2006	731.56	77	11.69
Beans	1973-1977	2,343.00	2003-2007	5,217.00	2,874	122.66
Cabbage	1973-1977	2,342.51	2003-2007	5,216.78	2,874	122.70
Tomato	1973-1977	2,700.00	2002-2007	8,964.00	6,264	232.00
Potato	1970-1973	8,822.00	2004-2006	14,595.00	5,773	65.44
Capsicum chillies	1983-1987	4,614.00	2003-2007	4,469.00	-145	-3.14
Brinjal	1973-1977	1,880.00	2003-2007	8,384.00	6,504	345.96
Pineapple	1973-1977	10,335.23	2003-2007	9,178.93	-1,156	-11.19
Papaw	1973-1977	16,380.00	2002-2007	6,220.00	-10,160	-62.03
Mango (Numbers/Ha)	1973-1977	53,047.00	2003-2007	17,144.00	-35,903	-67.68
Plantain(Bunches/Ha)	1973-1977	1,281.00	2003-2007	660.00	-621	-48.48

Source: Derived from Department of Census and Statistics by authors

Table 105: Change in Production of Selected OFCs

Crop	Period	Production (Mt)	Period	Production (Mt)	Change between period	
					Number	Percentage
<i>Kurakkan</i>	1970-1973	13,138	2004-2006	5,804	-7,334	-55.82
Maize	1970-1973	16,045	2004-2006	41,509	25,464	158.70
Cowpea	1970-1973	3,023	2004-2006	10,149	7,126	235.73
Green gram	1970-1973	2,726	2004-2006	8,260	5,534	203.01
Gingerly	1970-1973	6,792	2004-2006	5,493	-1,299	-19.13
Ground nut	1970-1973	3,033	2004-2006	8,931	5,898	194.46
Sorghum	1970-1973	623	2004-2006	220	-403	-64.69
<i>Meneri</i>	1970-1973	829	2004-2006	68	-761	-91.80
Soya beans	1984-1988	3,158	2004-2006	4,019	861	27.26
Black gram	1984-1988	8,094	2004-2006	6,451	-1,643	-20.30
Red onion	1970-1973	43,534	2004-2006	51,312	7,778	17.87
Manioc	1970-1973	400,717	2004-2006	223,356	-177,361	-44.26
Sweet potato	1970-1973	67,592	2004-2006	40,836	-26,756	-39.58
Chillies	1970-1973	29,495	2004-2006	48,747	19,252	65.27
Turmeric	1970-1973	2,880	2004-2006	3,800	920	31.94
Mustard	1970-1973	1,669	2004-2006	248	-1,421	-85.14
Beans	1973-1977	104,644	2003-2007	387,922	283,278	270.71
Cabbage	1973-1977	13,368	2003-2007	59,969	46,601	348.60
Tomato	1973-1977	13,533	2002-2007	56,367	42,834	316.52
Potato	1970-1973	29,253	2004-2006	79,734	50,481	172.57
Capsicum chillies	1983-1987	15,571	2003-2007	13,424	-2,147	-13.79
Brinjal	1973-1977	23,720	2003-2007	83,953	60,233	253.93
Pineapple	1973-1977	38,075	2003-2007	45,913	7,838	20.59
Papaw	1973-1977	43,489	2002-2007	31,428	-12,061	-27.73
Mango (No.' 000)	1973-1977	317,177	2003-2007	455,146	137,969	43.50
Plantain(Bunches'000)	1973-1977	43,494	2003-2007	32,955	-10,539	-24.23

Source: Derived from Department of Census and Statistics by authors

CHAPTER FIVE

Export Crops Sub Sector and Sugarcane Production

Table 106: Cultivated Extent (Ha.) of Tea, Rubber and Coconut by District, 1982 and 2002

District	Tea		Rubber		Coconut	
	1982	2002	1982	2002	1982	2002
Colombo	251	194	10,317	7,064	9,222	7,292
Gampaha	-	-	3,364	3,055	57,049	43,130
Kalutara	3,586	7,067	47,633	29,922	12,358	11,276
Kandy	35,082	21,975	2,127	1,163	8,306	7,888
Matale	7,106	5,073	4,421	1,861	9,296	10,299
Nuwara Eliya	62,822	49,828	225	22	833	1,043
Galle	14,609	24,920	14,637	6,518	13,244	12,543
Matara	15,540	23,436	6,637	3,614	14,370	14,398
Hambantota	142	397	67	41	20,430	20,733
Jaffna	N.A.	N.A.	N.A.	N.A.	10,027	3,454
Kilinochchi	N.A.	N.A.	N.A.	N.A.	N.A.	2,474
Mannar	N.A.	N.A.	N.A.	N.A.	1,181	910
Vavuniya	N.A.	N.A.	N.A.	N.A.	425	777
Mullaitivu	N.A.	N.A.	N.A.	N.A.	2,205	2,656
Batticaloa	N.A.	N.A.	N.A.	N.A.	4,090	3,537
Ampara	N.A.	N.A.	N.A.	N.A.	3,886	5,087
Trincomalee	N.A.	N.A.	N.A.	N.A.	1,807	2,108
Kurunegala	420	29	3,290	2,753	149,106	133,570
Puttalam	N.A.	N.A.	N.A.	N.A.	51,781	46,091
Anuradhapura	N.A.	N.A.	N.A.	N.A.	5,728	14,134
Polonnaruwa	N.A.	N.A.	N.A.	N.A.	3,002	6,640
Badulla	34,741	30,369	969	412	885	2,715
Moneragala	797	899	2,193	1,830	4,170	10,701
Ratnapura	24,064	38,759	29,329	21,669	12,430	15,969
Kegalle	7,987	7,676	45,918	34,754	20,419	15,411
Sri Lanka	207,147	210,622	171,154	114,678	416,250	394,836

Total cultivation of tea in 2010 – 222,000 Ha.

Total cultivation of rubber in 2010- 126,000 Ha.

Total cultivation of coconut in 2010 – 394,836 Ha.

Source: Department of Census and Statistics, Census of Agriculture, 1982, 2002

www.statistics.gov.lk

N.A. - Not Available

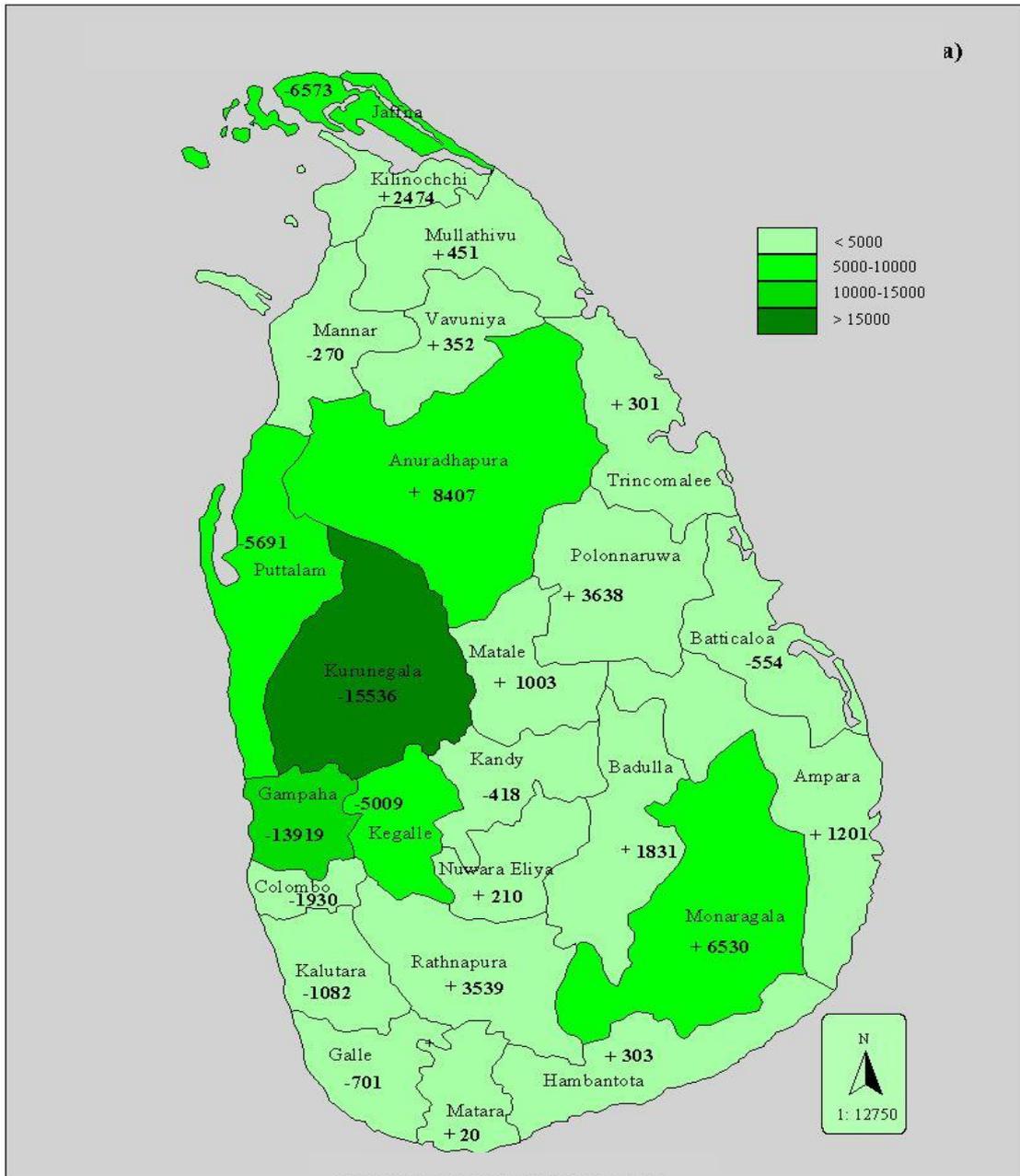
Table 107: Production and Export of Tea, 1980-2010

Year	Tea		
	Total Production (Mt)	Quantity Exported (Mt)	Export as a % of Production
1980	191,400	184,700	96.49
1981	210,100	183,310	87.25
1982	187,800	181,100	96.43
1983	179,200	157,950	88.14
1984	208,000	204,340	98.24
1985	214,100	197,960	92.46
1985	214,094	198,000	92.48
1986	211,276	207,800	98.35
1987	213,327	201,100	94.27
1988	226,952	219,900	96.89
1989	206,987	204,200	98.65
1990	233,165	216,000	92.64
1991	240,747	212,400	88.23
1992	178,870	178,200	99.63
1993	231,871	218,400	94.19
1994	242,214	229,600	94.79
1995	245,961	240,800	97.90
1996	258,427	244,100	94.46
1997	276,861	257,664	93.07
1998	280,055	265,300	94.73
1999	283,760	263,943	93.02
2000	305,843	281,351	91.99
2001	295,093	288,882	97.90
2002	310,032	291,800	94.11
2003	303,229	291,473	96.12
2004	308,092	298,300	94.04
2005	317,200	300,300	94.76
2006	310,800	308,300	99.19
2007	305,200	327,400	107.27
2008	318,700	319,700	100.31
2009	289,800	289,700	99.96
2010	329,000	314,300	95.53

Source : Ministry of Plantation Industries, 2007

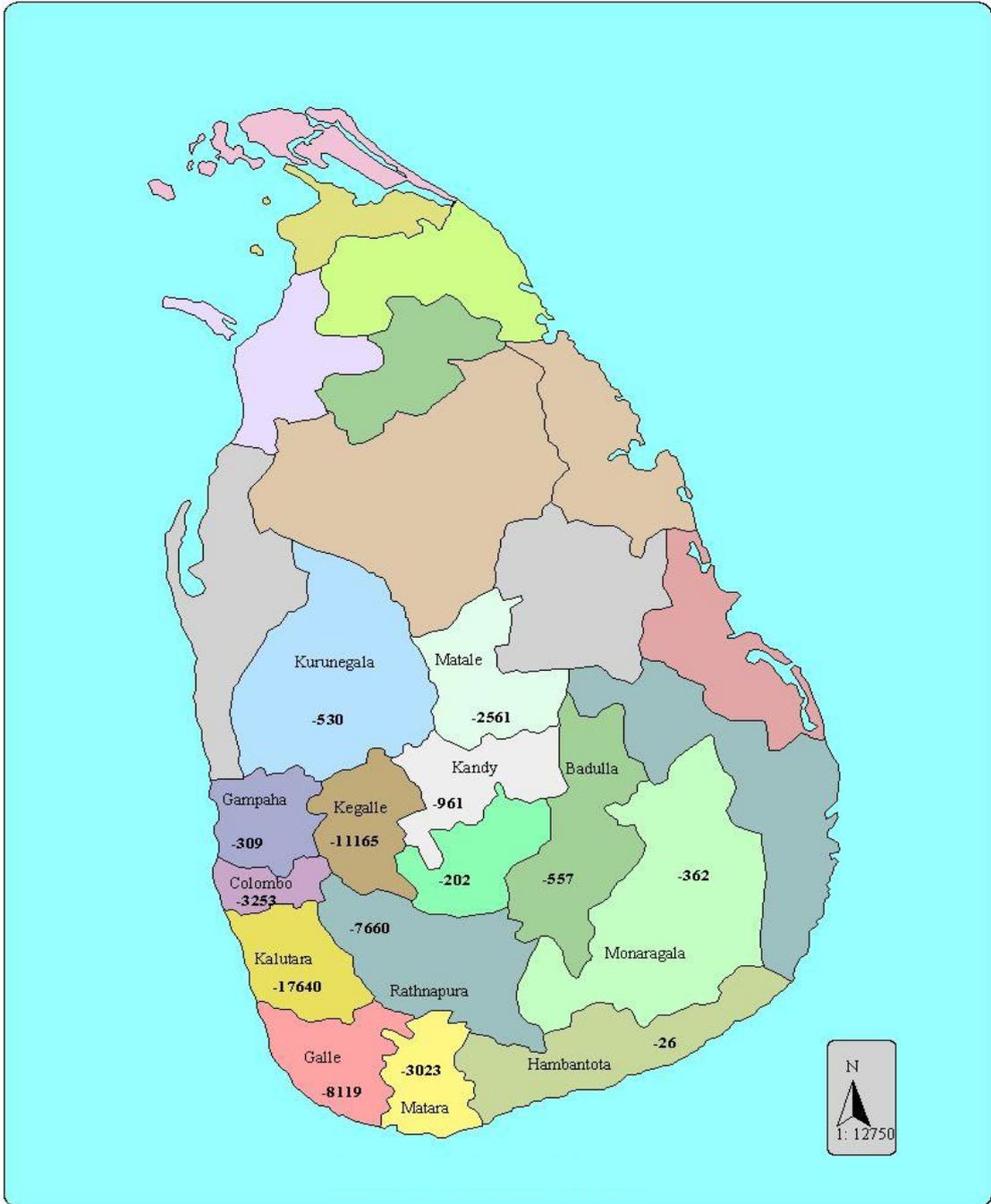
Economic and Social Statistics of Sri Lanka-2011, Central Bank of Sri Lanka.

Map 11: Changes of Coconut Extent (Ha.) by Districts, 1982-2002



Source: Prepared by APPE Division, HARTI on the basis of Department of Census and Statistics Data

Map 12: Changes of Rubber Extent (Ha.) by Districts, 1982-2002



Source: Prepared by APPE Division, HARTI on the basis of Department of Census and Statistics Data

Table 108: Production and Export of Rubber, 1980-2010

Year	Rubber		
	Total Production (Mt)	Quantity Exported (Mt)	Export as a % of Production
1980	133,200	120,900	90.76
1981	123,900	132,500	106.94
1982	125,200	131,300	105.04
1983	140,000	125,200	89.42
1984	141,900	126,200	88.93
1985	137,500	120,400	87.56
1985	137,493	120,448	87.60
1986	137,810	110,041	79.85
1987	121,806	105,988	87.01
1988	122,393	99,303	81.13
1989	110,743	86,020	77.68
1990	113,096	86,735	76.69
1991	103,853	76,350	73.52
1992	106,150	78,604	74.05
1993	104,200	69,604	66.80
1994	105,301	69,141	65.66
1995	105,717	68,235	64.54
1996	112,490	72,051	64.05
1997	105,783	61,402	58.05
1998	95,710	41,440	43.30
1999	96,585	42,740	44.25
2000	87,636	32,502	37.09
2001	86,232	31,951	37.05
2002	90,519	36,109	39.89
2003	92,008	35,200	38.26
2004	94,741	40,324	42.56
2005	104,400	72,700	69.63
2006	109,200	63,100	57.78
2007	117,600	52,000	44.22
2008	129,200	49,000	37.72
2009	136,900	56,000	40.90
2010	153,000	51,500	33.66

Source: Ministry of Plantation Industries, 2007
Economic and Social Statistics of Sri Lanka-2011, Central Bank of Sri Lanka

Table 109: Production and Export of Coconut, 1985-2004

Year	Total Production (Mt)	Quantity Exported (Mt)	Export as a % of Production
1985	1,006,300	247,567	24.60
1986	1,033,850	290,733	28.12
1987	758,290	172,632	22.77
1988	657,600	74,710	11.36
1989	845,040	168,932	19.99
1990	861,370	164,604	19.11
1991	742,990	118,379	15.93
1992	781,090	135,686	17.37
1993	736,180	95,734	13.00
1994	894,030	139,527	15.61
1995	937,240	176,834	18.87
1996	866,220	151,078	17.44
1997	894,710	159,670	17.85
1998	872,430	115,078	13.19
1999	918,590	159,509	17.36
2000	1,051,540	209,082	19.88
2001	988,270	130,659	13.22
2002	836,540	78,568	9.39
2003	871,580	113,740	13.05
2004	881,100	142,726	16.20

Source: Ministry of Plantation Industries, 2005

Table 110: Manufacture of Copra, Coconut Oil, Poonac and Desiccated Coconut (Mt), 1950-2010

Year	Copra	Coconut Oil	Poonac	Desiccated Coconut
1950	300,611	110,250	55,125	45,628
1951	256,702	145,875	72,937	40,407
1952	274,569	143,500	71,750	56,512
1953	232,982	130,000	65,000	58,194
1954	219,011	106,000	53,000	56,087
1955	290,681	137,375	68,687	58,788
1956	262,586	125,500	62,750	64,763
1957	142,609	66,024	33,012	49,681
1958	145,432	72,178	36,089	57,645
1959	197,940	95,169	47,584	53,329
1960	190,284	98,885	49,442	55,818
1961	268,136	130,527	65,314	49,121
1962	315,201	148,714	74,358	49,814
1963	291,662	152,552	76,276	51,618
1964	323,693	162,881	81,446	50,892
1965	271,024	141,183	70,592	54,250
1966	221,890	123,502	61,751	47,903
1967	200,956	113,785	56,893	47,814
1968	201,280	110,570	55,286	71,059
1969	200,930	111,738	55,869	55,494
1970	183,321	108,182	54,091	54,883
1971	226,609	131,600	65,800	54,750
1972	255,132	132,813	66,407	49,052
1973	99,775	61,400	30,700	37,982
1974	108,473	64,855	32,427	42,336

Continued Table 110: Manufacture of Copra, Coconut Oil, Poonac and Desiccated Coconut (Mt), 1950-2010

