



Ministry of Finance and Economic Development

CENTRAL STATISTICS OFFICE



Digest of Agricultural Statistics 2005



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**DIGEST
OF
AGRICULTURAL STATISTICS
2005**

DIGEST OF AGRICULTURAL STATISTICS – 2005

FOREWORD

This is the twenty-second issue of a regular publication of the Central Statistics Office on agricultural statistics for the Island of Mauritius. It contains metadata on agricultural statistics and an overview of the main indicators of the sector.

The digest is published annually and is designed to bring together in a single report as many series as possible on agricultural statistics. It thus contains information on the sugar, tea, tobacco, food crops, livestock and fisheries sectors. Data showing the pattern of food consumption of the population are given in the yearly "Food Balance Sheets". Agricultural price statistics are shown in the section "Producer Price Index - Agriculture (PPI-A)".

The data published cover in general the five-year period from 2001 to 2005 and are the latest available as at mid July 2006. Some of the figures are provisional and subject to revision in later issues. Figures in this issue supersede those appearing in previous ones. Furthermore, historical series of main agricultural statistics can be accessed from the CSO website: <http://statsmauriti.us.gov.mu>

It is hoped that the data assembled in this digest will meet the diverse needs of many users, in particular agricultural policy makers, planners and scientists.

The cooperation of the numerous contributors, private organisations and public agencies, to this publication is gratefully acknowledged.

(H. Bundhoo)

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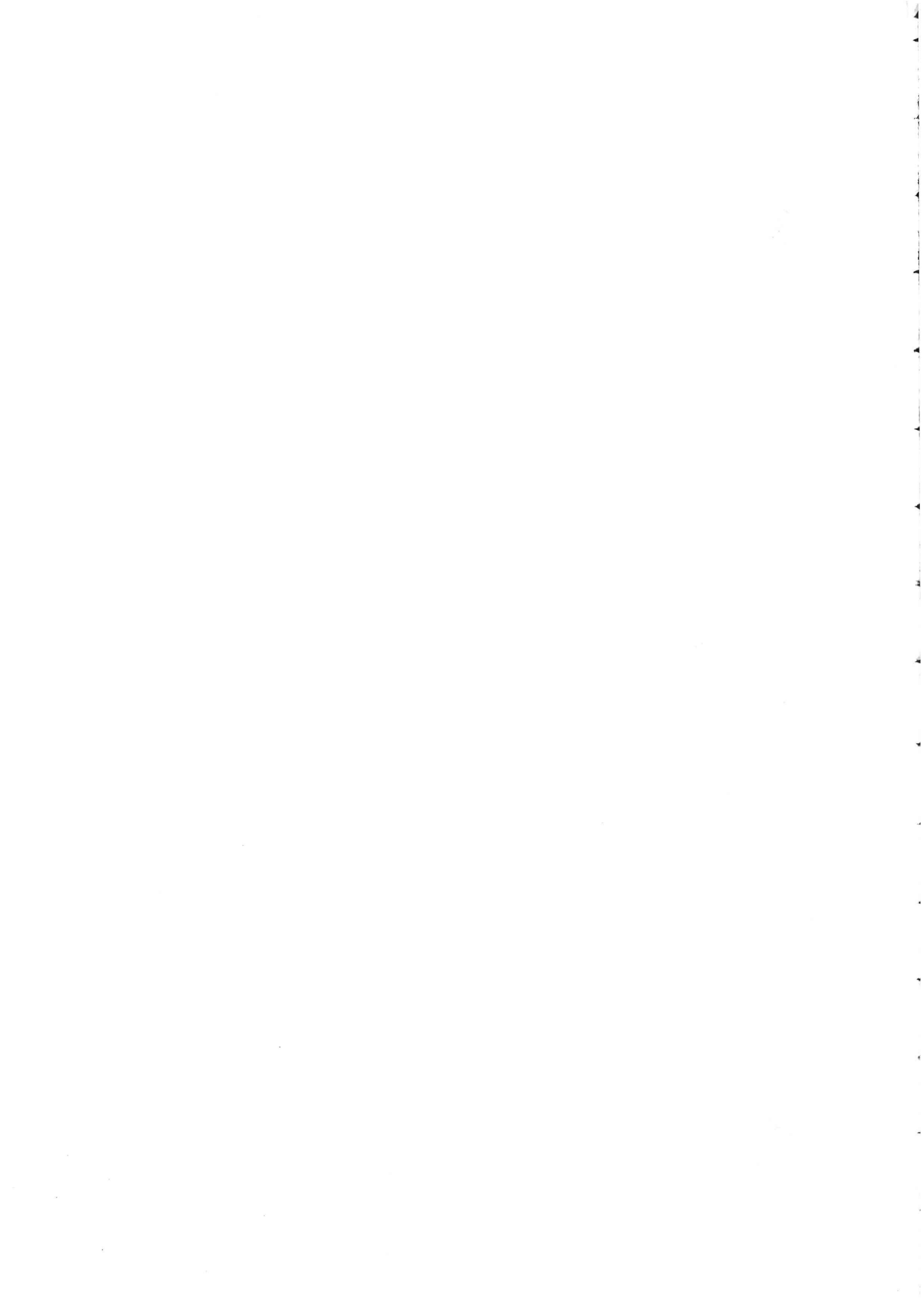
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PART I - INTRODUCTION

