

Sri Lanka

Department of Census and Statistics, Ministry of Finance and Planning

Crop Estimating Survey on Paddy (Yala) - 2011

Study Documentation

October 1, 2013

Metadata Production

Metadata Producer(s)	Department of Census and Statistics (DCS) , Ministry Of Finance and Planning , Conducting the survey
Production Date	October 10, 2009
Version	Version 1.0 (2009)
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Sri Lanka (2011)

Crop Estimating Survey on Paddy (Yala) - 2011 (CESP[Y] 2011)**Overview**

Type	Agricultural Survey [ag/oth]
Identification	LKA-DCS-CESP[Y]-2011-v1.0
Version	Production Date: 2009-09-10 V1.0: Full edited dataset, original version for internal DPD Use
Series	<p>This survey was started in the year 1950. It is conducted in Yala and Maha seasons with a view to estimate the average yield of paddy and production by District. In a Maha season about 6000 and in a Yala season about 4000 experiments are being conducted for this survey and it is the only source to estimate the country's paddy production. The findings are essential to calculate various important figures such as volume of additional rice requirement of the country to be imported</p> <p>This survey is carried out in each season of a cultivation year to collect the paddy extent under categories namely;</p> <ul style="list-style-type: none"> Aswedduumized Extent Sown Extent Harvested Extent <p>Paddy extent is estimated on the basis of complete enumeration of paddy parcels in the county covering both Maha and Yala seasons.</p> <p>All these variables are being collected through a form known as P1. The extent categories are again classified by type of irrigation namely;</p> <ul style="list-style-type: none"> Major Irrigation Schemes Minor Irrigation Schemes Rain-fed

Abstract

Crop estimating survey on paddy which is popularly known as "Crop Cutting Survey" commenced in the year 1950. It is conducted in Maha and Yala season with a view to estimate the average yield of paddy and production by District. In a Maha season about 6,000 and in a Yala season about 4,000 experiments are being conducted for this survey and it is the only source to estimate the country's paddy production. Policy Planners are benefited by these data in numerous ways for taking the decisions such as volume of additional rice requirement of the country to be imported in time, evaluation of extension programs undertaken to uplift the average yields of paddy, pricing policies of rice, mobilization of stocks from one place to another and many more. Therefore, it is a great responsibility to estimate paddy production accurately and timely to fulfill the national requirement.

Field staff attached to each District has been entrusted with many responsibilities on various data collection activities and among them, method of data collection for crop cutting is different from the other surveys. This survey is associated with an objective approach; as such crop cutting officers should carry out experiments in the field by themselves. According to the standard procedure, the crop cutting officer must visit the selected paddy field and they should follow a number of steps such as; demarcate the specified plot of land equivalent to 16' ½" X 16' 1/2" (a paddy land of one perch of an acre), harvest the crop of the plot, thresh the grain, measure the grain

using standard set of seers and finally report the results through the prescribed form CC3.

Special remarks - effective from 2005/2006 Maha Season

In order to perform these steps, Crop Cutting Officers should get the fullest co-operation from selected farmers. According to the available information, the whole process of conducting such an experiment takes around three hours. Also, all steps are being performed manually in many occasions. It is obvious that the crop cutting is a laborious procedure at present. Considering the volume of work and practical difficulties which could affect negatively, it is a must to introduce an updated method in order to maintain the quality of data. Some of the suggestions to overcome this burden are as follows.

- (1) Reduce the volume and time of involvement of the officers
- (2) Introduce modern equipment to thresh the grain or assess the paddy yield of the plot.
- (3) Replace the current methodology with an alternative survey procedure.

As an initial step, the Agriculture Division of DCS in line with above suggestion noted in (1) a pilot survey has been conducted in Kegalle District in the 2005/06 Maha season. This was extended to Matara and Kurunegala Districts during the Maha 2007/08, by reducing the experimental plot size to half of that of the standard plot which is used at present. Now, the Agriculture Division is statistically testing the results of the pilot survey against the results of the standard survey conducted hitherto. If there is no significant difference between these two, the new plot size would be introduced in the near future.

