# UNITED NATIONS ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC STATISTICAL INSTITUTE FOR ASIA AND THE PACIFIC (SIAP)

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# **COUNTRY PAPER**



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Sri Lanka

# **Country Report Sri Lanka**

#### 1. Introduction

Sri Lanka is an island in the Indian Ocean is geographically situated towards to the south of the Indian subcontinent. It lies between 5 55' and 9 55' north of the equator and between the eastern longitudes of 79 42' and 81 52'. The total lands area is 65,610 Sq. km with 62,705 Sq. Km of land area and 2,905 Sq. Km of inland water and comprises of an astonishing varied landscape. The island has a length of 445 km and a breadth of 225 km. The islands' topography consist beautiful tropical beaches, verdant vegetation, ancient monuments and a thousand delights that please all tastes.

The features of the island consist of a mountainous mass somewhat south of the center that spreads around with a height exceeding 2,500 meters, surrounded by broad plains. Palm fringed beaches surround the island and the sea temperature rarely falls below 27 Celsius. In the lowlands the climate is typically tropical with an average temperature of 27°C in Colombo. In the higher elevations it can be quite cool with temperatures going down to 16°C at an altitude of over 2,000 meters.

Bright, sunny warm days are in abundance and are common even during the height of the monsoon. Climatically Sri Lanka has no off season. The south – west monsoon brings rain mainly from May to July to the western, southern and central regions of the island, while the north-east monsoon rains occur in the northern and eastern regions from December to January.

Sri Lanka's Cultivated extend is about 27 percent of the total land area and 54 percent of the cultivated extend used for paddy cultivation in year 2014. About 85 percent of country population living in rural areas. Agriculture is one of the most important sectors of the economy and gives employment to at least 28.5% of employed persons with a high degree of subsistence farming. However, contribution by the agriculture sector to the Gross Domestic Product (GDP) has been decreased over the years.

# 2. National Statistical Organization (NSO)

**Department of Census and Statistics (DCS)** in Sri Lanka is the main authorized institute for data collection compilation and dissemination of all type of social and economic statistics in the country and it has Island wide network for data collection integrated with administrative setup. For the Agricultural data collection process DCS always collaborate with other related Ministries, Departments and research institutes.

Agriculture and Environment Statistics Division of DCS is responsible for collection, compilation and dissemination of all types of Agricultural information comply with the vested power and legal authority under the Census ordinance and statistical ordinance. It collects relative statistics mainly through conducting censuses, sample surveys and administrative records. Providing an accurate and timely data on agriculture sector has become a great challenge for DCS as to meet the growing demand of many stakeholders in addition to the government of Sri Lanka.

According to the government administration network, Sri Lanka has 25 districts and each district has several number of Divisional Secretariat (DS) Divisions. Under the DS divisions there are some Grama Niladari (GN) divisions. These are the lowest administrative unit in the country and under the GN division it has number of villages. Statistical Officers who are appointed to the DS divisions are responsible for the field data collection in the division.

# 3. Agriculture Statistics in Sri Lanka

The statistical programs undertaken by this division under the theme of Food and Agricultural Statistics are as follows.

Conducting the Census of Agriculture decennial basis

Conducting annual/biannual sample surveys under current statistical program

Conducting ad-hoc surveys depending on national requirements.

Collection of statistics through administrative records.

Census of Agriculture Cost of Production
Paddy Statistics Livestock Statistics
Highland Crops Food Consumption
Reconnaissance Surveys Food balance Sheet

Agriculture sector contribution to export has also been diminished during this time. Earlier, major export earning components were Tea, Rubber, Coconut and it has been change after diversification of export resulting open market economic policies.

Description	Percentage
Tea	10%
Rubber	2%
Coconut	8%

## 3.1 Cost of Production (COP)

Cost of Production improves the data and information base for a wide range of issues related to farm operations and the degree to which farms are capitalized. It also provides information on farm profitability and the forms of farm labour, such as hired and self-supplied labour by gender and age group. Also, collecting and processing COP data comes at a price, which are generally easy to measure and incurred in the short-term, and benefits, which are often intangible, difficult to measure and incurred in the medium to long-term.

#### 3.1.1. Scope and Coverage

The Department of Census and Statistics (DCS) compiles Cost of Production (COP) for Tea, Rubber and Coconut to facilitate decision making in export of these crops. This is initiated in 1950s in collaboration with Tea Commissioners' Division of Sri Lanka Tea Board, The Rubber Development Authority and The Coconut Development Board. This Survey covered an agricultural holding of 20 acres (8.09 Hectares) or more in extent and under the same unit of management was considered as an estate. These estates are identified as an agricultural holding in the Census of Agriculture 2013/14 is carried out in two distinct sectors such as Estate or the plantation sector and Small holding sector. In respect of the estate sector, the information was collected based on three independent sample surveys by sending mail questionnaires to the selected estates. Sample is selected for each crop using sample from that consist all the estates that have 20 or more acres of land. Cost of Production statistics for Tea, Rubber and Coconut compiles annually as a national estimate.

#### 3.1.2. Source and Frequency

Cost of Production (COP) statistics is calculated as follows.

#### 1. Tea

$$Cik = \frac{\sum_{n=1}^{no} Xink}{\sum_{n=1}^{no} Mink}$$

Average of a component item

Where  $x_{ink}$  = Cost reported for  $i^{th}$  item of expenditure nth questionnaire in the  $k^{th}$  elevation.

 $M_{ink}$  = Production of made tea in the nth questionnaire of  $k^{th}$  elevation

#### 2. Rubber

Average of a component item 
$$Ci = \frac{\displaystyle\sum_{n=1}^{no} Xin}{\displaystyle\sum_{n=1}^{no} Min}$$

Where xin = Cost reported for ith item of expenditure nth questionnaire in the kth type of Rubber.