1. General

All tables in this issue refer to the Island of Mauritius unless otherwise specified. The 1993 Systems of National Accounts (1993 SNA) has been used for the compilation of production accounts.

2. Definitions

2.1 Basic price

Basic price is the amount receivable by the producer, exclusive of taxes payable on products and inclusive of subsidies receivable on products.

2.2 Purchaser's price

Purchaser's price is the amount payable by the purchaser. This includes trade and transport margins and non-deductible VAT.

3. Technical Notes

3.1 Rounding of figures

It is to be noted that in some tables totals may not add up due to independent rounding of figures.

3.2 Regions (note to Table 2.5)

<u>Regions</u>	<u>Corresponding districts</u>
North	Port Louis, Pamplemousses and Riviere du Rempart
South	Grand Port and Savanne
East	Flacq
West	Black River
Centre	Plaines Wilhems and Moka

3.3 Symbols and abbreviations

Symbols:

... : Negligible
 — : Nil

Abbreviations:

Rs : Mauritian Rupees
 '000 : Thousand
 No. : Number
 N.A : Not available
 n.e.s : Not elsewhere specified
 c.i.f : Cost, insurance and freight
 f.o.b : Free on board

3.4 Conversion factors

1 hectare = 2.36922 arpents

1 arpent = 100 perches

1 perche = 11 toises

1 inch = 25.4 millimetres

1 tonne = 1,000 kilograms = 0.9842 long ton

1 hectolitre = 100 litres

To convert degrees Celsius (Centigrade) into degrees Fahrenheit multiply by 9/5
 and add 32⁰

Part II – SOURCES AND METHODS

1. Production account

1.1 Agriculture, hunting, forestry and fishing

The activities in this sector are presented in the following sub-groups:

Industrial crops (sugar cane, tea and tobacco)

Foodcrops, fruits and flowers

Livestock, poultry and related products

Forestry and hunting

Fishing

Agricultural services

Government services

Data sources:

Ministry of Agro – Industry and Fisheries

Mauritius Chamber of Agriculture

Mauritius Sugar Syndicate

Agricultural Research and Extension Unit (AREU)

Mauritius Meat Authority (MMA)

Special enquiries from food crop planters, livestock and poultry breeders and providers of agricultural services

Accountant-General's Department and extra budgetary agencies (e.g Irrigation Authority, Farmers Service Centre, etc)

Methodology

Separate production accounts are prepared for each of the above sub-groups. The methodology adopted varies with the source of information. Apart from sugar and tea, agricultural activities are performed mainly by small planters, breeders and fishermen who do not keep proper records of their transactions. Because of the lack of proper accounts, a variety of methods, based essentially on the commodity approach, is used to estimate gross output, intermediate consumption and value added.

(i) Industrial crops

Sugar cane : Details on the sugar industry are given separately in Section 1.2.

Tea and Tobacco : Quantities and prices of tea and tobacco leaves are available from the Tea and Tobacco Board respectively. Intermediate inputs per hectare are computed based on information obtained from a few tea estates and tobacco planters. Total intermediate consumption is then obtained by applying the appropriate rates of inputs to the total area under cultivation.