Concepts, Definitions and Classifications associated with Crop Estimation of Paddy Survey

Seasons - In Sri Lanka there are two major cultivation seasons associated with two monsoons and they are known as Maha season and Yala Season.

Maha Season is the main season associated with North-east monsoons effective during September - April in the following year. When a particular crop is planted and harvested during this period is known to be Maha Crop.

Yala season is the secondary season which is associated with South-west monsoons effective during the period between May to September. When a particular crop is planted and harvested during this period is known to be Yala Crop.

Mode of Irrigation

There are three type of irrigations related with paddy cultivation. They are (1). Major Irrigation schemes (2). Minor Irrigation schemes (3). Rain-fed schemes.

Major Irrigation schemes defined to be an irrigated scheme of which water is fed to more than 200 acres otherwise it defines as a Minor Irrigation scheme.

Rain-fed is defined, if the cultivated extent is purely depending on rain water in absence of permanent water tank or reservoir.

Volume of Production is reported in Metric Tons.

Average Yield per acre or Hectare: An Indicator of productivity per area unit (2.471 acres = 1 hectare while 1 hectare is equal to 1,000 square meters) estimated through crop cutting survey. Average yield per acre is reported in Bushels while per hectare is reported in Kgs.

Average yield is expressed in terms of Paddy (grain with the husk form but not in Rice form)

Area Harvested refers to the gross area of which the harvest is gathered excluding the area damaged due to different causes.

Gross Area refers to the extent of which reported by enumerators or respondents based on cultivated extent estimated by seed rates but not based on cadastral surveys while Net Area refers to the extent evolved by deducting the extent set apart for bunds and ridges.

Production for a year should consider to be the sum of the production of Maha season and Yala season. For instance the production of the year 2005 is to be the sum of 2004/05 Maha season and Yala season of 2005.

Kind of Data	Sample survey data [ssd]
Unit of Analysis	Paddy land Parcel 16 1/2" X 16 1/2", Where smaller experimental plot sizes are used in terraced fields, the actual length and breadth of these plots should be deducted.

Scope & Coverage

Scope

Geographical information

Paddy parcel information

System of tenure

Method of preparation of land

Variety of seed

Method of sowing

Application of Fertilizer

Weeding

Insects/Fungus control

Adverse affects on crop

Yield

Topics agricultural, forestry and rural industry [2.1]

Geographic Coverage

National Coverage

Universe

The survey covered a random sample from all the paddy lands in Sri Lanka

Producers & Sponsors

Primary Investigator(s) Department of Census and Statistics, Ministry of Finance and Planning

Funding Agency/ies Government of Sri Lanka (GOSL)

Sampling

Sampling Procedure

Sampling Design: The sampling design adopted in the survey is a stratified multistage sampling method where DS Divisions were treated as strata and mode of irrigation schemes namely; Major, Minor, and Rain-fed as sub strata. Number of villages to be selected for crop cutting experiments in each scheme is decided on the basis of the

following proportions.

Acreage sown in the previous corresponding season	Number of villages to be selected
< 500 Acres	3
500 - <1000 Acres	5
1000 - < 5000 Acres	10
5000 - < 10,000 Acres	15
10,000 - < 15,000 Acres	20
15,000 - < 20,000 Acres	25
20,000 Acres and above	30

Though the recommended design is such, considering the sampling variances occurred during the previous seasons, the number of experimental villages to be selected is being curtailed in order to keep the number of villages within a range of 3,000 for a Maha season and 2,000 for a Yala season in a year. Other reasons for such restrictions were related to practical aspects like cost of the survey and number of personnel that could be deployed to carry out crop cuttings.