1975	203,082	120,263	60,132	51,582
1976	162,818	100,196	50,098	46,186
1977	79,885	49,160	24,580	30,327
1978	130,145	80,089	40,045	41,591
1979	163,145	100,397	50,198	39,975
1980	101,619	62,535	31,267	31,860
1981	125,083	75,658	37,829	40,685
1982	170,397	102,485	51,242	42,096
1983	138,408	82,884	41,442	43,348
1984	62,295	36,834	18,417	32,518
1985	218,456	129,807	64,904	53,240
1986	242,616	143,300	71,650	62,645
1987	125,372	71,622	35,811	51,428
1988	61,987	34,548	17,274	22,774
1989	129,528	74,633	37,316	46,891
1990	128,806	74,804	37,402	55,258
1991	60,568	32,556	16,278	49,308
1992	54,956	30,219	15,110	53,612
1993	40,685	22,000	11,000	39,613
1994	103,985	60,000	30,000	55,887
1995	112,643	64,515	32,008	68,389
1996	74,468	41,000	20,500	62,533
1997	67,348	36,185	18,092	65,528
1998	70,272	38,000	19,000	45,070
1999	64,602	35,125	17,562	67,584
2000	82,062	44,407	22,204	89,030
2001	112,996	64,320	32,160	50,955
2002	59,033	30,100	15,050	30,700
2003	36,600	12,500	6,300	46,200
2004	37,100	25,000	12,500	54,900
2005	17,000	20,000	10,000	37,000
2006	19,000	38,000	19,000	45,000
2007	14,000	76,000	37,000	43,000
2008	13,000	59,000	30,000	38,100
2009	8,600	75,500	37,800	38,000
2010	100	65,100	32,600	28,800

Source: Coconut Development Authority
Economic and Social Statistics of Sri Lanka-2011, Central Bank of Sri Lanka

Table 111: Coconut Production, Exports of Kernel, Products and Domestic Consumption, 1950-2009

Year	Total Coconut Production (Min.Nuts)*	Export of Kernel products (Min.Nut. Equivalent)	Manufacture of Kernel Products (Min.Nuts.)	Domestic Consumption (Min.Nuts) **
1950	1,982	52.4	N.A.	943
1951	2,238	56.7	N.A.	968
1952	2,455	59.5	N.A.	993
1953	2,288	55.4	N.A.	1,019
1954	2,203	53.5	N.A.	1,044
1955	2,420	63.7	N.A.	1,074
1956	2,374	60.2	N.A.	1,116
1957	2,108	45.6	N.A.	1,146
1958	2,109	44.3	N.A.	1,174
1959	2,313	49.3	N.A.	1,203
1960	2,183	44.7	N.A.	1,237
1961	2,601	52.3	N.A.	1,271
1962	2,811	54.7	N.A.	1,305
1963	2,549	47.7	N.A.	1,331
1964	2,991	54.4	N.A.	1,363
1965	2,676	47.8	N.A.	1,396
1966	2,461	41.8	N.A.	1,430
1967	2,416	39.3	N.A.	1,463
1968	2,601	42.4	N.A.	1,499
1969	2,440	37.1	N.A.	1,532
1970	2,510	35.3	N.A.	1,564
1971	2,610	42.5	N.A.	1,558
1972	2,818	1,259	1,637	1,559
1973	1,948	423	751	1,525
1974	2,030	468	809	1,562
1975	2,585	914	1,319	1,671
1976	2,330	794	1,122	1,536
1977	1,821	233	601	1,588
1978	2,207	507	928	1,700
1979	2,393	561	1,076	1,832
1980	2,026	242	718	1,784
1981	2,258	439	893	1,819
1982	2,521	628	1,125	1,893
1983	2,312	572	976	1,740
1984	1,942	282	527	1,660
1985	2,958	931	1,438	2,027
1986	3,039	1,162	1,620	1,877
1987	2,292	561	967	1,731
1988	1,937	236	460	1,701
1989	2,484	588	957	1,896
1990	2,532	514	1,010	2,018
1991	2,184	389	633	1,795
1992	2,296	437	637	1,859
1993	2,164	317	473	1,847
1994	2,622	473	909	1,982
1995	2,755	608	1,042	2,009

Continued Table 11: Coconut Production, Exports of Kernel, Products and Domestic Consumption, 1950-2009

1996	2,546	508	809	2,042
1997	2,630	613	869	2,015
1998	2,522	461	742	2,053
1999	2,828	648	934	2,063
2000	3,096	846	1,218	2,126
2001	2,769	574	1,087	2,322
2002	2,392	384	620	2,056
2003	2,562	461	N.A.	1,834
2004	2,591	538	N.A.	1,853
2005	2,515	377	N.A.	1,872
2006	2,785	456	N.A.	1,901
2007	2,869	406	N.A.	1,900
2008	2,909	360	N.A.	1,798
2009	2,762	367	N.A.	1,816

Notes : * Coconut Production estimates are the aggregate of the nut equivalent of oil and desiccated coconut production, domestic fresh nut consumption, nut equivalent of copra exports and change in copra stocks.

** Domestic consumption is taken at 95.52 fresh nuts 1.81 bottles of coconut oil per head per annum (approximately)

***Population figures are mid-year estimates by Department of Census and Statistics. The following conversion factors are used for the estimation of nut equivalent of export products 1Mt Copra – 5,775 nuts, 1Mt D.C. – 8,000 nuts, 1Mt Oil- 8,800 nuts

Source: Coconut Development Authority

Economic and Social Statistics of Sri Lanka-2011, Central Bank of Sri Lanka

N.A. - Not Available

Table 112: Exports of Kernel Products, 1973-2010

Year	Coconut Oil (Mt)	Desiccated Coconut (Mt)	Copra (Mt)	Poonac (Mt)	Fresh Nuts ('000 Nuts)
1973	9,883	39,021	344	NO EXPORTS	5,001
1974	25,484	42,359	432		1,966
1975	68,876	51,121	1,230		9,525
1976	58,978	45,454	1,245		7,232
1977	2,133	31,957	276		N.A.
1978	28,267	40,664	924		N.A.
1979	33,961	41,766	1,080		348
1980	2,443	32,492	275		N.A.
1981	20,610	38,502	2,123	4,600	2,089
1982	38,855	42,393	3,859	25,387	9,469
1983	32,721	42,135	3,722	3,000	5,696
1984	7,606	30,099	2,440	N.A.	4,395
1985	66,144	52,187	7,520	30,435	10,104
1986	85,347	60,819	9,753	40,080	17,794
1987	17,297	53,236	8,986	5,550	16,328
1988	5,350	22,422	5,847	4,600	12,112
1989	29,668	43,205	8,250	11,880	16,262
1990	12,224	52,693	7,250	7,020	22,191
1991	1,049	46,815	7,665	23	24,434
1992	2,414	53,251	5,850	N.A.	24,782
1993	2,581	36,229	4,935	N.A.	22,329
1994	4,529	53,286	6,485	3,950	25,444
1995	8,953	66,060	10,219	1,251	26,517
1996	2,812	60,796	7,843	44	17,450
1997	3,702	63,739	8,547	9	17,717
1998	2,667	45,235	8,992	N.A.	17,535
1999	3,622	62,949	11,212	17	22,999
2000	4,656	82,735	14,563	7,337	29,025
2001	3,436	49,874	15,037	6,614	27,515
2002	2,585	28,557	13,281	21	23,679
2003	2,500	42,200	17,500	N.A.	34,500
2004	2,100	54,100	15,100	N.A.	41,400
2005	1,400	33,400	16,900	N.A.	40,600
2006	1,800	41,600	18,700	N.A.	48,100
2007	1,400	37,000	16,800	N.A.	46,600
2008	1,500	36,000	13,300	N.A.	32,300
2009	1,900	42,400	4,800	N.A.	46,000
2010	2,300	28,900	500	N.A.	29,200

Source: Coconut Development Authority
Economic and Social Statistics-2011, Central Bank of Sri Lanka
N.A. - Not Available

Table 113: Cultivated and Harvested Extent (Ha) of Sugarcane, 1972-2010

Year	Extent cultivated (Ha)	Extent Harvested (Ha)
1972	3,932	3,321
1973	5,258	3,551
1974	5,485	4,932
1975	5,864	4,200
1976	6,413	5,471
1977	4,167	4,585
1978	4,847	4,807
1979	6,522	5,372
1980	6,376	5,638
1981	5,937	5,393
1982	5,603	5,273
1983	5,710	5,328
1984	7,723	4,686
1985	4,682	4,527
1986	6,193	4,917
1987	10,688	6,615
1988	11,657	9,111
1989	10,557	8,699
1990	10,534	8,114
1991	12,936	8,289
1992	14,376	10,531
1993	12,890	11,095
1994	11,511	13,300
1995	10,574	13,574
1996	11,401	15,100
1997	13,793	15,528
1998	13,563	12,709
1999	7,976	6,125
2000	7,037	6,246
2001	7,557	6,045
2002	7,873	5,903
2003	7,308	5,395
2004	8,240	6,655
2005	8,445	6,432
2006	8,831	8,390
2007	7,544	6,185
2008	7,294	6,271
2009	7,320	5,978
2010	7,372	5,988

Source: Economic and Social Statistics of Sri Lanka, Various Issues, Central Bank of Sri Lanka

Table 114: Local Production, Import and Per Capita Consumption of Sugar, 1972-2010

Year	Local production (Mt)	Import (Mt'000)	Per capita consumption (Kg/Per person)
1972	6,660	214	20
1973	12,194	191	15
1974	19,481	42	5
1975	18,283	62	6
1976	23,512	47	5
1977	23,316	100	7
1978	17,376	176	12.4
1979	19,624	246	17.0
1980	26,289	209	14.2
1981	25,291	241	15.9
1982	23,060	133	10.2
1983	21,833	315	21.8
1984	19,765	263	18.2
1985	19,501	388	25.7
1986	-	-	-
1987	29,297	376	24.0
1988	53,521	319	20.7
1989	53,839	320	20.6
1990	57,165	305	21.3
1991	66,450	358	24.6
1992	59,974	370	24.7
1993	68,603	394	26.3
1994	72,274	491	31.5
1995	71,416	418	27.0
1996	70,114	381	24.6
1997	63,106	545	32.8
1998	61,549	444	26.9
1999	65,519	479	28.6
2000	64,481	562	32.4
2001	47,934	420	25.0
2002	37,661	554	31.1
2003	61,020	509	29.6
2004	63,151	438	25.8
2005	53,376	444	25.3
2006	56,020	525	27.89
2007	29,544	481	24.20
2008	39,378	575	29.03
2009	31,774	467	N.A.
2010	31,335	559	N.A.

Source: Economic and Social Statistics of Sri Lanka, Various Issues, Central Bank of Sri Lanka

Table 115: Average Cultivated Extent, Production and Export Quantity of Cocoa, 1972-2010

Period	Extent cultivated (Ha)	Production (Mt)	Exports- Quantity (Mt)
1972-1976	9,041	13,393	1,181
1977-1981	8,437	11,984	958
1982-1986	8,262	9,059	772
1987-1991	8,650	4,000	263
1992-1996	6,252	3,619	63
1997-2001	5,540	3,660	81
2002-2007	3,494	2,263	62
2008-2010	2,720	1,731	607

Source: Economic and Social Statistics of Sri Lanka, Various Issues, Central Bank of Sri Lanka

Table 116: Average Cultivated Extent, Production and Export Quantity of Cinnamon, 1972-2010

Period	Extent cultivated (Ha)	Production (Mt)	Exports- Quantity (Mt)
1972-1976	21,333	16,422	N.A.
1977-1981	22,146	25,448	N.A.
1982-1986	21,395	16,046	1,518
1987-1991	20,468	9,940	7,242
1992-1996	23,447	11,685	9,592
1997-2001	24,536	12,212	10,219
2002-2007	25,741	13,080	11,848
2008-2010	28,267	14,815	12,053

Source: Economic and Social Statistics of Sri Lanka, Various Issues, Central Bank of Sri Lanka

Table 117: Average Cultivated Extent, Production and Export Quantity of Cardamoms, 1972-2010

Period	Extent cultivated (Ha)	Production (Mt)	Exports- Quantity (Mt)
1972-1976	3,903	5,227	209
1977-1981	4,943	4,293	159
1982-1986	5,243	2,770	193
1987-1991	4,392	440	104
1992-1996	4,518	1,083	17
1997-2001	4,166	1,114	11
2002-2007	2,929	784	6
2008-2010	1,452	502	6

Source: Economic and Social Statistics of Sri Lanka, Various Issues, Central Bank of Sri Lanka

Table 118: Average Cultivated Extent, Production and Export Quantity of Pepper, 1972-2010

Period	Extent cultivated (Ha)	Production (Mt)	Exports- Quantity (Mt)
1972-1976	6,145	14,464	520
1977-1981	8,258	15,930	1,082
1982-1986	11,144	13,626	1,409
1987-1991	15,834	8,060	1,933
1992-1996	24,491	14,651	3,849
1997-2001	28,044	17,254	3,949
2002-2007	30,451	18,400	7,640
2008-2010	36,448	25,466	8,413

Source: Economic and Social Statistics of Sri Lanka, Various Issues, Central Bank of Sri Lanka

Table 119: Average Cultivated Extent, Production and Export Quantity of Citronella, 1972-2010

Period	Extent cultivated (Ha)	Production(Mt)	Exports- Quantity (Mt)
1972-1976	4,850	5,201	137
1977-1981	3,757	4,751	135
1982-1986	3,170	3,850	102
1987-1991	N.A.	N.A.	N.A.
1992-1996	N.A.	N.A.	N.A.
1997-2001	N.A.	N.A.	N.A.
2002-2007	N.A.	N.A.	N.A.
2008-2010	N.A.	N.A.	N.A.

Source: Economic and Social Statistics of Sri Lanka, Various Issues, Central Bank of Sri Lanka.

N.A. - Not Available

CHAPTER SIX

Technology Dissemination and Transformation in the Crops Sector

Table 120: Average Paddy Extent (Ha.) Sown by Method of Land Preparation

Period	Mainly by Tractors	Mainly by Buffaloes Ploughed	Tractors, Buffaloes and Mammotied	Total
1979-83	368,233	471,346	6,096	845,675
1984-88	394,620	460,338	21,294	876,252
1989-93	365,798	351,949	33,111	750,858
1994-98	527,180	224,961	30,645	782,786
1999-03	672,084	82,689	104,486	859,259
2004-06	733,471	75,133	64,046	872,650
2007-09	806,095	57,177	61,949	948,967

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 121: Average Paddy Extent (Ha.) Sown by Variety of Seeds

Period	Variety			Total
	New Improved Varieties	Old Improved Varieties	Traditional Varieties	
1979-83	612,112	125,479	108,084	845,675
1984-88	732,115	48,078	96,061	876,254
1989-93	657,698	17,303	64,093	739,093
1994-98	747,946	12,373	22,302	782,622
1999-03	843,314	11,357	4,588	859,259
2004-06	863,554	4,865	4,231	872,650
2007-09	913,920	9,864	1,421	948,967

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 122: Average Paddy Extent (Ha.) Sown by Method of Sowing

Period	Methods of Sowing				Total
	Broadcasting	Transplanted in Rows	Transplanted not in Rows	Row Seeded	
1979-83	672,589	49,414	140,323	3,330	865,657
1984-88	668,999	39,135	161,827	6,293	876,254
1989-93	567,597	26,096	142,189	2,860	738,742
1994-98	667,692	15,796	97,186	1,593	782,266
1999-03	784,962	11,358	61,869	1,070	859,259
2004-06	815,058	13,337	43,187	1,068	872,650
2007-09	879,888	8,787	35,907	749	948,967

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 123: Average Paddy Extent (Ha.) Sown by Type of Fertilizer Use

Period	Chemical Fertilizer Only	Organic Fertilizer Only	Both Chemical and Organic Fertilizer	None	Total
1985-88	777,957	15,309	29,230	33,692	856,188
1989-93	671,911	18,323	21,016	23,909	735,158
1994-98	724,600	5,282	33,409	18,204	781,495
1999-03	736,870	5,373	99,595	17,421	859,259
2004-06	685,045	6,104	163,159	18,342	872,650
2007-09	664,883	6,975	238,874	11,470	948,967

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 124: Average Paddy Extent (Ha.) Sown by Method of Weeding

Period	Method of Weeding				Total
	Hand Weeded	Used Weedicides	Used Water	Un-Weeded	
1979-83	258,288	359,001	31,047	197,305	845,641
1984-88	231,795	498,064	26,677	142,520	899,056
1989-93	192,005	434,627	24,142	89,232	740,005
1994-98	199,881	490,551	15,670	76,017	782,119
1999-03	158,311	641,489	15,321	44,143	859,263
2004-06	132,797	699,876	12,872	27,105	872,650
2007-10	126,022	763,525	8,319	27,281	948,967

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 125: Distribution of Agricultural Machinery Owned by Agricultural Operators and Size Class of Holdings, 2002

Size Class of the Holding Hectares	Two Wheel Tractors	Four Wheel Tractors	Manually Operated Sprayers	Power Operated Sprayers	Threshers	Winnowing Fans	Water Pumps
Less than 1 Hectare	34,089	7,594	108,602	6,488	8,272	13,113	64,751
1 - < 2 Hectares	19,792	4,114	37,294	2,029	3,240	9,338	14,806
2 - < 3 Hectares	3,402	1,905	5,785	604	604	1,640	3,253
3 - < 4 Hectares	677	514	1,325	140	140	319	779
4 - < 5 Hectares	392	558	1,032	121	121	184	614
5 - < 8 Hectares	224	363	735	93	93	117	475
8 Hectares and above	117	340	526	104	104	71	289
Total	58,693	15,088	155,379	9,759	9,759	24,782	84,967

Source: Census of Agriculture-2002, Department of Census and Statistics

Table 126: Number of Agriculture Machinery Owned by Agricultural Operators by District, 2002

District	Four Wheel Tractors	Two Wheel Tractors	Manually operated Sprayers	Powered operated Sprayers	Threshers	Winnowing Fans	Water Pumps
Colombo	95	381	366	52	226	214	274
Gampaha	681	1,557	1,338	94	592	580	710
Kaluthara	172	752	830	152	448	458	214
Kandy	149	800	4,622	184	193	575	482
Matale	490	2,092	10,115	276	355	439	8,171
Nuwara-Eliya	18	69	12,436	1,803	22	29	4,055
Galle	214	1,211	1,679	147	737	582	227
Matara	276	1,331	1,681	86	699	779	216
Hambantota	658	4,583	9,444	291	2,571	2,039	3,288
Jaffna	279	345	2,862	162	11	3	7,938
Mannar	206	73	621	28	33	18	1,060
Vavuniya	243	179	1,211	159	34	5	2,911
Mulativu	230	18	1,136	63	31	16	1,976
Kilinochchi	231	59	913	105	26	19	1,567
Batticalo	584	53	1,185	136	97	40	872
Ampara	1,466	3,425	6,572	524	1,672	1,879	555
Trincomalee	612	1,358	1,903	82	71	401	1,047
Kurunegala	3,126	12,862	19,698	588	2,047	4,016	17,018
Puttalam	689	1,889	4,287	186	301	571	6,630
Anuradhapura	2,352	10,000	25,565	659	592	3,323	14,122
Polonnaruwa	868	10,620	10,436	1,169	219	5,743	1,621
Badulla	254	1,880	23,421	2,230	314	969	4,974
Monaragala	839	1,563	6,241	239	886	878	3,327
Ratnapura	200	1,183	6,175	198	958	810	1,535
Kegalle	156	405	642	46	258	126	177
Sri Lanka	15,088	58,693	155,379	9,759	13,393	24,782	84,967