(ii) Food crops, fruits and flowers

Food crops : Data on food crops production and area harvested are obtained from AREU on a monthly basis. Estimates of backyard production are made on the basis of consumption data collected through the Household Budget Surveys. It is to be noted that production from **greenhouses**, which is still on a small scale, is not covered. Retail prices of about forty food crops and fruits are collected weekly by the Consumer Price Index unit. This enables the valuation of each product at basic price by deducting transport cost and retail margin from its retail price value.

Ad-hoc production cost surveys are regularly carried out to provide the necessary information on inputs. Intermediate consumption expenditure is then worked out by applying appropriate rates of inputs to the total acreage under cultivation. Some of the inputs, for example: fertilizers, pesticides and seeds are cross-checked with imports and local production figures.

Fruits and flowers: Monthly area harvested and production of banana and pineapple are obtained from AREU. As regards other fruits, the number of trees in bearing age is based on the "1985 Fruit Trees Survey" carried out by the Extension Service Division of the Ministry of Agriculture, Fisheries and Natural Resources. Production is estimated using average yield per tree, taking into account the climatic factor. This production is valued at basic prices.

The main source of data for estimating gross output of flowers is export data. A separate estimate is worked out for locally sold flowers, based on the number of weddings, deaths, religious ceremonies, etc.

(iii) Livestock, poultry and related products

The Mauritius Meat Authority (MMA) forwards a monthly return on the number of heads and carcass weight of local/imported cattle, sheep, goats and pigs slaughtered at the abattoir. To these, are added the weight of off-abattoir slaughters estimated from permits issued by the Ministry of Agro – Industry and Fisheries. The total quantity multiplied by a weighted average "retail price less transport cost and retail margin" gives the gross output at basic prices. Estimates of intermediate expenditure on cattle feeds, salt and water etc. are made and deducted from the gross output to obtain value added.

Data on poultry and egg production are obtained through the questionnaires sent to all large producers. These data are supplemented with estimates made for small breeders and backyard production, based on the number of broilers and on the quantity of feeds they purchased.

Data on milk production are obtained from the Animal Production Division of the Ministry of Agro – Industry and Fisheries.

(iv) Forestry and hunting

Estimates of forestry production, namely wood processed by sawmills and, to a lesser extent, firewood is made on the basis of information obtained from the Forestry Department.

Deer hunting is undertaken during a specific period of the year. The associations of hunters provide data on the production of venison. This is valued at basic prices as for other livestock.

Intermediate costs for both forestry and hunting are negligible so that the gross output is composed essentially of value added.

(v) Fishing

The Albion Fisheries Research Centre (AFRC) of the Ministry of Agro – Industry and Fisheries provides data on the quantity of fish caught. Separate figures are given in respect of lagoon and bank fishing. These are then valued at basic prices by deducting transport cost and retail margin from its retail price value. Intermediate inputs for lagoon fishing are low as the fishermen who are engaged in fishing in coastal waters, use artisanal methods and the catch is usually sold fresh. Bank fishing involves higher costs as the fish are caught in high seas in larger vessels. Establishments engaged in bank fishing are surveyed by a mail questionnaire and a production account is worked out from information thus received.

(vi) Agricultural services**(a) Government**

The government accounts are prepared by the Accountant-General's Department. The Government agricultural services cover all agricultural services falling under the Ministry of Agro – Industry and Fisheries, excluding the central administration of the Ministry.

Gross output, valued as the sum of production costs, is estimated as follows:

$$\begin{aligned} \text{Gross output} &= \text{Intermediate consumption} \\ &+ \text{compensation of employees} \\ &+ \text{consumption of fixed capital} \end{aligned}$$

(b) Non-government

Establishments engaged in non-government agricultural services provide services like land preparation, de-rocking, etc. Their respective production accounts are worked out from statistics obtained from direct surveys.

1.2 Sugar industry

Value added generated by the sugar industry is attributed, for national accounting purposes, to the following industrial activity groups:

Agriculture: the final product is sugar cane. Both millers and planters are engaged in its production.

Manufacturing: the final product is sugar and its by-products - molasses, scum and electricity which excludes Independent Power Producers (IPPs). Only millers are engaged in this activity.

Transport: includes only the millers' own account transport of sugar cane, sugar and other inputs.

Distribution: includes activities of brokers, shippers and the Mauritius Sugar Syndicate.

(a) Methodology

The period from the growing stage up to the marketing of all sugar produced covers eighteen months. Production is valued on an accrual basis, so that output relating to crop year, say, 2002/2003 is treated as production for calendar year 2002. The sugar cane crop of a given year normally extends from July to June of the following year.

