

Survey on Agricultural Crops and Livestock - 1993

(1) Background :

Recent trends in the concept of development planning, specially for rural sector, where source of livelihood heavily depend on Agricultural sector, emphasize the need for reliable statistical information disaggregated at lower administrative division levels. In this respect the emphasis has been made for more detailed information on land utilization associated with seasonal and minor export crops and their production levels. The dearth for there statistics have been growing more rapidly as a mean of poverty alleviation programs as well. These needs have made to adopt for more systematic and national approaches for the data collection on Agricultural Crops and Livestock.

The collection of information on perennial crops such as Tea, Rubber and Coconut is much easier and are readily available as a result of nature of the growing pattern of these crops and the management. Reliable and up-to-date information pertaining to these crops are also available through the means of Administrative records and Censuses. However, collecting reliable statistical information on other agricultural crops such as seasonal crops, fruit crops, minor export crops etc. has become a difficult and costly task due to scattered nature of many of these crops.

The nature of growing conditions of crops other than Tea, Rubber and Coconut do not permit to gather reliable information even through Agricultural Censuses. Therefore, such information could grasp only through well defined objective survey operations. In spite of these difficulties, the Department felt the increasing need for more realistic information on these crops which play a crucial role in the agricultural economy of small farmers and to fulfill the following objectives, the survey on Agricultural crops & livestock has been carried out during Maha Season 1992/93.

(2) Objectives :

- (a) To collect and provide up-to-date information on Agricultural crops and livestock at Grama Niladari (GNN) division and village level which are needed for planning at lower administrative levels.
- (b) To establish a frame on Agricultural crops and livestock, in order to conduct objective surveys that are expected to be undertaken in the future.
- (c) To make available the benchmark data needed to monitor the progress of the agricultural development programmes that are being implemented by the Government.

(3) Methodology

The survey operation could be considered as a "Mini Census" since all the parcels growing Agricultural crops and rearing livestock during the reference period, were listed and enumerated.

3.1 Reference period :

The reference period for the survey was Maha Season of 1992/93 (i.e. September 1992 - to April 1993).

3.2 Scope and Contents :

All the parcels growing Agricultural crops other than wet land paddy, were enumerated and listed in a special register. The extent under each crop, number of trees, creepers of bushes when the extents cannot be given, number of cattle and buffaloes were recorded. It was also recorded whether the parcel is a homegarden or not.

Asweddumized paddy parcels were excluded in this survey. However, if there were asweddumized paddy parcels cultivated with Agricultural crops, other than paddy during the reference period, such parcels were enumerated to determine the crop acreage for the Maha Season 1992/93. The survey was not conducted within the limits of urban councils and Municipal Councils as they are predominantly residential areas.

3.3 Enumerators :

Grama Niladaris (GNN) of their respective divisions were the enumerators in this survey.

3.4 Field Organization :

The Statistical Investigators attached to Divisional Secretariates, provided the training and technical guidance to enumerators (GNN) and Divisional Officers (DOO), Agricultural Instructors (All) assisted in the supervision work and quality checks, under the Administrative control of Additional Government Agents/ Divisional Secretaries. District Statisticians/Statistical Officers attached to Kachcheri were responsible for all arrangements relate to the survey within their respective districts. They were working under the guidance of a Deputy Director of the Department who was coordinating the survey activities.

4. Concepts and Definitions

Some of the main concepts and definitions used and the method of determination of the area under crops are described below.

4.1 (a) Agricultural crops refers to all perennial crops and seasonal crops grown in the parcels.

4.2 **Parcel** : is defined to be a piece of land cultivated either singly or jointly and is separated by a similar land cultivated by other cultivators or a water way, public road, boundary, fence or other such limits. This could be a land cultivated at the time of data collection or prepared for cultivation during the season, irrespective of legal ownership.

Estates : When a large estate extents fallen to number of GNN divisions or several villages in the same GN division, the portion fallen to one village was treated as a separate parcel.

4.3 Home Garden

- (a) A parcel of which land extent is less than or equal to 20 perches having some form of cultivation/ tends livestock and has a dwelling house was defined to be a homegarden.
- (b) A parcel of land which has some form of cultivation/livestock the total area of which is more than twenty perches could also be a homegarden if the following two conditions are fulfilled.
 - (i) It has a dwelling house.
 - (ii) The produces of the parcel is mainly used for home consumption.