Source: Census of Agriculture-2002, Department of Census and Statistics

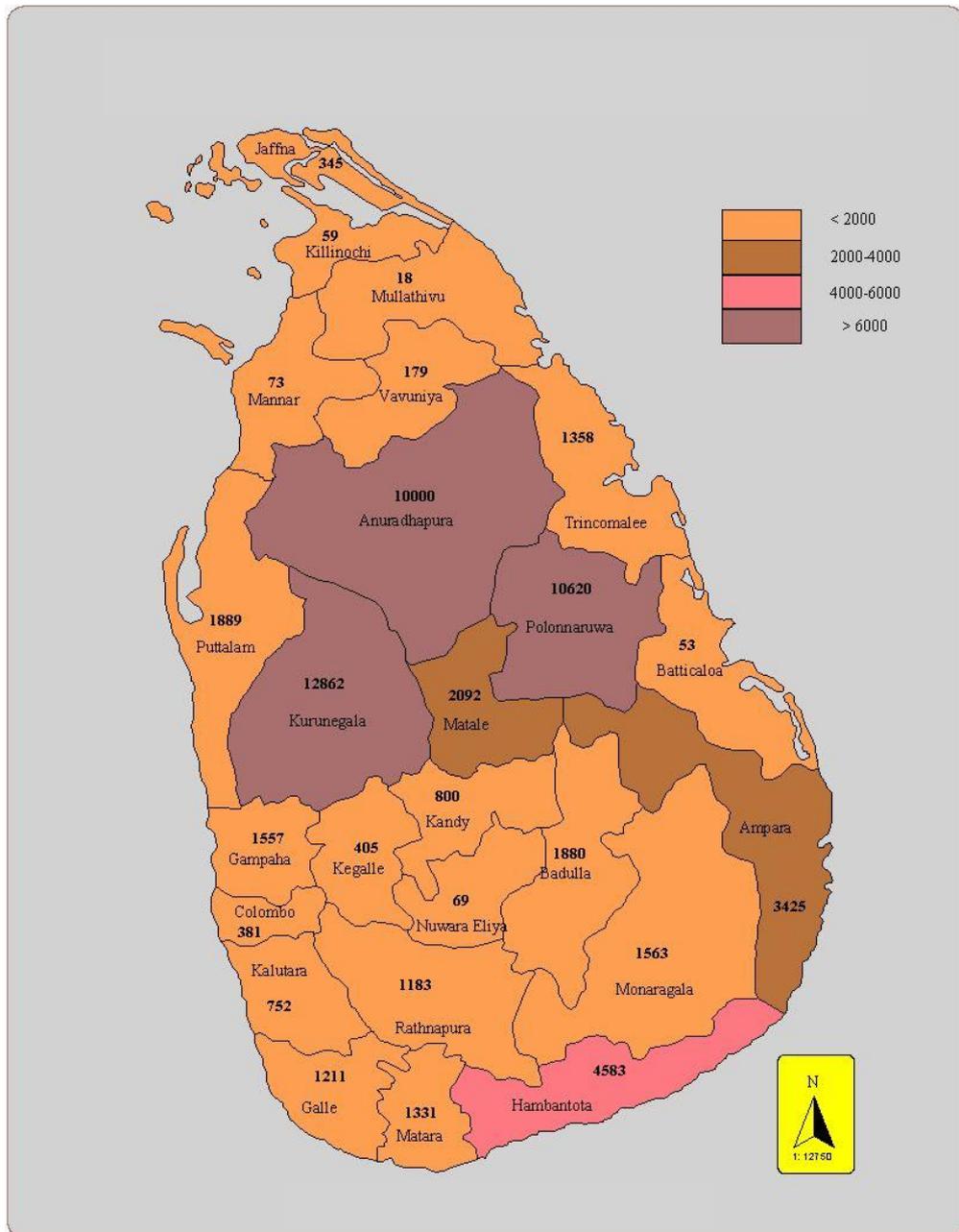
Table 127: Seed Rates, Wastage Factors and Extraction Rates

Food Item	Seed rate	Wastage Factor (as a % of the available supply)	Extraction rate %
Rice	2.0 bushels/acre	6.0	68.0
Wheat flour		0.9	
Maize	17.5 lb./acre	3.0	90.0
Meneri	8.0 lb./acre	3.0	90.0
<i>Kurakkan</i>	9.0 lb./acre	3.0	90.0
Sorghum	15.0 lb./acre	3.0	90.0
Potatoes	19.0 cwt./acre	10.0	N.A.
Manioc	-	30.0	N.A.
Sweet Potato	-	30.0	N.A.
Green gram	20.0 lb./acre	3.0	N.A.
Soya bean	73.0 Kg/hectare	3.0	N.A.
Cowpea	20.0 lb./acre	3.0	N.A.
Ground nuts	120.0 lb/acre	3.0	N.A.
Dhall	20.0 lb/acre	3.0	N.A.
Onions	15.0 cwt./acre	30.0	N.A.
Eggs	1.75 % of the av. supply	0.05	N.A.
Fish (fresh)	-	30.0	N.A.

Source: Food Balance Sheet-1991-1995, Department of Census and Statistics

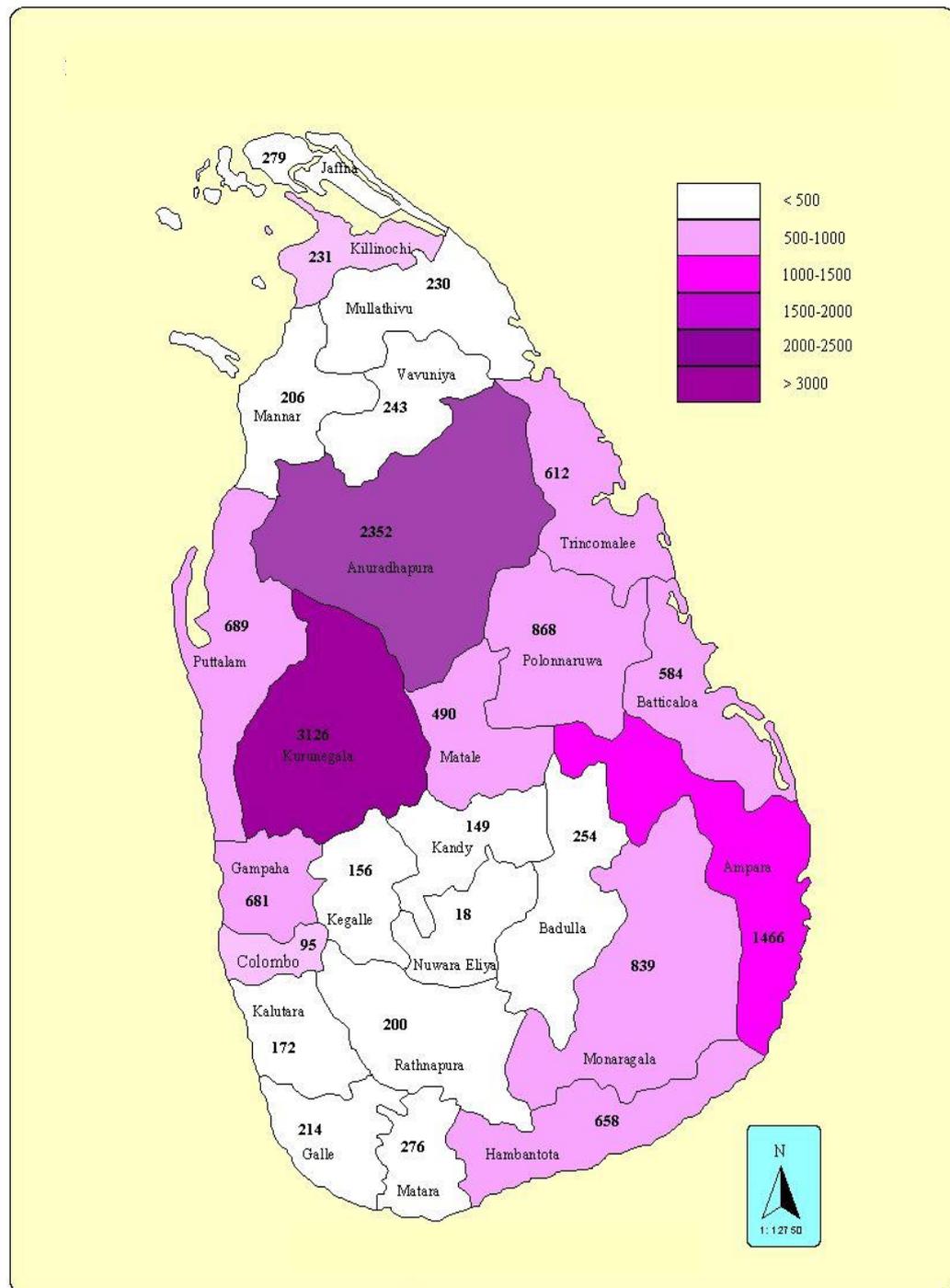
N.A. – Not Available

Map 13: Number of Two-Wheel Tractors Owned by Agricultural Land Operators by Districts in 2002



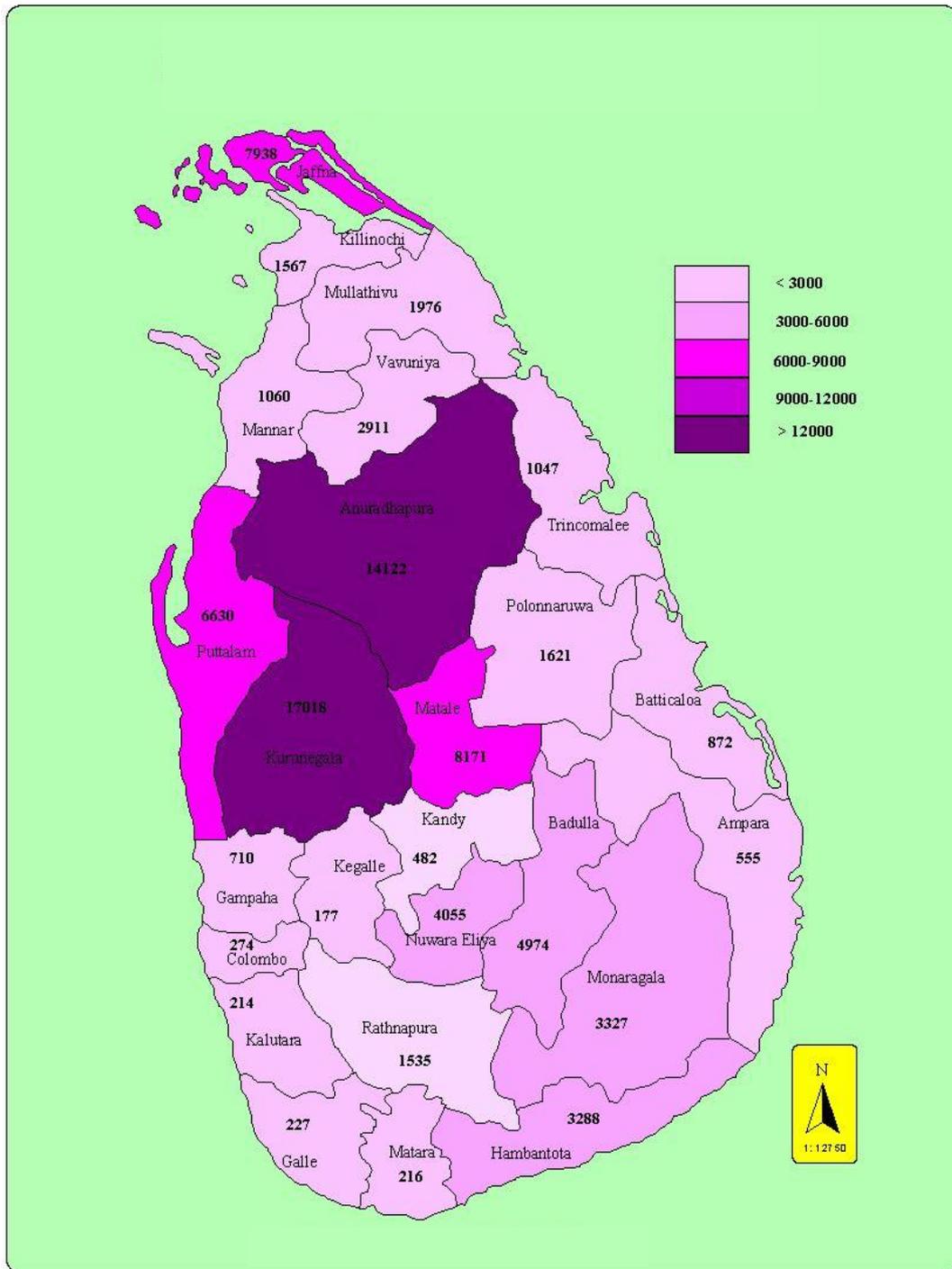
Source: Prepared by APPE Division, HARTI on the basis of Department of Census and Statistics Data

Map 14: Number of Four-Wheel Tractors Owned by Agricultural Land Operators by Districts in 2002



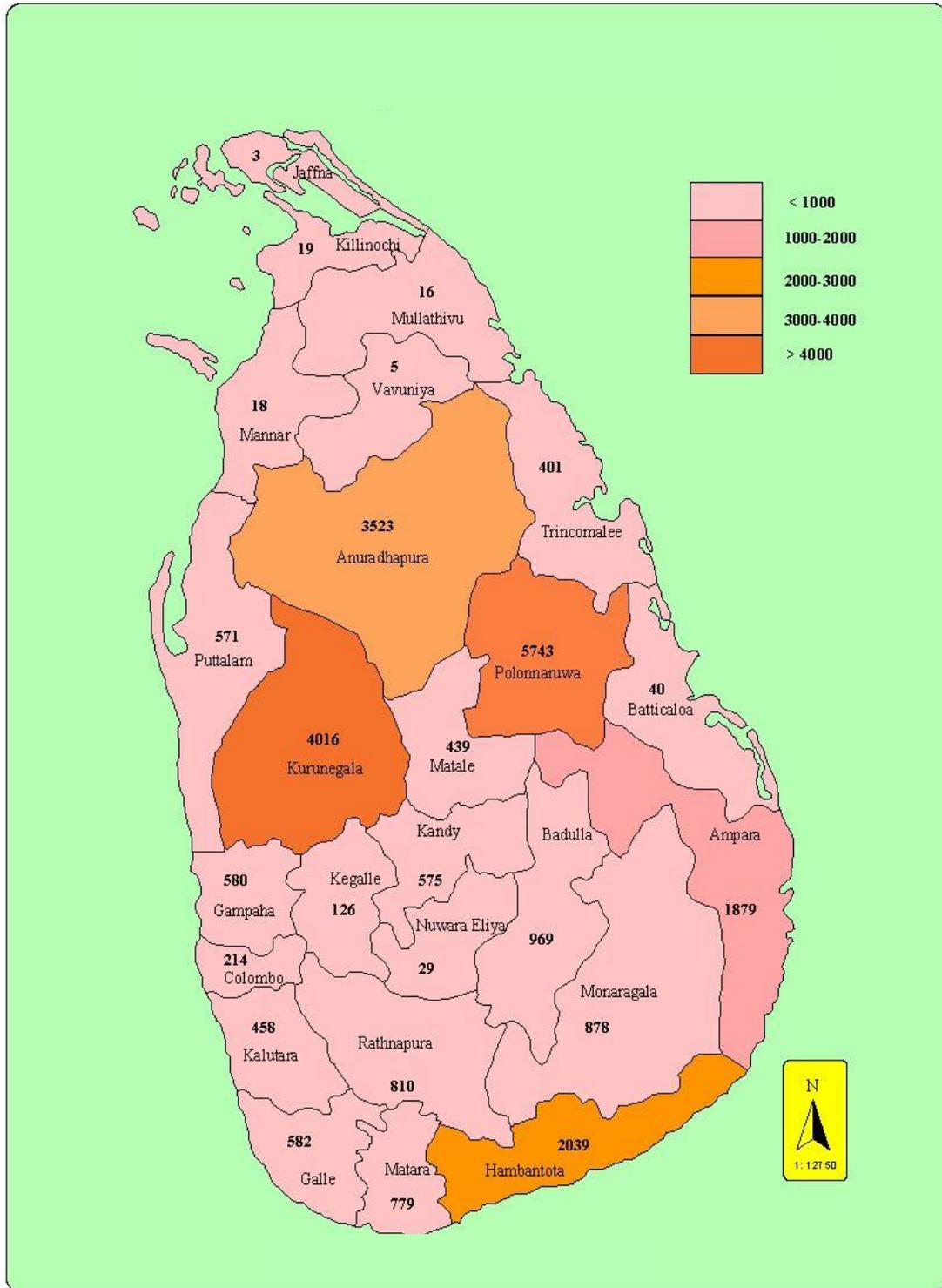
Source: Prepared by APPE Division, HARTI on the basis of Department of Census and Statistics Data

Map 15: Number of Water Pumps Owned by Agricultural Land Operators by Districts in 2002



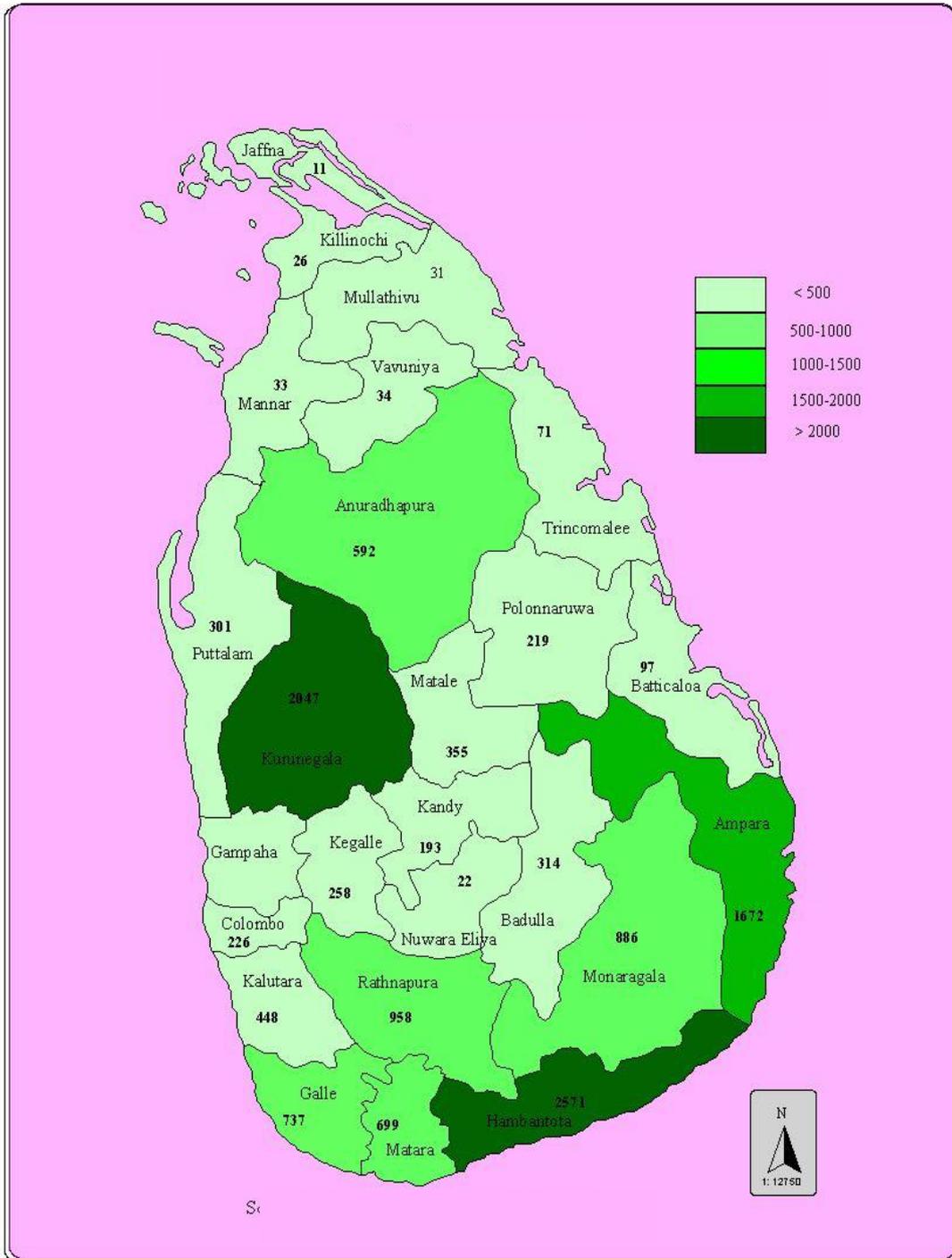
Source: Prepared by APPE Division, HARTI on the basis of Department of Census and Statistics Data