In each selected village two crop cutting experiments are conducted. The whole procedure in conducting the experiment is stated in detail in the manual of Crop Cutting Experiments prepared by the Agriculture Division. At present the sample villages and the parcels are selected at random. However, prior to 1980, selection of villages as well as parcels was done at random with probability proportional to the area cultivated during the previous corresponding season with replacement. As the procedure was somewhat laborious and time consuming, it was replaced with the present system i.e. both stages at random. Sample villages are selected in the head office while the selections of parcels are done at the respective Districts.

Controlling of Non-sampling Errors: In view of the accuracy of the experimental results, a sample of 1/5 of selected villages are to be supervised by executive officers/District Heads identified from the District such as DS/GA, Divisional Secretary, Director/Deputy Director of Agriculture, Deputy Commissioners of Agrarian Development in addition to the Senior Staff of DCS attached to the District. Spot checks are to be performed by them by visiting the sample villages.

Estimation of Average Yield of Paddy

Average yield of paddy per acre/hectare by mode of irrigation and by District is being estimated through an objective survey which is popularly known as crop cutting survey on paddy. This has been initiated in 1950 and the methodology introduced by Dr. Koshal, Statistician of FAO (an Indian expert) under the assistance of FAO. From time to time some modifications have been introduced and the procedure is still in operation to estimate the paddy production in each season.

Data Collection

Data Collection Dates	Yala: start 2011-01-01 Yala: end 2011-12-31
Data Collection Mode	Face-to-face [f2f]

Data Collection Notes

Crop Cutting Officers: Once the list of villages are transmitted to the Statistics Branch of the respective District, the Head of the Division Deputy Director/Senior Statistician/Statistician has to identify the crop cutting officers who are to be suitable for conducting these experiments in the selected villages. Guideline is to choose them preferably out of the field officers attached to the respective DS Divisions who are related to the discipline of agriculture such as Agricultural Officers/Agricultural Instructors of the Ministry of Agriculture, Divisional Officers of Department of Agrarian Development, Colonization Officers, etc. in addition to the Range Statistical Officers of

DCS. Range Statistical Officers should undertake at least three experiments in his range. The direction is to discuss this matter in the District Agriculture Committee Meeting (DAC) held once in a month chaired by District Secretary/Government Agent and then assign the villages in concurrence with the DS/GA

The Statistical officer (SO) or the Agriculture Instructor (AI) in the area visits the selected paddy land along with the farmer and cuts the crop in the demarcated area. The crop is measured in Seers then and there and the yield is recorded. Then in the same way yield for the other parcel is recorded. The crop collected for measuring is returned to the farmer. In addition to the yield recorded in this manner, other relevant information requested in the form C.C.3 has to be collected .

Ancillary Information: When crop cuttings are done in the field, in addition to sample fields selected for crop cuttings, an extra set of sample (four parcels) fields are selected to collect ancillary information related to the paddy crop viz. usage inputs, system of tenure, variety of seed, etc. Along with the final estimates on production and average yield the estimated extent related to the above characteristics are being disseminated.

Questionnaires

The questionnaire is Form C.C.3 printed in Sinhala/English and Tamil/English languages. It has three parts.

Part I is about the geographical and Paddy land parcel information.

Part II includes System of tenure, Method of preparation of land, Variety of seed, Method of sowing, Application of Fertilizer, Weeding, Insecticides, Fungicides, Adverse affects on crop.

Part III Collects yield information.

In the questionnaire the above information is recorded for two parcels selected for the survey. The same Form C.C.3 is used to collect data for both Yala and Maha seasons. Maha Season falls during "North-east monsoon" from September to March in the following year. Yala season is effective during the period from May to end of August.

Data Collector(s)	
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Supervision

"Agricultural Research and Production Assistants (ARPO) earlier known as "Govi Sevana Niyamakas" of Agrarian Development Department attached to Agrarian Service Centers do play the role of "Primary Reporters" to report the extent in P1 form which is parcel-wise enumeration of all paddy growing parcels.