Sugar is marketed solely through the Mauritius Sugar Syndicate. This agency provides data on value and price of sugar, both local sales and exports' proceeds. All the expenses incurred in respect of marketing are also given.

Production accounts of all sugar estates with factories are worked out from the aggregated data on expenditure presented in the statements: "Analysis of expenditure of Sugar Estate with Factories" and "Analysis of production costs", compiled by the Mauritius Chamber of Agriculture.

The items of expenditure therein are scrutinised and then allocated to the intermediate expenses of the respective industrial activity groups mentioned in Section 1.2.

(b) Production accounts

Separate accounts are prepared in respect of millers and planters.

The gross proceeds from the sales of sugar and its by-products are obtained from the Mauritius Sugar Syndicate. The gross output of agriculture comprises 76% of the gross proceeds as the remaining 24% accrues to millers to cover the milling cost.

Intermediate expenses in respect of sugarcane cultivation owned by millers are extracted from the statements provided by the Mauritius Chamber of Agriculture. As regards owner planters, the country is divided into four main regions and detailed production cost per arpent is prepared regionwise based on information collected from personal interviews of planters. Intermediate consumption also takes into consideration expenditure incurred on new plantations – a 'ratooning' cycle of 10 years is assumed.

Manufacturing: The gross output is worked out from the gross proceeds of sugar. The main item under goods consumed is sugarcane; other inputs include milling cost and marketing expenses which are obtained from the Mauritius Chamber of Agriculture and the Mauritius Sugar Syndicate.

Transport: The sugar estates and millers provide their own means of transport. Most of their canes, sugar and other inputs are transported by their own lorries. The 'Transport' activity is valued at cost. The expenditure incurred in respect of purchases of materials and services, compensation of employees and consumption of fixed capital are obtained from the statement, "Analysis of expenditure of Sugar Estates with Factories" published by the Mauritius Chamber of Agriculture. The total of these aggregates gives the gross output. Transport cost is then imputed, on a pro-rata basis, to the intermediate consumption expenditure of the agriculture and manufacturing sectors.

Distribution: The gross output is computed from the related expenditure items as given in the Mauritius Sugar Syndicate report. The cost component consists mainly of elements of value added.

PART III – STATISTICAL TABLES AND ANALYSIS

1. Overview of main agricultural statistics – 2005

1.1 Value added of agriculture

Value added at current basic prices of the agricultural sector was Rs 9,448 million in 2005, representing a decline of 2.2% compared to the 2004 figure of Rs 9,664 million. In real terms, it decreased by 5.3%. This is explained by decreases of 9.2% and 1.0% in sugar cane and “other agriculture” respectively. (Tables 1.1 & 1.5)

1.2 Share of agriculture in GDP

The share of agriculture to GDP declined from 6.3% in 2004 to 5.8% in 2005. (Table 1.1)

The share of the sugar industry in GDP was 3.9%.

1.3 Employment in agriculture

Employment in agriculture was 49,000 in 2005, same as in 2004. Employment in large establishments decreased by 1.5 % from 22,645 in 2004 to 22,990 in 2005, while employment in small establishments increased by 1.3 % from 26,010 to 26,355. (Tables 1.1 and 1.11)

It is to be noted that the “Voluntary Retirement Scheme (VRS)” in the sugar industry started in 2001 and by end of year 2004, 8,207 workers of the industry had opted for VRS.

1.4 Sugar cane

Figures refer to the crop year, that is starting in July of the reference year up to June of the following year. Sugar cane fields are classified according to agro-climatic conditions in the following five regions: North, South, East, West and Centre.

The area under sugar cane in 2005 was 71,583 hectares, which was 1.9 % lower than the 72,955 hectares in 2004. (Table 2.3)

An area of 68,351 hectares under sugar cane was harvested in 2005 as compared to 69,698 hectares in 2004, showing a reduction of 1.9%. (Table 2.4)

The cane yield per hectare for the whole island dropped by 3.8% from 75.8 tonnes in 2004 to 72.9 tonnes in 2005. This was due to the combined effect of decreases in cane yield in the North (14.1%), East (2.9%) and West (1.2%) and increases in the Centre (2.3%) and South (1.0%). (Tables 2.4 and 2.5)