Map 16: Number of Wininging Fans Owned by Agricultural Land Operators by Districts in 2002



Source: Prepared by APPE Division, HARTI on the basis of Department of Census and Statistics Data

Map 17: Number of Threshers Owned by Agricultural Land Operators by Districts in 2002



Source: Prepared by APPE Division, HARTI on the basis of Department of Census and Statistics Data

CHAPTER SEVEN

Livestock and Fishery Sub-Sectors

Table 128: Livestock Population, (No. '000), 1970-2010

Year	Cattle	Buffaloes	Goats	Sheep	Pigs	Poultry	Ducks
1970	1,596	736	558	27	108	6,856	30
1971	1,625	737	546	29	85	6,693	22
1972	1,617	748	562	29	102	9,127	24
1973	1,677	714	549	27	91	7,529	25
1974	1,686	736	547	30	49	6,521	33
1975	1,712	818	547	28	33	5,684	15
1976	1,744	854	562	30	36	5,700	15
1977	1,692	797	545	27	36	5,833	11
1978	1,541	814	450	23	41	4,912	13
1979	1,623	844	461	24	49	5,882	16
1980	1,644	843	493	28	71	6,341	22
1981	1,720	898	512	30	94	6,296	25
1982	1,699	879	512	28	75	6,249	23
1983	1,700	910	519	29	77	6,457	24
1984	1,738	951	535	29	85	6,113	25
1985	1,782	967	539	27	84	7,097	28
1986	1,783	964	534	29	86	7,638	30
1987	1,807	1,007	502	27	96	8,588	30
1988*	1,788	963	510	28	94	8,645	29
1989*	1,820	967	518	30	94	8,833	31
1990**	1,433	823	415	22	81	8,250	18
1991**	1,477	825	460	20	84	8,261	17
1992***	1,604	897	528	22	91	8,852	18
1993****	1,688	793	582	19	90	9,261	18
1994****	1,702	791	588	20	94	9,466	N.A.
1995****	1,704	764	591	19	87	9,573	16
1996****	1,664	761	535	11	85	9,137	12
1997	1,579	726	521	11	80	9,253	11
1998	1,599	721	519	12	76	9,566	13
1999	1,617	728	514	12	74	11,590	13
2000	1,582	689	495	11	71	10,622	10
2001	1,565	661	493	12	68	10,655	12
2002	1,510	643	452	12	73	10,609	10
2003	1,139	280	415	9	67	9,774	N.A
2004	1,161	302	405	11	79	11,041	N.A
2005	1,185	308	395	10	85	11,636	N.A
2006	1,215	314	382	13	92	13,117	N.A
2007	1,222	318	388	16	94	13,788	N.A
2008	1,196	318		387	89	14,331	N.A
2009	1,136	371		385	81	13,615	15
2010	1,169	422		381	83	14,018	13

* Estimates due to data collection difficulties

** Mannar, Vavuniya, Mullaitivu, Kilinochchi and Trincomalee data not included due to difficulties in collection

*** Mannar, Mullaitivu and Kilinochchi data not included due to difficulties in collection while Vavuniya and Trincomalee are estimates

**** Mannar, Kilinochchi and Mullaitivu data are estimates based on past trends.

Trincomalee guess estimates of district staff

Source: Ministry of Agriculture and Livestock – Sri Lanka

Economic and Social Statistics of Sri Lanka-Variou issues, Central Bank of Sri Lanka.

N.A. - Not Available

Table 129: Pig Population and Distribution by Districts, 2003-2010

District	2003	2004	2005	2006	2007	2010
Colombo	3,700	4,000	3,660	3,430	3,770	8,865
Gampaha	15,140	15,970	17,000	22,717	22,800	20,765
Kalutara	1,270	4,800	3,440	3,365	3,800	1,925
Kandy	1,180	750	1,000	753	800	475
Matale	3,690	3,740	3,740	3,196	3,800	2,510
Nuwara Eliya	340	220	240	175	360	390
Galle	950	170	860	871	970	1,010
Matara	110	110	200	431	500	95
Hambantota	610	1,340	1,150	1,037	1,580	810
Jaffna	20	35	0	0	-	-
Killinochchi	0	0	0	0	-	-
Mannar	10	0	70	79	50	35
Vavuniya	100	0	310	211	80	195
Mulativu	0	0	0	0	-	-
Batticaloa	50	80	80	65	40	40
Ampara	330	530	350	645	560	300
Trincomalee	220	250	280	142	400	245
Kurunegala	10,990	11,370	15,390	15,557	15,080	12,935
Puttalam	19,050	20,830	22,620	25,635	26,100	20,085
Anuradhapura	5,840	7,230	7,500	7,543	7,210	6,450
Polonnaruwa	1,470	2,900	2,790	2,365	2,260	2,275
Badulla	610	740	610	1,095	1,040	1,295
Moneragala	280	730	830	801	950	1,190
Ratnapura	630	1,580	1,700	669	920	910
Kegalle	1,150	1,320	1,200	1,195	1,140	985
Total	67,740	79,295	85,020	91,977	94,210	83,785

Source: Economic and Social Statistics of Sri Lanka-2011, Central Bank of Sri Lanka.
 Gunaratne, S.P., Chandrasiri A.D.N. and Shadana Gajanayake (2009). Smallholder Pig Production in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.
 Economic and Social Statistics of Sri Lanka-2011, Central Bank of Sri Lanka.

Table 130: Annual Estimates of Poultry Population, 1970-2006

Year	Total Chicken Population (Mn)	DOC Layers (Mn)	DOC Broilers (Mn)	Year	Total Chicken Population	DOC Layers (Mn)	DOC Broilers (Mn)
1970	6.856	-	-	1989	8.833	3.12	13.1
1971	6.693	-	-	1990	8.250	3.70	14.5
1972	9.127	-	-	1991	8.261	4.20	15.6
1973	7.529	-	-	1992	8.852	3.80	18.8
1974	6.521	-	-	1993	9.261	4.60	25.2
1975	5.684	-	-	1994	9.466	3.70	32.4
1976	5.700	-	-	1995	9.573	5.80	37.9
1977	5.833	-	-	1996	9.137	3.30	38.5
1978	4.912	-	-	1997	9.253	5.60	40.8
1979	5.882	1.73	2.3	1998	9.566	4.50	47.2
1980	6.341	1.60	2.5	1999	9.922	4.40	48.9
1981	6.296	1.80	3.1	2000	10.622	4.90	59.7
1982	6.249	1.62	5.8	2001	10.655	5.96	63.7
1983	6.457	1.84	6.5	2002	11.564	5.72	64.7
1984	6.113	1.67	6.9	2003	11.774	7.20	67.1
1985	7.097	1.95	8.6	2004	11.041	6.50	69.7
1986	7.638	1.79	10.2	2005	11.636	6.70	73.7
1987	8.588	2.01	11.4	2006	13.117	6.30	73.4
1988	8.645	2.12	12.6				

Source: Department of Census and Statistics, Statistical Abstract, various issues
Gamage, D.V.S.de.S. and Gunaratne, S.P., (2009). Smallholder Poultry Production in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Table 131: Livestock Population with Annual Growth Rates for Selected Years (Unit 1000 Heads)

Species	1992	1999	2000	2001	2002	Annual Growth Rate 1992-2002 (%)
Cattle	1,567.6	1,616.7	1,557.0	1,564.8	1,565.0	-0.7%
Buffalo	895.5	727.7	693.6	661.2	661.2	-2.5%
Pig	90.8	73.6	70.8	68.3	67.0	-3.5%
Sheep	17.1	12.1	11.2	11.7	11.7	-5.8%
Goat	502.5	514.4	495.2	492.6	490.0	-1.5%
Duck	0	1.0	1.0	1.0	1.0	7.6%
Poultry	826.0	1,159.0	1,062.2	1,066.0	1,061.0	4.0%

Source: Sri Lankan Livestock Statistics- 2002
Seresinhe, T. and Pathirana, K.K., .2009. Livestock for Food Security in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Table 132: Trends in Livestock Populations

Year	Cattle	Buffalo	Goat	Sheep	Swine	Poultry
1954	1,277,310	706,644	563,912	N.A.	N.A.	N.A.
1959	1,486,009	780,784	487,365	N.A.	N.A.	N.A.
1970	1,596,000	736,000	558,000	27,000	108,000	6,856,000
1975	1,712,000	818,000	547,000	28,000	33,000	5,684,000
1980	1,644,000	843,000	493,000	28,000	71,000	6,341,000
1995	1,704,100	763,900	591,100	19,000	87,000	9,573,000
2000	1,147,600	304,500	495,200	11,200	70,800	10,622,400
2005	1,185,020	307,750	394,960	10,290	85,020	11,635,770
2010	1,169,670	422,450		381,375	83,785	14,018,320

Source: Livestock Data (2000 to 2007), Department of Animal Production and Health, Ministry of Livestock
Gunaratne, S.P, Chandrasiri, A.D.N. and Gajanayake, S., (2009). Smallholder Pig Production in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.
Economic and Social Statistics of Sri Lanka- 2011, Central Bank of Sri Lanka.

N.A. - Not Available

Table 133: Annual Milk Production (litres), 1960-2010

Year	Cow Milk	Buffalo Milk	Total
1960	80,401,788	28,517,280	108,919,068
1961	87,729,984	29,224,560	116,954,544
1962	78,210,180	21,638,868	99,849,048
1963	110,406,804	33,470,556	143,877,360
1964	138,032,244	29,814,732	167,846,976
1965	124,321,788	46,208,304	170,530,092
1966	120,345,144	39,727,596	160,072,740
1967	116,841,708	38,556,792	155,398,500
1968	131,198,796	39,109,896	170,308,692
1969	120,747,660	36,906,696	157,654,356
1970	125,255,724	34,463,328	159,719,052
1971	130,733,100	38,978,100	169,711,200
1972	122,199,300	41,812,200	164,011,500
1973	135,214,200	33,656,400	168,870,600
1974	136,284,300	40,764,600	177,048,900
1975	163,764,000	48,242,700	212,006,700
1976	194,911,200	52,864,200	247,775,400
1977	212,202,000	51,017,400	263,219,400
1978	209,824,200	54,822,600	264,646,800
1979	196,159,500	61,597,800	257,757,300
1980	216,164,700	64,377,900	280,542,600
1981	232,329,600	73,291,500	305,621,100
1982	230,895,900	69,552,000	300,447,900
1983	231,641,100	82,908,000	314,549,100
1984	235,565,100	88,172,100	323,737,200
1985	244,036,800	89,932,500	333,969,300
1986	126,703,800	49,453,200	176,157,000
1987	195,324,000	79,213,200	274,537,200
1988	162,154,800	63,496,800	225,651,600
1989	172,858,800	65,343,600	238,202,400
1990	190,119,600	58,819,200	248,938,800
1991	208,821,600	70,888,800	279,710,400
1992	232,665,600	85,293,600	317,959,200
1993	244,567,200	81,118,800	325,686,000
1994	250,498,800	81,800,400	332,299,200
1995	253,447,200	79,858,800	333,306,000
1996	249,459,600	81,936,000	331,395,600
1997	251,928,000	79,106,400	331,034,400
1998	256,336,800	85,044,000	341,380,800
1999	260,346,000	82,470,000	342,816,000
2000	263,056,800	82,521,600	345,578,400
2001	265,939,200	30,000,000	295,939,200
2002	265,832,400	30,000,000	295,832,400
2003	435,000,000	30,000,000	465,000,000
2004	444,000,000	31,000,000	471,000,000
2005	162,000,000	31,000,000	193,000,000
2006	165,000,000	32,000,000	187,000,000
2007	169,000,000	32,000,000	201,000,000
2008	172,000,000	36,000,000	208,000,000
2009	184,000,000	49,000,000	233,000,000
2010	192,000,000	56,000,000	248,000,000

Note: Figures based on returns furnished by *Grama Niladharies*
Since 1987 the figure for certain North and East Districts are either excluded or estimated

Source: Ministry of Agriculture and Livestock – Sri Lanka
Economic and Social Statistics of Sri Lanka-2011, Central Bank of Sri Lanka

Table 134: Annual Milk Production and Collection (000' Mt.) for Selected Years

Year	Cow Milk	Buffalo Milk	Total Milk Production	Milk Collection (formal)	% Collection
2000	151	30	181	93	51.4
2001	153	30	183	102	55.7
2002	153	30	183	92	50.3
2003	157	30	187	88	47.1
2004	160	31	191	99	51.8
2005	162	31	193	100	51.8
2006	165	32	197	109	55.3
2007	170	32	202	114	56.4

Source: Chandrasiri, A.D.N., (2009). Smallholder Dairy Sector in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Table 135: Annual Milk Production and the Amounts Collected by the Formal Milk Collection Systems (Mainly Processors) over the Period , 1998-2006

Year	Annual Milk Production (Litres)		Total Annual Production (Litres)	Total Collected by Processors (Litres)
	Cattle	Buffalo		
1998	147,381,600	29,707,440	177,089,0450	100,828,000
1999	149,686,800	30,196,800	179,883,600	108,863,000
2000	151,239,600	30,210,144	181,449,744	92,494,000
2001	152,764,800	30,262,800	183,027,600	102,245,000
2002	152,840,880	30,354,120	183,195,000	92,043,000
2003	156,546,000	30,258,000	186,804,000	88,003,000
2004	159,696,000	30,600,000	190,296,000	99,235,000
2005	161,816,400	30,925,200	192,741,600	100,185,000
2006	164,862,200	31,648,160	196,510,680	109,308,000

Source: Subasingha, D.H.A. and Perera, B.M.A.O. (2009). Lanka Water Buffalo: Its Importance to Dairy Industry in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Table 136: Animals Slaughtered and Production of Meat, 1960-2010

Year	No. of Animals Slaughtered				Meat Production (Mt'000)		
	Cattle	Buffaloes	Goats and Sheep	Pigs	Beef	Mutton	Pork
1960	179,276	466	123,935	12,908	12,243	1,239	465
1961	181,946	462	125,453	11,566	12,425	1,255	416
1962	214,880	697	123,600	16,101	14,691	1,236	580
1963	183,077	5,339	121,430	13,406	13,053	1,214	483
1964	187,065	3,501	129,185	14,505	13,116	1,292	522
1965	201,663	3,848	140,166	13,735	14,148	1,402	494
1966	213,673	5,642	139,282	17,162	15,167	1,393	618
1967	217,957	5,177	160,717	19,954	15,406	1,607	718
1968	229,239	3,454	146,325	18,612	15,979	1,463	670
1969	237,413	3,336	125,903	18,542	16,521	1,259	668
1970	234,720	3,343	130,503	18,499	16,339	1,305	666
1971	251,850	3,710	122,762	22,188	17,545	1,228	799
1972	242,324	1,994	113,773	20,524	16,703	1,138	739
1973	251,154	1,405	124,725	16,859	17,237	1,247	607
1974	247,756	366	137,502	15,481	16,889	1,375	557
1975	246,022	230	141,340	12,881	16,755	1,413	464
1976	222,493	485	133,360	13,326	15,184	1,334	480
1977	194,911	29	128,156	19,077	13,257	1,282	687
1978	189,269	29	126,876	18,426	12,874	1,269	663
1979	175,158	7	123,630	23,021	11,912	1,236	829
1980	178,048	-	136,877	31,508	12,107	1,369	1134
1981	182,874	-	137,137	24,389	12,435	1,371	878
1982	182,659	-	162,933	21,551	12,421	1,629	776
1983	191,824	-	134,084	17,303	13,044	1,341	623
1984	199,464	-	150,655	19,284	13,564	1,507	694
1985	197,471	-	143,648	17,232	13,428	1,436	620
1986	194,034	-	121,426	15,778	13,194	1,214	568
1987	184,110	-	110,992	19,975	12,519	1,110	719
1988	162,784	-	104,479	20,814	11,069	1,045	749
1989	151,065	-	96,094	19,371	10,272	961	697
1990	152,245	-	82,711	22,913	10,353	827	825
1991	170,988	-	79,277	30,604	11,627	793	1,102
1992	190,461	-	101,692	32,950	12,951	1,017	1,186
1993	179,413	-	109,158	22,343	12,200	1,092	804
1994	192,578	-	128,941	27,535	13,095	1,289	991
1995	209,199	-	114,805	32,191	14,226	1,148	1,159
1996	179,331	-	98,021	31,070	12,195	980	1,119
1997	186,507	-	95,157	29,691	12,682	952	1,069
1998	183,159	-	80,449	26,392	12,455	804	950
1999	173,621	-	82,622	22,722	11,806	826	818
2000	211,058	-	84,683	24,082	14,352	847	867
2001	201,443	-	79,116	26,865	13,698	791	967
2002	205,025	-	80,889	25,628	13,942	809	923
2003	216,066	-	70,449	29,752	N.A.	N.A.	N.A.
2004	206,979	-	72,605	29,240	N.A.	N.A.	N.A.
2005	215,181	-	74,601	30,249	N.A.	N.A.	N.A.
2006	187,689	-	68,171	30,540	N.A.	N.A.	N.A.
2007	186,084	-	64,283	31,861	N.A.	N.A.	N.A.
2008	163,716	-	58,288	21,481	N.A.	N.A.	N.A.
2009	168,002	-	62,635	22,265	N.A.	N.A.	N.A.
2010	203,520	-	68,351	19,539	N.A.	N.A.	N.A.

Note: After 1980, buffalo slaughter for meat was abolished by the law.

The number of animals slaughtered at licensed slaughter houses only.