Mink = Production of made Rubber in the nth questionnaire of kth type of Rubber

#### 3. Coconut

Average of a component item 
$$Ci = \frac{\displaystyle\sum_{n=1}^{no} Xin}{\displaystyle\sum_{n=1}^{no} Min}$$

Where xin = Cost reported for ith item of expenditure nth questionnaire in the kth type of Coconut.

Mink = Production of made Coconut in the nth questionnaire of kth type of Coconut

#### 3.2. Cost of Production (COP) of Tea

- The cost of production of tea per kilogram of made tea is computed based on the data collected from all registered tea factories at the Tea Commissioners' Division of the Sri Lanka Tea Board.
- The Questionnaire used in this survey is a mail questionnaire. Although the, follow up actions are being made to collect data from non-response factories, the response rate is deteriorating year by year.
- The average cost per kilogram by cost components is computed at elevation-wise High grown, Medium grown, Low grown at Island level.
- This survey has initiated in 1950s and it is a joint venture of DCS in collaborations with Tea Commissioners' Division.
- The questionnaires are posted to the Managers of Tea Factories requesting them to fill it and mail back to Tea Commissioner.
- The guestionnaires received are edited and tabulated by DCS.
- The average cost per kilogram and their break down by cost components for the Island is computed on a weighted average basis by combining elevation categories using actual tea production ratios by three elevations obtained from Tea Board/Tea small Holding Development Authority.

#### 3.3. Cost of Production (COP) of Rubber

- ➤ Out of the 25 districts in the Island Rubber is cultivated extensively in 10 Districts namely; Colombo, Gampaha, Kalutara, Galle, Matara, Kandy, Matale, Ratnapura, Kegalle, Kurunegala and marginally in Moneragala, Hambantota and Nuwaraeliya.
- Total extent under Rubber according to the Census of Agriculture 2002 was 116,000 hectares compared to the extent of 227,000 in 1970s.
- ➤ The Rubber Development Department of Sri Lanka is responsible for the development of Rubber cultivation and maintains Rubber Statistics.
- All owners of Rubber holdings are obliged to register their land with the Rubber Development according to the law. However, the law is imposed there is no compulsion to cancel their registration when the land diverted to alternative use.

- Such data are collected only from estates above 20 acres in extent using the frame of Estates prepared at the Census of Agriculture 2002.
- At present the COP data are collected only from Estates of 20 acres or more in extent. This survey is carried out jointly by the DCS and Rubber Development Department annually based on a mail inquiry.
- ➤ DCS is responsible for selection of the sample estates from the list compiled at the Census of Agriculture and give them to the Rubber Development Department for the collection of perfected questionnaires through mail.
- However, they are requested to make follow up. Once the completed questionnaires received, DCS is responsible for editing and processing.
- When the questionnaire received at the office, the estates are classified in to three major types depending on the type of production of Rubber.
  - (a). Sheet producing estates
  - (b). Crepe producing estates
  - (c). sheet and crepe producing estates.

## 3.4. Cost of Production (COP) of Coconut

- Census of agriculture 2002 reveals that coconut cultivation in Sri Lanka has spread out in all districts covering the extent of 394,834 hectares.
- The production of coconut influences immensely to the economy of Sri Lanka.

  Therefore, the survey on cost of production is a necessity in order to fulfill the requirement of correct statistics on coconut industry.
- This survey is carried out by the DCS annually based on a mail inquiry.
- After selecting the sample estates from the list compiled at the Census of Agriculture, the lists handed over them to respective statistics branches of the Districts directing them to forward questionnaires through mail with a covering letter signed by the District Secretary.
- ➤ However, they are requested to make follow up actions if they are not received with in the specified time period. Once the completed questionnaires are received, the agriculture division is responsible for editing and processing.

The estates in the main coconut growing districts are classified in to following categories.

North West Region - Kurunegala, Puttalam

South West Region - Colombo, Gampaha, Kalutara, Galle, Matara, Hambantota

North East Region - Jaffna, Trincomalee, Batticaloa, Ampara

Central Region - Matale, Kandy, Anuradhapura, Ratnapura, Kegalle

At the initial stage the cop by regional level was computed and to estimate cost item for the Island, the production estimated for the region was use as weighting factors.

In order to derive the production for the region, average production of the sample estates was multiplied by the estimated extent of the region.

#### 4. Weaknesses in Current Method

- ➤ Due to the poor response for one reason or another elevation-wise COP is not currently disseminated for Tea.
- > Due to the fragmentations over the years, Rubber has become small holders' crop.

  As such frame of Rubber holdings available at the Department has become obsolete.
- As there are number of difficulties in collecting the cop data from small holdings, cop is covered only for Estates.
- ➤ Diversity of the ownership pattern among the small holders and the presence of large number of small holders in the sector who are not maintaining any record keeping on COP, adoption of different cultural practices etc. are the main obstacles in computing COP of Rubber.
- Many small holders themselves do the work on their holdings as unpaid family labor, sell their liquid latex directly to other party without processing, they do not own their processing facility, as such it is extremely difficult to obtain COP data.

# 5. Plans to improve quality and coverage of agricultural costs of production statistics

- > Training to build professional capacity for all agriculture data producing agencies including the DCS
- > Supervision on data collection regarding to Cost of Production of Tea, Rubber and Coconut.
- > Awareness programme for respondents to increase the response rate
- Conducting a Survey on cost of Production for selected crops (Paddy, Maize, Big Onion, Chilies, Red Onion and Potato)