4.4 Extents under Crops :

In most parcels in Sri Lanka, the general pattern is mixed cropping. Even in large plantations, there are instances where mixed cropping has been under taken. Thus, estimating the acreage under various crops posses serious problems to the enumerator. This is specially so when numerous varieties are haphazardly

grown in a parcel. The problem is further aggravated as the density of the mixed cropping vary from parcel to parcel. In keeping those features in mind the following methods of estimation procedures have been used to give the extent in the case of mixed cropping.

- (a) method of total area allocated to principal crops.
- (b) Equal fraction for each mixed crop.
- (c) Estimating the area based on number of plants.

for example, Rubber and Cocoa are planted in a 10 acre plot (parcel) wholly and if it contains the recommended number of trees per acre for both the crops, the enumerator was instructed to record 10 acres for Rubber and 10 acres for Cocoa as well.

Sometimes the enumerators were not able to give the extent under each crop. separately when a number of crops are being cultivated in one parcel. In such instances they were instructed to count the number of trees, creepers or bushes grown in the parcel and the extent under each crop was estimated with the help of the table given below and the other crops based on the general knowledge of the farmers in respect of their divisions.

Recommended No. of trees, Creepers or Bushes for an acre

Code No.	Crop	Recommended No.	Code No.	Crop	Recommended No.
15	Manioc	4,800-6,000	55	Arecanut	1,200
42	Rubber	160 - 200	57	Plantain	300
43	Coconut	60	58	Papaw	450
44	Cocoa	450	59	Pineapples	14,000
45	Coffee	450	60	Oranges	100
46	Cinnamon	3,000	61	Mangoes	30
50	Pepper	680	62	Avacadopears	100
51	Cardamons	600	63	Limes	200
52	Cloves	100	64	Passionfruit	500
53	Nutmeg	80	65	Jackfruit	20-25
54	Cashew	35	66	Breadfruit	30
			70	Betel	0,000

5. Tabulations :

The enumerators have been instructed to prepare a summary sheet based on the information collected on number of homegardens, acreage under important crops grown in their divisions and number of neat cattle and buffaloes. Arrangements are being made to release the information from summaries to the users early in order to meet their data needs. More detailed tabulations will be made available later.

5.1 This report presents the basic information by Grama Niladari divisions and divisional Secretariates in the district, based on the summary information prepared by GNN.

5.2 The following informations are given in four major tables.

- (a) Number and extent of agricultural parcels and number of homegardens.
- (b) Extents under seasonal crops.
- (c) Extents under perrenial crops.
- (d) Number of cattle and buffaloes.

5.3 If the reported extent under any crop for the entire district is reported to be less than 5 hectares or less than two hectares for perennial crops or less than one hectare for seasonal crop of a G.N. division were not taken into tabulations when the data for GN divisions are presented. However those extents have been taken into account when the data for Divisional Secretariates are presented in the tables.

5.4 Seasonal Crops :

Kurakkan, Maize, Sorghum, Meneri, Green gram, Cowpea, Soyabean, Black gram, Dhal, Gingelly, Ground Nuts, Manioc, Sweet Potatoes, Potatoes, Red Onions, Big Onions, Chillies, Mustard, Ginger, Turmeric, Tobacco (Cigarette/Beedi/Cigar/Chewing) Cotton, Mulberry, Leafy vegetables, Gherkin.

5.5 Perennial Crops :

Tea, Rubber, Coconut, Cinnamon, Coffee, Cocoa, Pepper, Cardamons, Cloves, Nutmeg, Arecanut, Cashew, Oranges, Limes, Mangoes, Jak, Bread-fruit, Sugar-cane, Goraka, Tamarine, Plantain, Papaw, Pineapple, Passion-fruit, Betel, Kitul, Wood-apple, Beli, Pomegranate (Delum), Rambutan, Amberella, Mangosteen, grapes, Drumstick, Palm, Durian, Pears.

The crops that are not included in the above were treated under "other" category.