Source: Ministry of Agriculture and Livestock – Sri Lanka

Economic and Social Statistics of Sri Lanka- 2011, Central Bank of Sri Lanka

N.A. - Not Available

Table 137: Eggs and Meat Production of Sri Lanka, 1970-2010

Year	Eggs (Million)	Year	Eggs (Million)
1970	431	1991	780
1971	477	1992	812
1972	582	1993	714
1973	466	1994	719
1974	406	1995	718
1975	372	1996	713
1976	365	1997	712
1977	379	1998	730
1978	360	1999	748
1979	432	2000	769
1980	544	2001	946
1981	466	2002	890
1982	521	2003	884
1983	567	2004	874
1984	561	2005	864
1985	666	2006	901
1986	667	2007	915
1987	814	2008	1,039
1988	778	2009	1,142
1989	834	2010	1,139
1990	784		

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Statistics and Data Processing Unit, HARTI

Table 138: Operating Fishing Crafts by Type, 1997-2010

Year	In Board Engine Multi-day	In Board Engine One- day	In Board Engine Fibre Glass	Traditional Mechanized	Traditional Non- Mechanized	Total Number of Craft
1997	1,765	1,564	8,300	1,761	14,375	27,765
1998	1,353	2,494	6,910	1,845	15,659	28,261
1999	1,419	1,475	8,623	1,274	14,944	27,735
2000	1,430	1,470	8,690	1,405	7,268	28,104
2001	1,572	993	8,744	640	15,200	27,149
2002	1,614	1,112	9,033	776	15,600	28,135
2003	1,530	1,486	11,020	618	15,040	29,694
2004	1,581	1,493	11,559	674	15,260	30,567
2005	1,328	1,114	11,010	1,660	14,150	29,262
2006	2,394	907	13,860	1,842	16,347	35,350
2007	2,460	1,060	15,200	1,680	16,640	37,040
2008	2,698	1,687	12,874	2,785	18,178	38,222
2009	2,934	958	17,193	2,126	18,240	41,454
2010	3,346	977	18,770	2,680	19,190	44,963

Source: Economic and Social Statistics of Sri Lanka, Various Issues, Central Bank of Sri Lanka

Table 139: Fish Production (Mt.) by Fishing Sector, 1972-2010

Year	Marine Fish		Inland Fisheries *	Total
	Off shore and Deep Sea	Coastal		
1972	2,557	90,717	8,438	101,712
1973	2,385	91,312	7,005	100,702
1974	2,230	100,805	7,660	110,695
1975	970	114,863	13,307	129,140
1976	548	122,783	12,540	135,871
1977	312	125,386	13,068	138,766
1978	2,949	136,900	16,738	156,587
1979	2,099	148,851	17,425	168,375
1980	2,148	165,264	20,266	187,678
1981	2,178	175,080	29,590	206,848
1982	1,078	182,530	33,320	216,928
1983	680	184,050	36,070	220,800
1984	820	136,640	31,890	169,350
1985	2,400	140,270	32,740	175,410
1986	3,400	144,270	35,390	183,060
1987	4,260	149,270	36,470	190,000
1988	4,430	155,100	38,010	197,540
1989	8,160	157,410	39,720	205,290
1990	11,670	134,130	38,190	183,990
1991	15,080	159,150	23,830	198,060
1992	22,000	163,170	21,000	206,170
1993	33,000	169,900	18,000	220,900
1994	37,500	174,500	12,000	224,000
1995	60,000	157,500	18,250	235,750
1996	57,000	149,550	22,250	228,800
1997	62,000	152,750	27,250	242,000
1998	73,250	166,700	29,900	269,850
1999	76,500	171,950	31,450	279,900
2000	84,400	175,280	36,700	296,380
2001	87,360	167,530	29,870	284,760
2002	98,510	176,250	28,130	302,890
2003	90,830	163,850	30,280	284,960
2004	98,720	154,470	33,180	286,370
2005	66,710	63,690	32,830	163,230
2006	94,620	121,360	35,290	251,980
2007	102,560	150,110	38,380	291,050
2008	109,310	165,320	44,490	319,120
2009		293,170	46,560	339,730
2010		330,240	51,390	381,630

* Inland water fish, Lagoon fish and Aquaculture fish

Source: Economic and Social Statistics of Sri Lanka- 2008, 2011, Central Bank of Sri Lanka

CHAPTER EIGHT

Policy, Economic and Social Domains of Agriculture Transformation

Table 140: Current Expenditure for Agriculture, 1971-2010

Year	Total Current Expenditure (Rs. Million)	Expenditure for Agriculture and Irrigation			Expenditure for Fisheries		
		Amount (Rs. Million)	Increase or Decrease (Rs. Million)	% of Total Expen.	Amount (Rs. Million)	Increase or Decrease (Rs. Million)	% of Total Expen.
1971	4,069.8	75.0		1.84	4.7		0.12
1972	3,080.7	88.2	+13.2	2.86	4.9	+0.2	0.16
1973	2,193.8	84.5	-3.7	3.85	4.3	-0.6	0.20
1974	4,564.3	82.6	-1.9	1.81	4.8	+0.5	0.11
1975	5,265.0	78.6	-4	1.49	6.1	+1.3	0.12
1976	5,602.1	99.2	+20.6	1.77	8.8	+2.7	0.16
1977	8,812.8	113.0	+13.8	1.28	8.2	-0.6	0.09
1978	9,470.8	135.0	+22	1.43	9.8	+1.6	0.10
1979	11,524.6	209.6	+74.6	1.82	11.3	+1.5	0.10
1980	13,462.8	255.3	+45.7	1.90	13.1	+1.8	0.10
1981	16,154.7	281.6	+26.3	1.74	13.6	+0.5	0.08
1982	20,046.5	320.5	+38.9	1.59	37.2	+23.6	0.18
1983	23,732.2	431.2	+110.7	1.81	21.4	-15.8	0.09
1984	24,630.0	459.5	+28.3	1.86	19.9	-1.5	0.08
1985	32,645.0	1,313.0	+853.5	4.02	31.0	+11.1	0.09
1986	33,966.0	1,336.0	+23	3.93	38.0	+7	0.11
1987	39,560.0	1,086.0	- 250	2.75	40.0	+2	0.10
1988	46,132	1,399.0	+313	3.03	40.0	0	0.09
1989	56,884	976.0	-423	1.72	47.0	+7	0.08
1990	71,770	982.0	+ 6	1.37	46.0	-1	0.06
1991	83,756	912.0	-70	1.09	98.0	+52	0.12
1992	89,639	1,398.0	+486	1.56	68.0	- 30	0.08
1993	102,288	1,483.0	+85	1.45	107.0	+39	0.10
1994	127,084	2,506.0	+1,023	1.97	99.0	- 8	0.08
1995	154,159	3,826.0	+1,320	2.48	105.0	+6	0.07
1996	175,149	3,894.0	+68	2.22	148.0	+43	0.08
1997	184,749	3,723.0	-171	2.02	156.0	+8	0.08
1998	199,648	5,444.0	+1,721	2.73	175.0	+19	0.09
1999	207,271	5,012.0	-432	2.42	180.0	+5	0.09
2000	254,279	5,706.0	+694	2.24	338.0	+158	0.13
2001	303,362	7,967.0	+2,261	2.63	308.0	-30	0.10
2002	330,847	7,635.0	-332	2.31	435.0	+127	0.13
2003	334,693	7,002.0	-633	2.09	573.0	+138	0.17
2004	389,678	8,876.0	+1,874	2.28	N.A.	N.A.	N.A.
2005	443,350	13,500.0	+4,624	3.04	N.A.	N.A.	N.A.
2006	540,960	22,163.0	+8,663	4.09	N.A.	N.A.	N.A.
2007	622,758	22,849.0	+686	3.66	N.A.	N.A.	N.A.
2008	743,710	41,579.0	+18,730	5.59	N.A.	N.A.	N.A.
2009	879,575	43,967.0	+2,388	4.99	N.A.	N.A.	N.A.
2010	937,094	44,081.0	+114	4.70	N.A.	N.A.	N.A.

Source: Economic and Social Statistics of Sri Lanka, Various Issues, Central Bank of Sri Lanka

Table 141: Capital Expenditure and Lending (Rs. Million) for Agriculture and Irrigation, 1971-2010

Year	Total Capital Expenditure and Lending (Rs. Million)	Expenditure for Agriculture and Irrigation						Expenditure for Fisheries		
		Amount	Increase or Decrease	% of Total Expen.	Of which: Mahaweli Project Amount	Increase or Decrease	% of Total Exp.	Amount	Increase or Decrease	of Total Expen.
1971	3,899	131	N.A.	3.35	N.A.	N.A.	N.A.	3	-	0.08
1972	5,397	166	+35	3.07	N.A.	N.A.	N.A.	5	02	0.09
1973	5,026	160	- 06	3.18	N.A.	N.A.	N.A.	3	- 02	0.06
1974	5,822	253	+93	4.35	N.A.	N.A.	N.A.	13	10	0.22
1975	7,187	307	+54	4.27	N.A.	N.A.	N.A.	31	18	0.43
1976	8,653	410	+103	4.74	N.A.	N.A.	N.A.	36	5	0.42
1977	8,813	336	-74	3.81	N.A.	N.A.	N.A.	21	-15	0.24
1978	17,688	360	+24	2.04	N.A.	N.A.	N.A.	33	12	0.19
1979	20,339	567	+207	2.79	N.A.	N.A.	N.A.	71	38	0.35
1980	28,532	910	+343	3.19	N.A.	N.A.	N.A.	172	101	0.60
1981	29,485	857	-53	2.91	N.A.	N.A.	N.A.	119	-53	0.40
1982	16,146	8,916	+8,059	55.22	7,333	-	45.42	147	28	0.91
1983	16,664	8,252	+93	49.52	6,395	-938	38.38	162	15	0.97
1984	20,817	9,400	+54	45.16	7,057	+662	33.90	166	4	0.80
1985	22,528	9,370	+103	41.59	7,233	+176	32.11	108	-58	0.48
1986	25,905	8,217	-74	31.72	5,952	-1281	22.98	223	115	0.86
1987	25,975	8,484	+ 267	32.66	5,101	- 851	19.64	294	+ 71	1.13
1988	27,971	6,412	- 2,072	22.92	3,430	-1671	12.26	140	- 154	0.50
1989	26,651	5,234	- 1,178	19.64	2,475	- 955	9.29	283	+ 143	1.06
1990	26,387	5,215	- 19	19.76	1,810	- 665	6.86	133	- 150	0.50
1991	32,658	6,071	+ 856	18.59	2,410	+ 600	7.38	181	+ 48	0.55
1992	29,622	5,890	- 181	19.88	2,670	+260	9.01	175	- 6	0.59
1993	40,841	5,682	- 208	13.91	2,810	+140	6.88	124	- 51	0.30
1994	40,455	5,179	- 503	12.80	2,598	- 212	6.42	368	+ 244	0.91
1995	52,810	6,060	+ 881	11.48	3,090	+492	5.85	361	- 7	0.68
1996	45,973	4,718	-1,342	10.26	1,940	-1150	4.22	311	- 50	0.68
1997	51,260	3,780	- 938	7.37	1,626	- 314	3.17	480	+ 169	0.94
1998	68,277	6,018	+ 2,238	8.81	1,049	- 577	1.54	562	+ 82	0.82
1999	71,142	6,211	+ 193	8.73	1,357	+308	1.91	694	+ 132	0.98
2000	80,958	6,908	+ 697	8.53	1,716	+359	2.12	899	+ 205	1.11
2001	82,491	6,034	- 874	7.31	2,237	+521	2.71	705	- 194	0.85
2002	72,177	6,936	+ 902	9.61	2,663	+426	3.69	743	+ 38	1.03
2003	87,409	8,420	+ 1,484	9.63	3,005	+ 342	3.44	653	- 90	0.75
2004	97,631	8,207	- 213	8.41	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2005	48,582	10,041	+1,834	20.67	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2006	177,443	12,434	+2,393	7.01	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2007	229,273	14,726	+2,292	6.42	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2008	263860	17,681	+2,955	6.70	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2009	330448	22,105	+4,423	6.69	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
2010	356519	24,865	+24,865	6.97	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

Source: Economic and Social Statistics of Sri Lanka, Various Issues, Central Bank of Sri Lanka

N.A. - Not Available

Table 142: Total Budgetary Expenditure (Rs. Million) (Current and Capital) for Agriculture, 1971-2010

Year	Total Expenditure (Current and Capital) (Rs. Million)	Total Expenditure for Agriculture and Irrigation (including Mahaweli Project)			Expenditure for Fisheries		
		Amount	Increase or Decrease	% of Total Expenditure	Amount	Increase or Decrease	% of Total Expenditure
1971	3,899	206	-	5.28	4.7	-	0.19
1972	5,397	314	+108	5.81	9.9	+5.2	0.18
1973	7,220	245	- 69	3.39	7.3	+2.6	0.10
1974	10,386	336	+91	3.24	17.8	+10.5	0.17
1975	12,452	386	+50	3.10	37.1	+19.3	0.30
1976	14,255	509	+123	3.57	44.8	+7.7	0.31
1977	17,626	449	-60	2.55	29.2	-15.6	0.17
1978	27,159	495	+46	1.82	42.8	+13.6	0.16
1979	31,864	777	+282	2.44	82.3	+39.5	0.26
1980	41,995	1,165	+388	2.77	1,85.1	+102.8	0.44
1981	45,640	1,139	-26	2.50	1,32.6	-52.5	0.29
1982	36,192	9,237	+8,098	25.52	1,84.2	+51.6	0.50
1983	40,396	8,683	-554	21.49	1,83.4	-0.8	0.45
1984	45,447	9,860	+1,177	21.69	1,85.9	+2.5	0.40
1985	55,173	10,683	+823	19.36	139	-46.9	0.25
1986	59,871	9,553	-1,130	15.96	261	+10.5	0.44
1987	65,535	9,570	+17	14.60	334	+73	0.51
1988	74,103	7,811	-1,759	10.54	180	-154	0.24
1989	83,535	6,210	-1,601	7.43	330	+150	0.40
1990	98,157	6,197	-13	6.31	179	-151	0.18
1991	116,414	6,983	+786	6.00	279	+ 100	0.24
1992	119,261	7,288	+305	6.11	243	- 36	0.20
1993	143,129	7,165	-123	5.01	231	- 12	0.16
1994	167,539	7,685	+520	4.59	467	+ 236	0.28
1995	206,969	9,886	+2,201	4.78	466	- 1	0.23
1996	221,122	8,612	-1,274	3.89	459	-7	0.21
1997	236,009	7,503	-1,109	3.18	636	+177	0.27
1998	267,925	11,462	+3,959	4.28	737	+101	0.28
1999	278,413	11,223	-239	4.03	874	+137	0.31
2000	335,237	12,614	+1,391	3.76	1,237	+363	0.37
2001	385,853	14,001	+1,387	3.63	1,013	-224	0.26
2002	403,024	14,571	+570	3.62	1,178	+165	0.29
2003	422,102	15,422	+851	3.65	1,226	+48	0.29
2004	487,309	17,083	+1,661	3.51	N.A.	N.A.	N.A.
2005	540,981	23,541	+6458	4.35	N.A.	N.A.	N.A.
2006	718,503	34,607	+11,066	4.82	N.A.	N.A.	N.A.
2007	852,031	37,575	+2,978	4.41	N.A.	N.A.	N.A.
2008	1,007,570	59,260	+24,653	5.88	N.A.	N.A.	N.A.
2009	1,210,023	66,072	+6,812	5.46	N.A.	N.A.	N.A.
2010	1,293,613	68,946	+2,874	5.33	N.A.	N.A.	N.A.

Source: Economic and Social Statistics of Sri Lanka, Various Issues, Central Bank of Sri Lanka

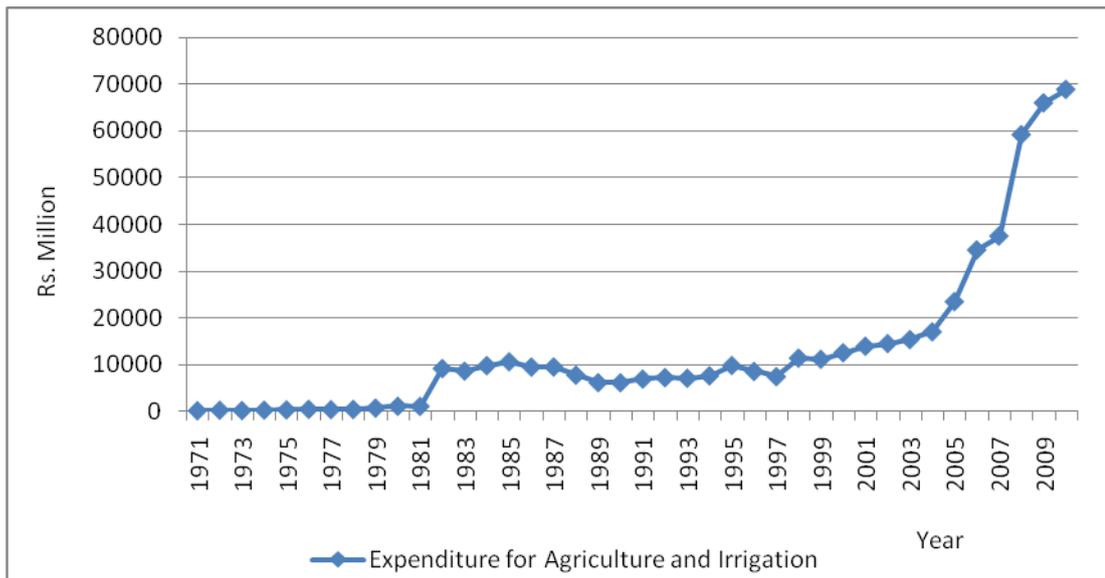
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Table 143: Total Expenditure for Agriculture as a Percentage of GDP, 1971-2010

Year	GDP at Current Prices (Rs. Million)	Total Expenditure for Agriculture and Irrigation (including Mahaweli Project)		Expenditure for Fisheries	
		Amount	% of GDP	Amount	% of GDP
1971	13,674	206	1.50	4.7	0.03
1972	14,720	314	2.13	9.9	0.06
1973	17,920	245	1.37	7.3	0.04
1974	23,302	336	1.44	17.8	0.08
1975	25,691	386	1.50	37.1	0.14
1976	28,032	509	1.82	44.8	0.16
1977	34,684	449	1.29	29.2	0.08
1978	40,479	495	1.22	42.8	0.11
1979	49,782	777	1.56	82.3	0.17
1980	62,246	1,165	1.87	185.1	0.30
1981	79,337	1,139	1.44	132.6	0.17
1982	94,679	9,237	9.76	184.2	0.19
1983	113,878	8,683	7.62	183.4	0.16
1984	140,039	9,860	7.04	185.9	0.13
1985	148,321	10,683	7.20	139	0.09
1986	163,713	9,553	5.84	261	0.16
1987	177,731	9,570	5.38	334	0.19
1988	203,516	7,811	3.84	180	0.09
1989	228,138	6,210	2.72	330	0.14
1990	290,615	6,197	2.13	179	0.06
1991	337,399	6,983	2.07	279	0.08
1992	386,999	7,288	1.88	243	0.06
1993	453,092	7,165	1.58	231	0.05
1994	523,300	7,685	1.47	467	0.09
1995	598,327	9,886	1.65	466	0.08
1996	695,934	8,612	1.24	459	0.07
1997	803,698	7,503	0.93	636	0.08
1998	912,839	11,462	1.26	737	0.08
1999	994,730	11,223	1.13	874	0.09
2000	1,125,259	12,614	1.12	1,237	0.11
2001	1,245,599	14,001	1.12	1,013	0.08
2002	1,403,286	14,571	1.04	1,178	0.08
2003	1,562,737	15,422	0.99	1,226	0.08
2004	1,797,941	17,083	1.00	N.A.	N.A.
2005	2,439,328	23,541	0.97	N.A.	N.A.
2006	2,924,172	34,607	1.18	N.A.	N.A.
2007	3,577,438	37,575	1.05	N.A.	N.A.
2008	2,452,782	59,260	1.34	N.A.	N.A.
2009	2,938,680	66,072	1.37	N.A.	N.A.
2010	3,578,688	68,946	1.23	N.A.	N.A.

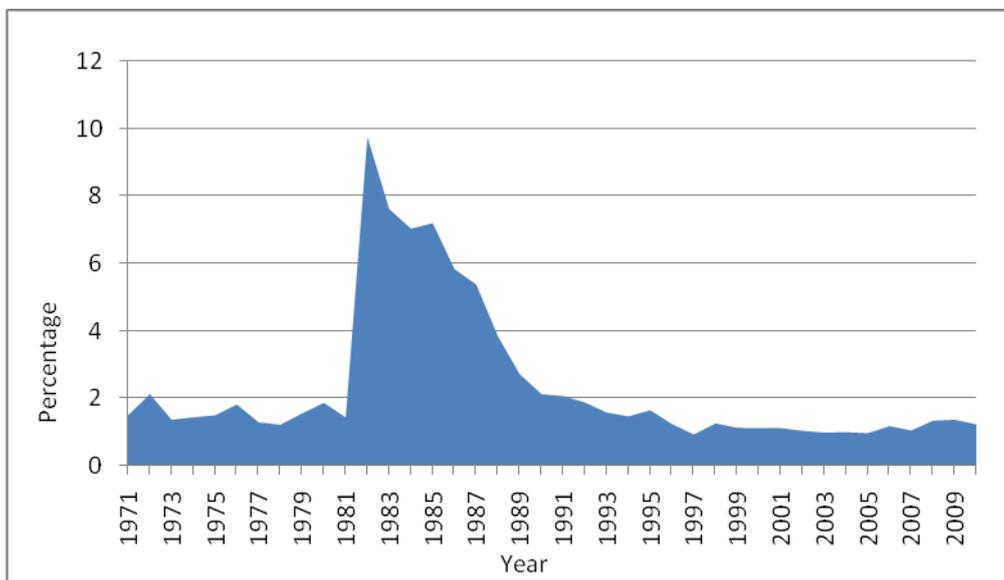
Source: Calculate based on Annual Report- Central Bank of Sri Lanka, Various Issues and Economic and Social Statistics of Sri Lanka, Various Issues, Central Bank of Sri Lanka
N.A. - Not Available

Figure 55: Budgetary Expenditure for Agriculture and Irrigation, 1971-2009



Source: Economic and Social Statistics of Sri Lanka, Various Issues, Central Bank of Sri Lanka

Figure 56: Budgetary Expenditure for Agriculture and Irrigation as a Percentage of GDP, 1971-2009



Source: Economic and Social Statistics of Sri Lanka, Various issues, Central Bank of Sri Lanka

Table 144: New Land Cultivated under Mahaweli Programme

Year	New Land Cultivated (Hectares)											
	System H		System C		System B		System G		System L		Total	
	Paddy	Other Crops	Paddy	Other Crops	Paddy	Other Crops	Paddy	Other Crops	Paddy	Other Crops	Paddy	Other Crops
1985	32,666	8,962	10,913	1,489	4,533	248	4,139	1,225	-	-	52,251	11,924
1986	32,432	13,091	15,727	1,499	7,149	256	4,576	1,470	-	-	59,884	16,316
1987	26,612	7,962	18,738	715	10,746	1,108	6,090	2,063	-	-	62,186	11,848
1988	27,511	10,166	22,773	1,808	14,203	859	5,570	2,286	-	-	70,057	15,119
1989	18,815	4,398	23,974	1,899	17,357	963	5,944	2,260	-	-	66,092	9,520
1990	35,487	5,749	28,359	3,733	19,928	1,185	7,248	2,033	-	-	66,092	9,520
1991	38,568	12,623	50,640	4,074	20,749	1,149	7,630	2,101	483	515	91,505	13,215
1992	30,556	5,687	31,858	2,675	21,799	1,208	5,076	278	824	692	90,113	10,540
1993	31,408	13,642	38,378	3,119	24,469	1,716	7,365	1,781	726	451	102,346	20,709
1994	41,155	15,322	39,683	4,333	34,328	3,754	-	-	844	439	116,010	23,848
1995	42,558	9,308	40,297	5,190	25,329	3,125	9,029	1,485	816	291	118,029	19,399
1996	32,806	7,360	39,984	4,682	23,455	2,533	5,800	1,858	396	227	102,441	16,660
1997	28,423	6,972	40,189	4,660	26,129	1,918	7,448	1,752	519	369	102,700	15,671
1998	32,570	4,851	40,489	3,186	29,097	583	8,007	683	0	104	110,157	9,417
1999	42,586	7,582	40,993	1,895	30,009	800	9,684	984	176	181	123,448	11,442
2000	40,395	8,246	41,127	3,556	31,282	631	9,369	1,867	641	29	122,742	14,401
2001	41,046	11,467	41,833	2,027	29,285	734	9,353	755	585	150	122,102	15,133
2002	41,502	5,904	41,287	3,046	29,735	511	7,920	803	297	230	120,741	10,494
2003	42,843	11,615	41,165	2,306	33,226	998	9,518	935	861	275	127,613	16,129
2004	34,991	10,931	41,732	2,680	34,095	639	8,131	961	936	241	119,885	15,452
2005	48,566	16,463	41,309	2,010	33,980	1,657	9,497	1,277	1,038	180	134,390	21,587
2006	48,767	20,130	42,294	2,246	31,512	1,047	9,580	1,442	1,160	98	152,701	40,217
2007	44,156	26,299	43,187	2,435	31,269	3,182	9,235	1,888	951	314	147,709	51,771
2008	51,263	16,266	43,184	3,501	33,875	2,045	9,727	1,496	777	176	158,973	42,396
2009	36,729	13,235	31,949	3,864	30,370	2,654	7,641	855	1,121	315	129,393	39,734
2010	50,508	17,330	44,702	1,915	38,512	2,710	10,132	1,390	1,567	610	172,492	40,212

Source: Economic and Social Statistics of Sri Lanka – 2005, 2008, 2011, Central Bank of Sri Lanka

Table 145: Settlements under Mahaweli Programme

Year	Settlements (Families)					Total
	System H	System C	System B	System G	System L	
1976	2,383	-	-	-	-	2,383
1977	3,141	-	-	-	-	3,141
1978	2,754	-	-	-	-	2,754
1979	5,290	-	-	-	-	5,290
1980	7,407	-	-	-	-	7,407
1981	2,389	2,777	-	-	-	5,166
1982	1,449	2,683	1,918	-	-	6,050
1983	1,077	1,988	1,938	1,319	-	6,322
1984	1,956	1,992	1,381	446	-	5,775
1985	44	823	3,423	1,045	-	5,335
1986	780	2,151	1,260	583	-	4,774
1987	182	1,407	857	274	-	2,720
1988	14	1,081	656	1,081	3,270	5,106
1989	09	1,008	324	1,305	94	2,740
1990	1,680	3,427	3,492	366	-	8,965
1991	1,151	3,240	1,468	126	-	5,985
1992	754	2,005	1,716	06	-	4,481
1993	283	1,500	3,190	-	-	4,973
1994	30	332	841	-	-	1,203
1995	-	68	132	-	-	200
1996	-	-	752	-	-	752
1997	-	392	157	-	-	549
1998	-	-	-	-	-	-
1999	-	392	157	-	-	549
2000	88	1,348	2,203	113	195	3,947
2001	84	828	354	357	120	1,743
2002	-	-	-	-	-	-
2003	-	-	-	-	-	-
2004	-	-	-	-	-	-
2005	-	361	1,082	-	37	1,480
2006	-	10	-	-	-	10
2007	-	25	2,217	-	-	2,242
2008	54	253	1,049	-	-	1,356
2009	-	107	396	-	569	503
2010	-	1,612	1,360	101	485	3,558
Total	32,999	31,810	32,323	7,122	4,733	107,459

Total number of families in Udawalawa project from 2005 to 2010 : 8,337

Total number of families in Victoria in 2010:26

Source: Economic and Social Statistics of Sri Lanka, Various Issues, Central Bank of Sri Lanka
Annual Report-2000, 2007, Central Bank of Sri Lanka

Table 146: Agriculture Sub Sectoral Growth Rates

Activities	1976-1980	1981-1985	1986-1990	1991-1995	2009	2010
Plantation crops	-3.4	6.1	-1.5	2.4	5.2	5.4
Paddy	13.6	4.7	0.5	2.5	-5.1	17.5
Livestock	1.4	2.0	5.5	0.5	6.2	2.9
Fisheries	7.1	-0.1	1.5	5.4	6.9	12.2
Other Agriculture	3.0	2.9	2.3	2.8	5.1	7.6
Agriculture	4.3	3.7	0.7	2.7	3.2	7.0

Source: Statistical Profile of Sri Lanka,(1998). Department of Census and Statistics
Annual Report-2010, Central Bank of Sri Lanka

Table 147: Agriculture GDP, (Rs'000) 1980-2010

Year	Livestock Sector		Agriculture (Including Livestock)		Total G.D.P.	
	(1)	(2)	(1)	(2)	(1)	(2)
1980	1,024.7	439.8	17,900.0	9,537.3	68,337.7	35,307.5
1981	1,060.2	395.2	22,787.9	10,057.9	84,526.6	37,266.3
1982	1,267.9	410.4	25,257.9	10,371.7	97,527.5	39,198.8
1983	1,274.9	428.1	30,467.6	10,994.1	119,201.5	41,061.8
1984	1,424.4	474.5	37,292.9	10,200.0	147,343.5	43,135.7
1985	1,549.3	479.4	38,505.8	11,146.3	157,763.3	45,300.0
1986	1,723.1	483.9	39,529.4	11,223.8	172,440.3	47,237.5
1987	1,946.5	581.5	43,173.6	13,259.2	188,821.6	48,002.5
1988	2,399.8	586.5	51,074.4	10,836.9	218,774.0	49,336.2
1989	2,784.2	606.0	56,774.0	10,527.9	248,230.0	50,310.3
1990	3,195.0	3,195.0	72,788.0	72,788.0	317,904.0	317,904.0
1991	4,431.0	3,344.0	81,926.0	74,072.0	369,720.0	333,230.0
1992	-5,395.0	3,134.0	88,840.0	72,722.0	421,755.0	347,822.0
1993	5,572.0	3,191.0	103,703.0	77,670.0	499,708.0	371,876.0
1994	5,905.0	3,240.0	115,996.0	80,204.0	579,159.0	392,884.0
1995	6,520.0	3,260.0	123,990.0	82,947.0	662,384.0	414,608.0
1996	7,476.0	3,222.0	141,589.0	79,564.0	771,414.0	430,186.0
1997	8,302.0	3,237.0	158,594.0	82,007.0	891,067.0	457,915.0
1998	10,825.0	3,425.0	175,478.0	84,010.0	1,018,330.0	479,663.0
1999	12,843.0	3,699.0	191,577.0	88,966.0	1,108,845.0	500,265.0
2000	13,332.0	3,810.0	200,964.0	90,923.0	1,253,622.0	530,039.0
2001	14,886.0	3,890.0	214,482.0	87,650.0	1,396,314.0	522,618.4
2002	15,245.0	3,929.0	237,282.0	89,666.0	1,570,260.0	543,523.2
2003	17,093.0	16,189.0	210,963.0	213,359.0	1,822,468.0	1,733,222.2
2004	21,318.0	16,270.0	228,760.0	213,246.0	2,090,841.0	1,827,597.0
2005	25,428.0	16,644.0	270,679.0	228,006.0	2,452,782.0	1,941,671.0
2006	39,006.0	17,992.0	297,887.0	235,872.0	2,938,680.0	2,090,564.0
2007	44,630.0	19,415.0	363,404.0	241,010.0	3,578,688.0	2,232,656.0
2008	100,013.0	20,495.0	522,180.0	258,881.0	4,410,682.0	2,365,501.0
2009	102,776.0	21,761.0	534,140.0	266,208.0	4,835,293.0	2,449,214.0
2010	113,884.0	22,397.0	623,116.0	283,236.0	5,602,321.0	2,645,432.0

Note:

(1) at current prices

(2) at constant 1975 prices (1975-1989 base year – 1975, 1990-2002 base year – 1990 and 2003-2010 base year -2002)

Source: Ministry of Agriculture and Livestock – Sri Lanka

Central Bank Annual Report-2010 and 2007, Central Bank of Sri Lanka

Table 148: Agriculture and Livestock Contribution to GDP

Year	Value of livestock Products	Value of agriculture GDP	Livestock contribution to agriculture GDP
	SLR (Million)	SLR (Million)	%
1998	10,825	175,478	6.2
1999	12,843	191,577	6.7
2000	13,332	200,964	6.6
2001	15,797	215,929	7.3
2002	15,981	233,615	6.8
2003	17,093	241,122	7.1
2004	21,318	262,271	8.1
2005	25,428	289,906	8.8
2006	29,829	333,114	9.0
2007	40,650	417,353	9.7

Source: Department of Census and Statistics

Gunaratne, S.P., Chandrasiri, A.D.N. and Gajanayake, S., (2009). Smallholder Pig Production in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Table 149: Livestock's Contribution to GDP

Year	Livestock Contribution to Agriculture GDP		Livestock Contribution to Total GDP	
	%	Agriculture GDP SLR (millions)	%	Total GDP SLR (millions)
1975	5.4	411	1.5	7,580
1980	5.7	1,024	1.5	19,900
1985	4.0	1,549	0.98	38,506
1990	4.36	3,195	1.0	72,788
1995	5.25	6,520	0.94	123,990
1998	6.44	11,311	1.12	175,562
1999	4.0	-	0.71	-
2000	4.1	13,332	0.71	200,964
2001	4.4	-	0.72	-
2002	4.4	15,245	-	237,282

Source: Abeyratne, A. S., 2007

Gunaratne, S.P., Chandrasiri, A.D.N. and Gajanayake, S., (2009). Smallholder Pig Production in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Table 150: Contribution of Different Sectors to the GDP at Current Price, 1950-2010

Year	Agriculture	Manufacturing	Services
1950	46.3	19.6	36.9
1951	45.8	20.2	36.8
1952	45.5	17.0	39.5
1953	45.2	18.3	38.7
1954	46.5	17.9	38.1
1955	45.9	16.5	39.6
1956	43.0	17.6	40.9
1957	39.6	18.0	42.9
1958	39.2	16.9	44.0
1959	38.8	17.3	43.8
1960	37.8	16.8	45.4
1961	38.7	16.8	44.5
1962	36.5	17.3	46.2
1963	38.0	16.9	45.2
1964	36.4	16.6	47.0
1965	33.6	17.4	49.0
1966	33.8	16.7	49.6
1967	35.3	16.6	48.1
1968	37.2	17.9	44.9
1969	34.4	19.4	46.2
1970	28.3	23.8	47.9
1971	27.1	24.7	48.2
1972	26.3	24.2	49.5
1973	27.3	25.4	47.3
1974	33.2	25.1	41.8
1975	30.4	26.4	43.2
1976	29.0	27.1	43.9
1977	30.7	28.7	40.6
1978	30.5	28.2	42.3
1979	26.9	28.2	44.8
1980	27.6	29.6	42.8
1981	27.7	28.0	44.3
1982	26.4	26.3	47.3
1983	28.3	26.3	45.4
1984	28.7	26.3	45.0
1985	27.7	26.2	46.1
1986	27.1	26.6	46.3
1987	27.0	27.4	45.6
1988	26.3	26.7	47.0
1989	25.6	26.8	47.6
1990	26.3	26.0	47.7
1991	26.8	25.6	47.7
1992	25.9	25.6	48.5
1993	24.6	25.6	49.8
1994	23.8	26.2	50.1
1995	23.0	26.5	50.5
1996	22.4	26.4	51.1
1997	21.9	26.9	51.2
1998	21.1	27.5	51.4
1999	20.7	27.3	52.0
2000	19.9	27.3	52.8
2001	20.1	26.8	53.1
2002	14.3	28.0	57.7
2003	13.7	27.7	58.6
2004	13.0	27.7	59.3
2005	12.5	28.1	59.4
2006	12.3	28.2	59.5
2007	11.9	28.5	59.6
2008	12.1	28.4	59.5
2009	12.0	28.6	59.3
2010	11.9	28.7	59.3

Source: Central Bank of Sri Lanka, Annual Report, Various Issues
Economic and Social Statistics of Sri Lanka-2008, Central Bank of Sri Lanka

Table 151: Sub Sectoral Shares in Agriculture Sector to GDP

Activities	1976-1980	1981-1985	1986-1990	1991-1995
Plantation crops	20.2	17.6	17.6	25.3
Paddy	29.7	33.2	31.7	19.3
Livestock	4.9	4.1	5.3	4.2
Fisheries	5.2	5.6	5.1	9.1
Other Agriculture	40.0	39.5	40.3	42.2
Agriculture	100.0	100.0	100.0	100.0

Source: Statistical Profile of Sri Lanka, Department of Census and Statistics, 1998

Table 152: GDP and GNP at Current Market Prices for Selected Years

Item	1990	2000	2005	2010
GDP at current market prices (Rs billion)	322	1,258	2,453	4,825
GNP at current market prices (Rs billion)	319	1,233	2,423	4,769
Per capita GDP at market prices (Rs)	18,934	68,102	124,709	235,945
Per capita GNP at market prices (Rs)	18,791	66,790	123,181	233,216
Per capita GDP at market prices (\$)	473	899	1,241	2,053
Per capita GNP at market prices (\$)	469	881	1,226	2,029

Source: Central Bank of Sri Lanka (a), Annual Report 2008.

Gamage, D., (2009). Introduction in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Economic and Social Statistics of Sri Lanka-2011, Central Bank of Sri Lanka.

Table 153: Transformation of the Economic Structure in the Country

Item	1981	1991	2000	2001	2005	2008
Agriculture	27.7	26.8	19.5	19.5	17.2	12.1
Industry	28.0	25.6	27.5	26.7	27.0	28.4
-of which Manufacturing	16.2	14.8	16.9	15.8	-	17.5
Services	44.3	47.7	53.0	53.8	55.7	59.6

Source: Country Assistance Strategy of the World Bank Group 2003-2006, Sri Lanka, Central Bank Annual Report 2008, Economic and Social Statistics in Sri Lanka, 2007, Central Bank of Sri Lanka

Table 154: Total Employed Population by Sector and Percentage Distribution by Major Industry Group

Year	Total Number of Employees	Agriculture	Industry	Service
1990	5,047,000	47	18	35
1991	5,016,000	-	-	-
1992	4,924,130	42.2	20.1	37.7
1993	5,201,904	41.5	19.7	38.8
1994	5,281,279	39.5	19.8	40.7
1995	5,357,120	36.7	22.2	41.1
1996	5,536,216	37.4	22.0	40.6
1997	5,607,868	36.2	24.2	39.6
1998	6,049,388	39.3	21.9	38.8
1999	6,082,449	36.3	21.9	41.8
2000	6,310,247	36.0	23.6	40.3
2001	6,235,588	32.6	23.9	43.5
2002	6,519,415	34.5	22.4	43.1
2003	6,609,466	33.6	23.3	43.1
2004	6,704,006	33.0	24.8	42.1
2005	6,788,119	30.3	26.3	43.3
2006	7,105,322	32.2	26.6	41.2
2007	7,042,000	31.3	26.6	42.1
2008	7,148,318	31.8	26.4	41.8
2009	7,603,000	32.6	25.1	42.3
2010	7,707,000	32.7	24.2	43.1

Note: (a) Data Exclude both Northern and Eastern Provinces
(b) 1st quarter 2008

Source: Economic and Social Statistics of Sri Lanka, Various Issues, Central Bank of Sri Lanka

Table 155: GNP Per Capita Income at Constant Prices (USD)

Year	Per Capita Income (\$)
1995	755
2000	899
2005	1,160
2010 (a)	2,368

(a) Provisional

Source: Gamage, D., (2009). Introduction in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.
Economic and Social Statistics of Sri Lanka-2011, Central Bank of Sri Lanka.

Table 156: Average Monthly Household Income (Rs.) by Sector and Year (at 1980/81 constant price)

Year	Sector			
	Urban	Rural	Estate	Sri Lanka
1980/1981	1,274	795	753	881
1995/1996	2,044	1,064	738	1,177
2002	2,386	1,246	777	1,362
2005	2,594	1,533	993	1,649

Source: Gamage, D., (2009). Introduction in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Table 157: Mean Per capita Income Per Month in Sri Lanka, 1980-2010

Year	Per Capita Income (Rupees)
1980/81	180
1985/86	395
1990/91	724
1995/96	1,439
2002	3,056
2005	4,896
2006/07	6,463
2009/10	9,104

Source: Household Income and Expenditure Survey-2009/10, Department of Census and Statistics

Table 158: Per capita income per month by sector, 2002 -2010

Sector	Per capita income (Rupees)		Ratio of rural and estate income of urban income	
	2002	2010	2002	2010
Urban	5,203	11,245	-	-
Rural	2,885	8,916	55.4	79.2
Estate	1,763	5,782	33.8	51.4

Source: Household Income and Expenditure Survey – 2002, 2009/10, Department of Census and Statistics

Gamage, D., (2009). Introduction in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Table 159: Gini Coefficient for Household Income by Sector, 1980-2010

Sector	Survey Period							
	1980/81	1985/86	1990/91	1995/96	2002	2005	2006	2010
All Island	0.43	0.46	0.47	0.46	0.47	0.47	0.48	0.49
Urban	0.44	0.48	0.62	0.47	0.48	0.48	0.55	0.48
Rural	0.38	0.43	0.42	0.46	0.45	0.45	0.45	0.49
Estate	0.27	0.31	0.25	0.34	0.34	0.34	0.41	0.43

Source: Household Income and Expenditure Surveys from 1980/1981, 1985/1986, 1990/1991, 1995/1996, 2002, 2005, 2006/2007, 2009/10, Department of Census and Statistics, www.statistics.gov.lk

Gamage, D., (2009). Introduction in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Table 160: Rice Imports and Exports, 1985-2010

Year	Rice Imports (Mt'000)	Rice Export (Mt'000)	Per Capita Availability (Kg/Yr)
1985	182.30	N.A.	N.A.
1986	220.10	0.06	113.00
1987	102.37	0.10	103.41
1988	188.58	0.14	94.43
1989	291.48	0.26	100.69
1990	131.76	0.26	91.86
1991	132.96	N.A.	101.45
1992	237.22	N.A.	102.93
1993	206.88	0.73	100.59
1994	58.43	35.30	98.80
1995	9.45	46.25	99.32
1996	339.68	1.26	95.64
1997	305.94	1.43	95.48
1998	167.57	1.52	97.47
1999	214.19	1.41	98.98
2000	14.85	2.01	107.25
2001	51.95	1.80	95.73
2002	95.10	2.15	94.53
2003	34.52	2.13	98.09
2004	221.61	2.38	94.08
2005	76.07	3.50	104.40
2006	12.00	5.99	104.57
2007	88.00	5.74	100.85
2008	84.00	5.72	122.58
2009	52.00	N.A.	N.A.
2010	126.00	N.A.	N.A.

Source: Statistical Abstract, Various Issues, Department of Census and Statistics
Central Bank Annual Report-2008
Economic and Social Statistics-2011, Central Bank of Sri Lanka.

N.A. - Not Available

Table 161: Composition of Consumer Goods Imports (Value in Rs. Million)

Category	1997	1998	1999	2000	2001	2002	2010
1.Consumer Goods	72,062	80,956	87,060	105,403	110,059	126,181	295,204
(a) Food and Drink	45,996	46,543	46,116	52,584	58,466	66,540	156,673
Rice	4,331	2,621	3,290	288	969	1,732	6,741
Sugar	10,788	8,384	7,448	10,777	10,289	12,634	41,117
Wheat	8,128	8,133	7,792	9,625	9,783	12,427	29,120
Other foods	22,749	27,405	27,586	31,894	37,425	39,746	64,841
(b) Other consumer goods	26,066	34,413	40,943	52,819	51,593	59,641	138,531
2.Intermediate goods	182,754	192,494	210,439	287,196	296,522	334,357	875,991
Petroleum	31,828	22,275	30,124	68,381	65,190	75,627	341,307
Fertilizer	3,916	3,989	4,690	6,059	6,047	7,259	27,175
Chemicals	8,024	9,241	9,590	11,152	12,647	14,792	44,057
Textile (Including clothing)	81,816	90,099	93,105	111,386	117,993	126,438	195,549
Other	57,170	66,890	72,929	90,218	94,645	110,241	189,572
3. Investment goods	78,232	95,322	110,599	130,889	96,185	112,046	335,410
Machinery and Equipment	43,853	50,592	47,736	59,538	54,287	61,296	136,154
Transport Equipment	12,276	17,098	37,191	39,489	11,469	14,449	72,538
Building Materials	16,030	19,590	18,296	23,087	22,145	26,013	91,491
Other	6,073	8,042	7,376	8,776	8,285	10,288	35,226
4. Unclassified Imports	12,978	11,367	8,126	30,802	30,198	11,907	19,999
5. Total	346,026	380,138	416,223	554,290	532,694	584,491	1,526,604

Source: Economic and Social Statistics of Sri Lanka 2004 and 2011, Central Bank of Sri Lanka

Table 162: Local Production, Imports and Per Capita Availability of Pulses

Year	Local Production (Mt'000)	%	Imports (Mt'000)	%	Per Capita Availability (Kg/Yr)
1985	44,340	66.52	22,320	33.48	4.24
1986	46,440	52.06	42,770	47.94	5.15
1987	46,160	50.39	45,440	49.61	5.12
1988	47,600	56.36	36,860	43.64	4.83
1989	41,060	47.91	44,650	52.09	4.90
1990	52,740	52.58	47,560	47.42	5.45
1991	51,010	46.68	58,260	53.32	6.21
1992	41,960	43.05	55,510	56.95	5.42
1993	41,750	46.20	48,620	53.80	5.36
1994	38,690	29.11	94,210	70.89	7.39
1995	34,520	33.20	69,450	66.80	6.09
1996	34,360	35.83	61,550	64.17	5.88
1997	29,420	26.08	83,390	73.92	5.95
1998	29,680	26.55	82,110	73.45	6.25
1999	26,730	24.30	83,280	75.70	5.84
2000	24,450	21.34	90,110	78.66	6.02
2001	20,180	16.40	102,840	83.60	6.34
2002	21,920	15.74	117,300	84.26	6.88
2003	26,470	20.83	100,590	79.17	6.36
2004	18,860	15.35	103,970	84.65	6.10
2005	25,170	20.57	97,170	79.43	6.00
2006	23,290	16.31	119,520	83.69	6.93

Source: Department of Census and Statistics - Food Balance Sheet, Various Issues

Table 163: Local Production, Imports and Per Capita Availability of Potato, 1985-2006

Year	Local Production (Mt'000)	%	Imports (Mt'000)	%	Per Capita Availability (Kg/Yr)
1985	88,950	100.00	N.A.	N.A.	3.98
1986	82,390	99.98	20	0.02	3.52
1987	81,040	100.00	2	0.00	3.45
1988	87,530	99.98	20	0.02	3.71
1989	83,470	99.40	501	0.60	3.50
1990	87,200	99.95	40	0.05	4.44
1991	66,740	100.00	N.A.	N.A.	2.60
1992	78,560	100.00	N.A.	N.A.	3.08
1993	78,180	100.00	N.A.	N.A.	3.05
1994	79,390	91.00	7,849	9.00	3.59
1995	81,660	87.23	11,957	12.71	3.83
1996	100,760	79.65	25,740	20.28	5.35
1997	66,480	38.02	108,375	61.89	7.79
1998	25,900	18.32	115,610	81.78	6.83
1999	27,170	17.40	128,860	82.51	7.48
2000	48,410	29.38	116,450	70.67	7.63
2001	57,680	47.94	62,560	52.00	5.32
2002	88,710	70.02	38,000	29.99	5.30
2003	71,750	63.93	40,490	36.07	4.59
2004	81,270	74.37	28,010	25.63	4.49
2005	79,450	66.10	40,750	33.90	4.93
2006	78,490	62.77	46,550	37.23	5.12

Source : Department of Census and Statistics - Food Balance Sheet, Various Issues

N.A. - Not Available

Table 164: Local Production and Imports of Onions and Per Capita Availability, 1985-2006

Year	Local Production (Mt'000)	%	Imports (Mt'000)	%	Per Capita Availability (Kg/Yr)
1985	45,380	42	61,632	58	4.03
1986	56,840	55	47,320	45	3.75
1987	60,780	64	34,402	36	3.31
1988	59,160	84	11,672	16	2.14
1989	77,200	77	22,950	23	3.07
1990	61,000	66	31,450	34	3.67
1991	55,680	53	48,690	47	4.05
1992	82,340	69	35,510	30	3.90
1993	72,860	68	34,230	32	3.41
1994	82,950	62	50,210	38	4.27
1995	78,110	50	78,470	50	5.17
1996	63,310	40	93,550	60	5.29
1997	73,940	38	122,430	62	6.77
1998	55,490	35	102,840	65	5.42
1999	105,380	55	86,050	45	6.26
2000	79,060	39	123,450	61	6.76
2001	68,830	38	112,890	62	5.88
2002	66,890	34	131,940	66	6.54
2003	67,820	34	130,810	66	6.47
2004	76,970	40	117,810	60	6.28
2005	109,280	47	120,950	53	7.20
2006	134,370	51	130,340	49	8.08

Source: Department of Census and Statistics - Food Balance Sheet, Various Issues

Table 165: Imports of Wheat Flour and Per Capita Availability

Year	Imports (Mt)	Per Capita Availability (Kg/Yr)
1965	316,940	N.A.
1966	268,290	N.A.
1967	525,430	N.A.
1968	365,150	N.A.
1969	394,670	N.A.
1970	374,550	N.A.
1971	335,770	N.A.
1972	401,960	N.A.
1973	436,910	N.A.
1974	495,150	N.A.
1975	528,240	N.A.
1976	479,490	N.A.
1977	604,980	N.A.
1978	693,560	N.A.
1979	530,270	N.A.
1980	419,520	N.A.
1981	380,250	N.A.
1982	373,290	N.A.
1983	423,040	N.A.
1984	433,700	N.A.
1985	N.A.	N.A.
1986	514,250	28.40
1987	438,160	N.A.
1988	488,830	N.A.
1989	584,240	33.98
1990	569,810	27.62
1991	494,700	36.28
1992	522,930	33.74
1993	570,540	32.90
1994	655,090	39.29
1995	782,470	44.88
1996	675,620	38.67
1997	599,930	35.50
1998	664,240	30.50
1999	682,520	40.53
2000	660,320	30.85
2001	649,490	40.67
2002	733,540	34.88
2003	710,070	34.41
2004	706,530	35.50
2005	842,060	42.07
2006	696,640	34.82
2007	626,080	30.20
2008	540,570	26.23

Source: Department of Census and Statistics, Statistical Abstract, Various Issues
N.A. - Not Available

Table 166: Percentage Share of the Production in the Dairy Sector

Year	Local Production (%)	Imports (%)
1982	66	34
2002	43	57
2006	20	80

Source: Sri Lanka Livestock Statistics, 1982, 2002, 2006, Department of Animal Production and Health Chandrasiri, A.D.N., (2009). Smallholder Dairy Sector in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Table 167: Condensed Milk Production and Imports

Year	Local Production (Mt'000)	Imports (Mt'000)
1980	3.97	1.22
1981	5.54	1.16
1982	4.30	0.38
1983	4.42	0.93
1984	2.16	0.33
1985	3.64	0.04
1986	3.83	N.A.
1987	3.70	0.02
1988	3.26	0.04
1989	4.03	0.11
1990	3.91	0.03
1991	4.39	0.04
1992	3.97	0.25
1993	4.21	0.03
1994	4.21	0.45
1995	4.38	0.29
1996	3.90	0.33
1997	4.09	0.25
1998	4.18	0.26
1999	4.24	0.17
2000	4.59	0.09
2001	4.43	0.08
2002	4.42	0.07
2003	4.73	0.05
2004	5.06	0.16
2005	5.27	0.01
2006	4.80	N.A.

Source: Department of Census and Statistics, Food Balance Sheet, Various Issues

N.A. - Not Available

Table 168: Other Milk Production and Imports

Year	Local Production (Mt'000)	Imports (Mt'000)
1980	0.03	N.A.
1981	N.A.	N.A.
1982	N.A.	N.A.
1983	N.A.	N.A.
1984	N.A.	N.A.
1985	N.A.	N.A.
1986	0.30	N.A.
1987	0.40	N.A.
1988	0.55	N.A.
1989	0.57	N.A.
1990	1.34	N.A.
1991	1.75	N.A.
1992	1.41	0.05
1993	1.52	0.05
1994	1.76	0.21
1995	2.24	0.20
1996	1.71	0.07
1997	1.62	0.12
1998	1.51	0.32
1999	1.54	0.12
2000	1.20	0.19
2001	1.69	0.14
2002	1.74	0.28
2003	2.17	0.36
2004	2.54	0.38
2005	2.77	0.24
2006	N.A.	1.94
2007	N.A.	1.48
2008	N.A.	1.41
2009	N.A.	1.50
2010	N.A.	0.99

Source: Department of Census and Statistics, Food Balance Sheet, Various Issues.
Economic and Social Statistics of Sri Lanka-2011, Central Bank of Sri Lanka.

N.A. - Not Available

Table 169: Per Capita Availability of Milk

Year	Fresh Milk (Kg/Yr)	Tinned Milk (Kg/Yr)	Condensed Milk (Kg/Yr)	Other Milk Production (Kg/Yr)
1980	13.61	1.59	0.36	0.01
1981	15.32	0.92	0.45	N.A.
1982	14.51	1.12	0.31	0.01
1983	15.40	1.87	0.35	0.00
1984	15.71	1.42	0.16	0.01
1985	17.25	1.61	0.23	0.02
1986	8.61	1.78	0.24	0.02
1987	12.34	2.33	0.23	0.02
1988	9.76	2.55	0.20	0.03
1989	9.28	2.94	0.25	0.03
1990	12.03	1.98	0.23	0.08
1991	11.23	2.80	0.27	0.11
1992	13.20	2.34	0.25	0.09
1993	12.81	2.44	0.25	0.09
1994	13.13	2.63	0.27	0.12
1995	12.06	2.83	0.25	0.13
1996	11.19	2.70	0.23	0.10
1997	11.14	2.59	0.24	0.09
1998	4.80	3.30	0.25	0.10
1999	4.99	3.16	0.24	0.09
2000	4.96	3.73	0.25	0.08
2001	4.90	3.64	0.24	0.10
2002	5.03	3.94	0.25	0.11
2003	5.47	4.10	0.24	0.13
2004	5.34	3.46	0.27	0.15
2005	5.37	3.63	0.27	0.15

Source: Department of Census and Statistics, Food Balance Sheet, Various Issues

Table 170: Production, Imports and Availability of Dried Fish, 1985-2010

Year	Local Production (Mt)	%	Imports(Mt)	%	Total Supply (Mt)	Per Capita Availability (Kg/Yr)
1985	5,920	19.36	24,660	80.64	30,580	1.93
1986	9,990	29.31	24,090	70.69	34,080	2.11
1987	5,360	13.16	35,370	86.84	40,730	2.49
1988	5,380	14.96	30,590	85.04	35,970	2.17
1989	6,080	22.91	20,460	77.09	26,540	1.58
1990	11,120	22.47	38,360	77.53	49,480	2.91
1991	12,930	22.76	43,890	77.24	56,820	3.45
1992	14,400	24.50	44,380	75.50	58,780	3.53
1993	15,500	19.29	64,840	80.71	80,340	4.77
1994	16,120	25.29	47,620	74.71	63,740	3.73
1995	12,090	20.06	48,190	79.94	60,280	3.50
1996	10,000	17.14	48,330	82.86	58,330	3.33
1997	12,000	19.75	48,782	80.25	60,782	3.62
1998	14,500	22.68	49,426	77.32	63,926	3.71
1999	16,750	28.94	45,312	71.06	63,762	3.63
2000	24,360	32.52	50,550	67.48	74,910	4.32
2001	17,640	28.04	45,280	71.96	62,920	3.84
2002	24,690	35.69	44,488	64.31	69,178	3.98
2003	21,480	32.43	45,512	67.57	67,352	3.81
2004	25,390	40.16	37,842	59.84	63,232	3.54
2005	7,560	14.49	44,608	85.51	52,168	2.96
2006	33,400	42.74	44,750	57.26	78,150	4.23
2007	36,200	42.95	48,092	57.05	84,292	N.A.
2008	42,320	48.54	44,863	51.46	87,183	N.A.
2009	43,790	48.99	45,605	51.01	89,395	N.A.
2010	N.A.	N.A.	N.A.	N.A.	60,782	N.A.

Source: Department of Fisheries and Aquatic Resources
 Socio Economic Data, Various Issues, Central Bank of Sri Lanka
 Statistical Abstract-2010, Department of Census and Statistics.

N.A. - Not Available

Table 171: Wholesale Price Index for Agricultural Commodities, 1980=100

Food Item	1995	2000	2005
Imported Rice (1Mt)	287.30	471.02	702.57
Paddy G.P.S. (1Bu.)	373.24	373.00	N.A.
Paddy Open Market	322.14	462.56	623.64
Wheat Grain (1Mt)	380.36	415.34	663.17
Wheat Flour (1Mt)	154.53	320.69	520.51
Eggs (Each)	354.54	500.00	779.22
Fish G.M. of varieties (1Kg)	508.64	675.63	978.53
Potatoes (1Kg)	673.18	568.29	978.26
Non Seasonal Vegetables (G.M. of 3 varieties – 1Kg)	717.50	819.50	1,350.00
Seasonal Vegetables (G.M. of 3 varieties – 1Kg)	958.92	1103.57	1,607.14
Coconut (Each)	290.4	378.4	1,019.20
Coconut Oil (1Mt)	401.17	543.84	1,113.72
Dried Chillies (1Kg)	488.89	479.19	517.58
Mustard (1Kg)	218.24	288.56	368.00
Red Onions (1Kg)	581.48	841.43	925.92
High Grown Tea (1Kg)	365.74	682.50	898.17
Mid Grown Tea (1Kg)	389.41	748.66	1,009.28
Low Grown Tea (1Kg)	379.70	712.72	977.88
Sugar (1Mt)	209.57	189.60	317.14

Source: Annual Report Central Bank of Sri Lanka, Various Issues
 N.A. - Not Available

CHAPTER NINE

Social and Institutional Domains of Agriculture Transformation

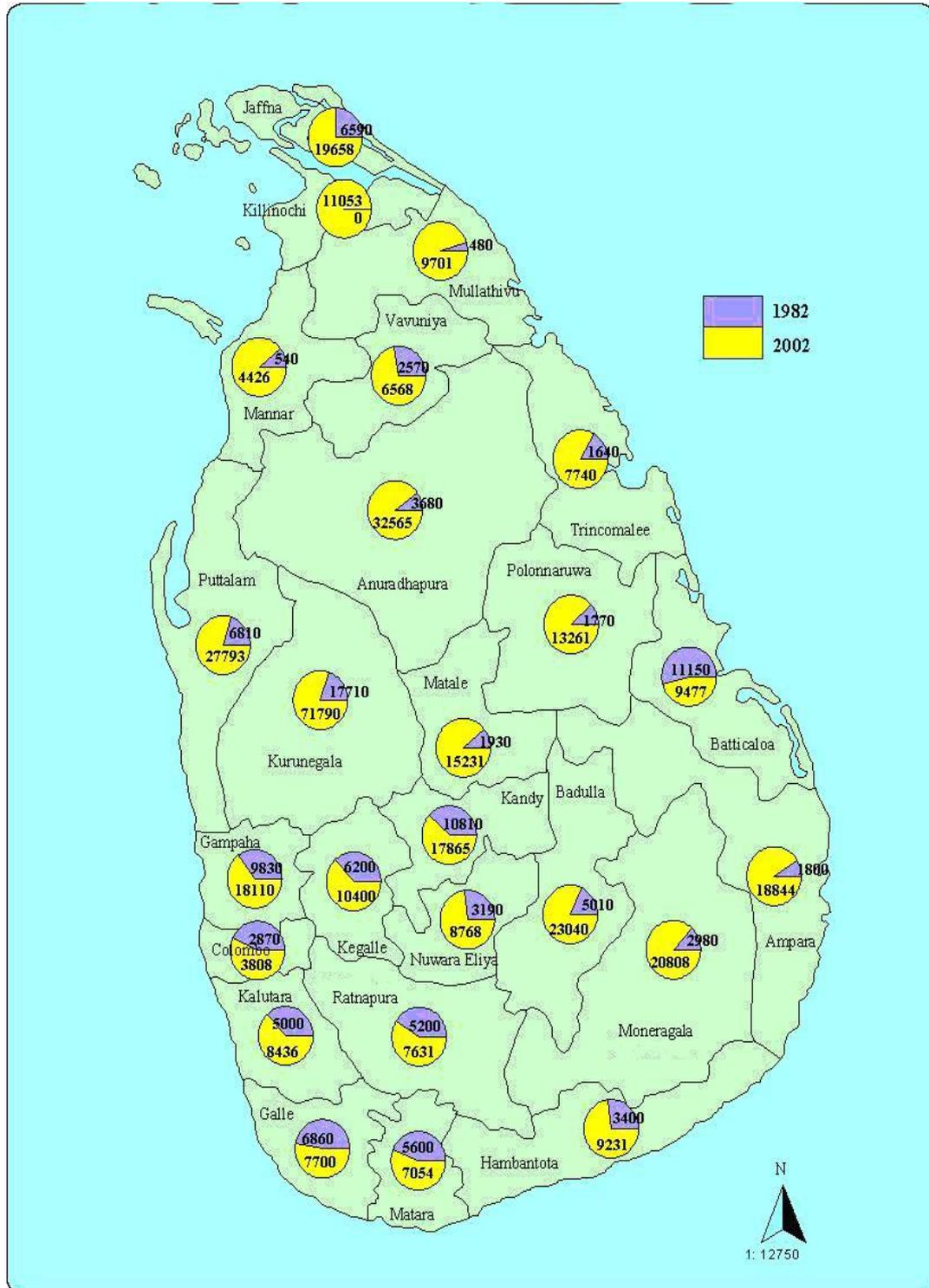
Table 172: Distribution of Agricultural Holdings (Extent in ha), Type of Land Use and by Size Class in 2002

Size Class of the Holding	All Holdings		Holdings with Crops and Livestock		Holdings with Crops only		Holdings with Livestock Only	
	No	Extent	No	Extent	No	Extent	No	Extent
Less than 1 Ha	1,270,308	548,279	238,858	112,201	1,027,119	434,999	4,331	1,079
1 - < 2 Ha	374,397	491,814	105,801	141,198	268,178	350,251	418	366
2 - < 3 Ha	91,687	210,576	30,914	71,194	60,630	139,181	143	201
3 - < 4 Ha	22,074	74,347	7,565	25,447	14,473	48,830	36	70
4 - < 5 Ha	11,861	51,605	3,775	16,472	8,053	35,077	33	56
5 - < 8 Ha	9,323	56,974	2,948	18,072	6,353	38,841	22	61
8 Ha and Above	3,823	42,402	1,097	12,311	2,715	29,985	11	106
Sri Lanka	1,783,473	1,475,997	390,958	396,895	1,387,521	1,077,164	4,994	1,939

Source: Department of Census and Statistics, Census of Agriculture 2002

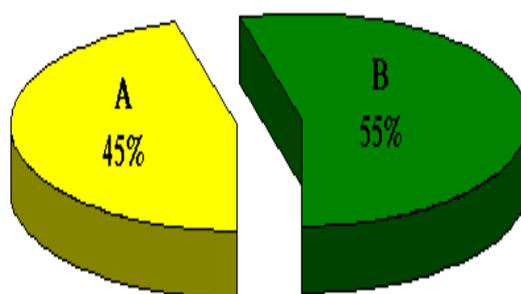
Gamage, D., (2009). Introduction in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Map 18: Number of Agricultural Holdings (Smallholding Sector) with Crops and Livestock in 1982 and 2002



Source: Gamage, D., (2009). Introduction in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

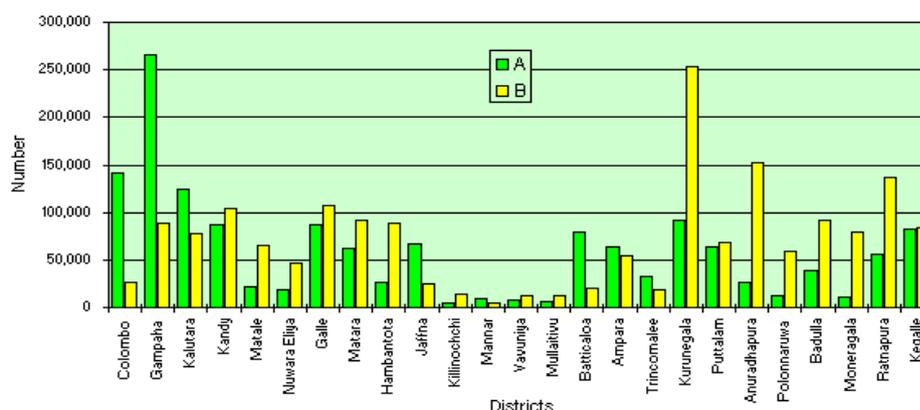
Figure 57: Distribution of Agricultural Holdings in Smallholding Sector in 2002



- A. Holdings reporting extent less than or equal to 40 perches of land with agricultural produce mainly for home consumption
- B. Holdings reporting extent more than 40 perches of land or producing agricultural output mainly for sale purposes

Source: Census of Agriculture 2002, Department of Census and Statistics
 Gamage, D., (2009). Introduction in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Figure 58: Distribution of Agricultural Holdings in the Smallholding Sector by Districts in 2002



- A. Holdings reporting extent less than or equal to 40 perches of land with agricultural produce mainly for home consumption
- B. Holdings reporting extent more than 40 perches of land or producing agricultural output mainly for sale

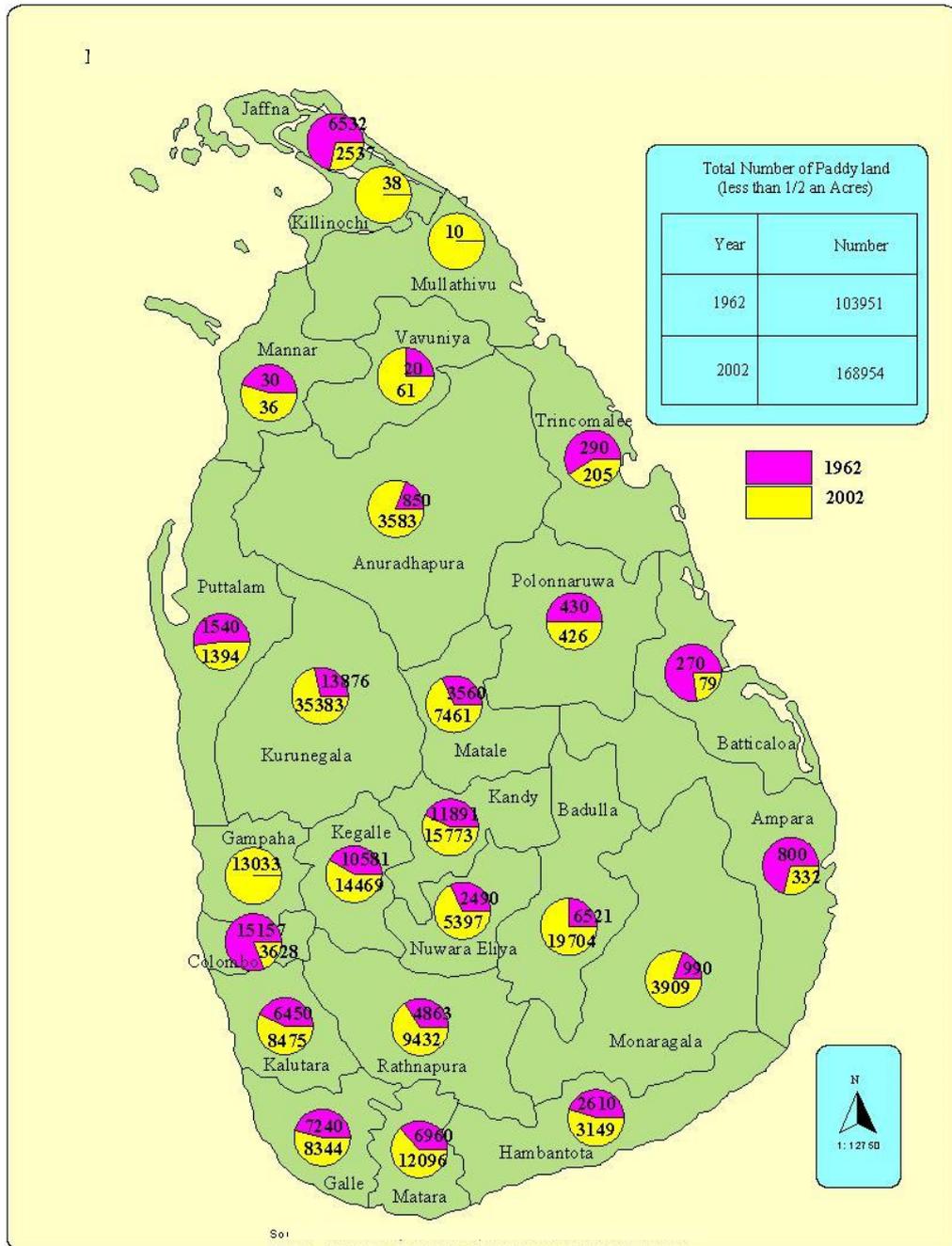
Source: Census of Agriculture 2002, Department of Census and Statistics.
 Gamage, D., (2009). Introduction in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Table 173: Distribution of Extent under Rubber and Coconuts by Size Class of the Holdings in 2002

Size Class of the Holding	Total Extent (Hectares)	
	Rubber	Coconut
Less than 1Ha	14,075	128,404
1 - < 2 Ha	14,229	75,858
2 - < 3 Ha	7,594	36,927
3 - < 4 Ha	3,803	15,598
4 - < 5 Ha	3,039	12,072
5 - < 8Ha	4,502	16,953
8 Ha and above	3,209	8,520
Total	50,451	294,963

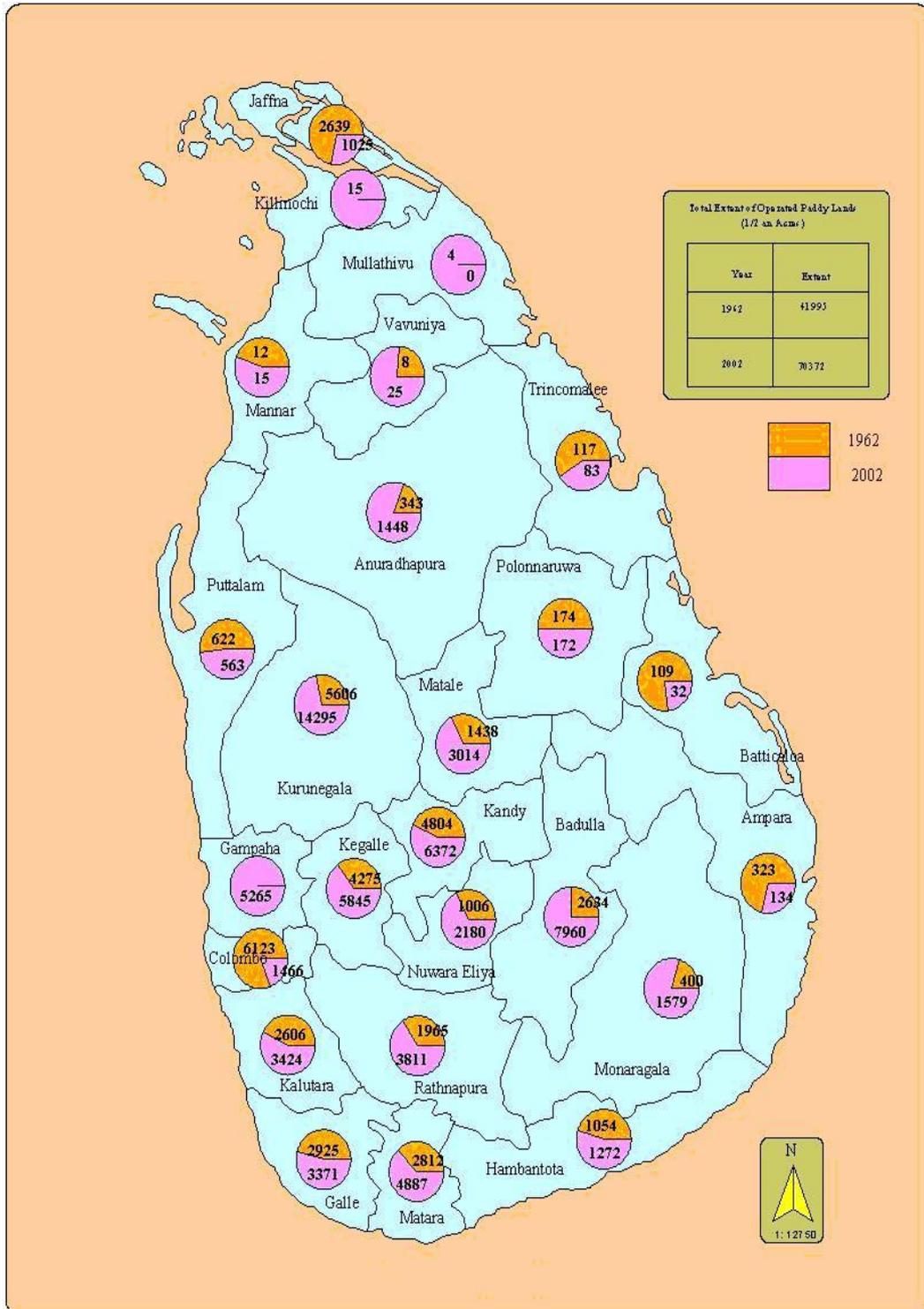
Source: Department of Census and Statistics, Census of Agriculture-2002

Map 19: Number of Operated Paddy Lands that are Less than Half an Acre in 1962 and 2002



Source: Prepared by APPE Division, HARTI On the basis of Department of Census and Statistics Data

Map 20: Extent of Operated Paddy Land that are Less than Half an Acre in 1962 and 2002



Source: Prepared by APPE Division, HARTI On the basis of Department of Census and Statistics Data

Table 174: Number of Cattle, Buffalo and Goats by Operational Size of Landholdings

Size of Holding	Cattle	Buffalo	Goat
< 1/4 acre	117,181	15,805	109,412
¼ – 20 acres	1,038,368	281,454	264,584
> 20 acres	48,221	5,972	30,921
Total	1,203,770	303,281	404,917

Source: Department of Census and Statistics (2002), Census of Agriculture 2002
 Gamage, D., (2009). Introduction in Livestock for Rural Development and Poverty Reduction,
 Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Table 175: Distribution of Poultry Population by Size of Herd

Size Class of the Herd	Number of Poultry Farms	For Egg production		For meat Production	Local		Total Poultry
		Laying Hens	Chicks including brooders	Broilers including Brooders	Laying Hens	Cock Birds and Others	
Less than 100	160,120	206,118	79,344	75,522	698,925	486,651	1,546,560
100 - < 500	5,062	598,115	200,929	404,691	44,716	56,171	1,304,622
500 - < 1,000	2,097	494,605	201,803	661,258	35,593	55,942	1,449,201
1,000 - < 2,000	1,966	628,229	233,844	1,551,298	88,633	155,117	2,657,121
2,000 - < 5,000	830	826,823	209,204	1,217,595	318,676	318,701	2,890,999
5,000 - < 10,000	225	502,188	130,514	487,399	351,007	412,235	1,883,343
10,000 and Above	60	335,200	133,500	536,000	192,003	175,000	1,371,700
Total	170,360	3,591,278	1,189,138	4,933,763	1,729,553	1,659,817	13,103,546

Source: Census of Agriculture 2002, Department of Census and Statistics
 Gamage, D., (2009). Introduction in Livestock for Rural Development and Poverty Reduction,
 Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Table 176: Number and Extent of Agricultural Holdings with Livestock only Reported by Agricultural Census of 1982 and 2002 by District (Extent in Hectares)

District	Number			Extent		
	1982	2002	Percentage Change	1982	2002	Percentage Change
Colombo	360	82	-77.22	232	23	-90.09
Gampaha	460	177	-61.52	434	51	-88.25
Kalutara	330	139	-57.88	181	11	-93.92
Kandy	530	374	-29.43	121	89	-26.45
Matale	100	117	17.00	133	35	-73.68
Nuwara Eliya	340	104	-69.41	123	21	-82.93
Galle	260	136	-47.69	399	9	-97.74
Matara	170	38	-77.65	84	4	-95.24
Hambantota	250	240	-4.00	216	75	-65.28
Jaffna	1,940	169	-91.29	1,645	60	-96.35
Mannar	140	33	-76.43	143	29	-79.72
Vavuniya	700	91	-87.00	1,392	80	-94.25
Mullaitivu	90	33	-63.33	93	24	-74.19
Kilinochchi	0	556	-	0	367	-
Batticaloa	200	55	-72.50	256	32	-87.50
Ampara	210	120	-42.86	137	77	-43.80
Trincomalee	100	109	9.00	219	41	-81.28
Kurunegala	570	576	1.05	449	168	-62.58
Puttalam	320	607	89.69	176	316	79.55
Anuradhapura	260	702	170.00	389	267	-31.36
Polonnaruwa	100	184	84.00	75	65	-13.33
Badulla	150	139	-7.33	177	28	-84.18
Moneragala	130	93	-28.46	128	41	-67.97
Ratnapura	260	55	-78.85	175	13	-92.57
Kegalle	280	65	-76.79	83	13	-84.34
Sri Lanka	8,250	4,994	-39.47	7,463	1,939	-74.02

Source: Department of Census and Statistics, Census of Agriculture -2002

Table 177: Distribution of Livestock Population in Smallholding Sector

Type of Distribution	Cattle	Buffalo	Goat & Sheep	Swine	Chicks	Ducks
Total population (1992)	1,567,600	895,500	519,600	90,800	8,260,000	18,400
Total population in smallholding sector	1,263,614	534,263	246,912	28,510	3,622,421	N.A.
% in smallholding sector	80	60	48	31.8	44	-
Total population (2002)	1,565,000	661,000	501,700	67,000	10,611,000	10,000
Total population in smallholding sector	1,067,160	2,766,72	2,382,75	35,000	4,868,840	N.A.
% in smallholding sector	68	42	65	53.2	44	N.A.

Source: Sri Lanka Livestock Statistics, 1992- 2002
Seresinhe, T. and Pathirana, K.K., (2009). Livestock for Food Security in Livestock for Rural Development and Poverty Reduction: Hector Kobbekaduwa Agrarian Research and Training Institute.

Table 178: Number of Milch Cows and Their Production in the Smallholder Sector

Year	No of Milch Cows	% of the Total Population	Total Production/day (lit.)	Avg. Production/day/cow (lit)
1972	316,000	19.5	339,442.5	1.1
1982	423,000	24.9	641,377.5	1.5
1992	626,000	39.0	646,293.3	1.0
2002	648,000	42.9	738,423.3	1.1

Source: Based on Sri Lanka Livestock (2002), Smallholder Sector
Chandrasiri, A.D.N., (2009). Smallholder Dairy Sector in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Table 179: Number of Milch Buffalo and Their Production in the Smallholder Sector

Year	No of Milch Buffaloes	% of the Total Population	Total Production/day (lit.)	Avg. Production/day/cow (lit)
1972	98,000	13.1	11,614.5	1.2
1982	133,000	15.1	193,200.0	1.5
1992	277,000	30.9	236,926.7	0.9
2002	221,000	34.4	230,316.7	1.0

Source: Based on Sri Lanka Livestock Statistics - Smallholder Sector, 2002.
Chandrasiri, A.D.N., (2009). Smallholder Dairy Sector in Livestock for Rural Development and Poverty Reduction, Colombo: Hector Kobbekaduwa Agrarian Research and Training Institute.

Table 180: Land Owned (in hectares) and Operated by Expenditure Quintiles

	Poorest	Second	Third	Fourth	Richest	Total
Land owned	0.46	0.47	0.53	0.55	0.86	0.56
Net cultivated area	0.58	0.62	0.75	0.84	1.09	0.77
Gross cultivated area	0.84	0.86	0.99	0.98	1.19	0.96
Cropping Intensity	1.45	1.39	1.32	1.17	1.09	1.25

Source: World Bank, 2003, Sri Lanka Integrated Survey, 1999 – 2000.

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