They list out the area Aswedduumized, Sown and Harvested in Maha and Yala seasons at village/Yaya,Tract/Kandam in the prescribed form. Here the "paddy parcel" is defined to be piece/plot of land cultivated by one individual farmer or group of farmers jointly surrounded by another paddy parcel cultivated by another individual farmer or group of farmers or any land cultivated with crops other than paddy or uncultivated land such as road, stream etc.

The paddy extent thus enumerated is summarized by Village/Yaya/Tract/Kandam and transferred to the form known as P2 which gives the aggregate extent under paddy by above categories and by irrigation modes at GN division level and by DS level. This form is prepared by the Range Statistical Officer attached to a particular DS. During the Yala season the sown and harvested extents are recorded while aswedduumized extent is updated, only if there occurs a change.

However, it is to be noted that the Districts where ARPOs are not appointed, Grama Niladaris (GNN) are still acting as primary reporters for the collection of paddy statistics as well as other agricultural statistics. This is specifically true for Northern and Eastern Provinces.

The aggregate extent prepared for DS level leads to the compilation of paddy extent at various higher levels such as District and All Island Level. It is important to note that the extent reported/listed in the P1 form is the "Gross Extent" since the extent of most of the paddy parcels are not based on any cadastral survey or measures, but reported extent are based on seed rates or traditional measurement or guesstimates as per the knowledge of respective farmers. This gross extent is ultimately converted to net-extent by applying correction factors which were determined at District level through a land measurement survey carried out by means of a sample of paddy parcels with the assistance of the Survey General Department in 1970s.

The list prepared by the primary reporters in the P1 form acts as the basis for the selection of sample of paddy parcels while the list of paddy growing villages compiled in the P2 form acts the basis to select villages for the National Crop Cutting Survey on Paddy conducted by the Agriculture and Environment Statistics Division of DCS.

Data Processing & Appraisal

Other Processing

Average yield per acre/hectare of paddy is estimated at the Head quarters in Colombo, based on the crop cutting sample data received from the Districts using a DBASE program and SPSS software customized for this purpose by the Agriculture and Environment Statistics Division of DCS. Prior to final processing manual coding, verifications of data entries and checking outliers are performed

Data in the Form C.C.3 are entered District-wise by about 10 Data Entry Operators / Coding Clerks into a dBase III database. Then the databases they generate are merged to get the total file for the survey. This file which is in dbase form is imported to SPSS to produce standard tables.

Estimates of Sampling Error

Formulae needed to calculate Avg. Yield & Variance for a given Stratum is available in the External Resource Section.

Accessibility

Access Authority	Director General (Department of Census and Statistics) , http://www.statistics.gov.lk , dgcensus@statistics.gov.lk
Contact(s)	Director General (Department of Census and Statistics) , http://www.statistics.gov.lk , dgcensus@sltnet.lk Agriculture and Environment Statistics Division (Department of Census and Statistics) , http://www.statistics.gov.lk/agriculture/index.htm , agriculture@statistics.gov.lk Information Unit (Department of Census and Statistics) , http://www.statistics.gov.lk , information@statistics.gov.lk

Confidentiality

Under the Statistical ordinance, micro data cannot be released with identifications for public use. Procedures are in place to ensure that information relating to any particular individual person, household or undertaking will be kept strictly confidential and will not be divulged to external parties. Information on individual or individual Household/establishment will not be divulged or published in such a form that will facilitate the identification of any particular person or establishment as the data have been collected under the Census/Statistical ordinance, according to which the information at individual level cannot be divulged and such information is strictly confidential.

Access Conditions

The dataset has been anonymized and is available as a Public Use Dataset. It is accessible to all for statistical and research purposes only, under the following terms and conditions:

1. The data and other materials will not be redistributed or sold to other individuals, institutions, or organizations without the written agreement.
2. The data will be used for statistical and scientific research purposes only. They will be used solely for reporting of aggregated information, and not for investigation of specific individuals or organizations.
3. No attempt will be made to re-identify respondents, and no use will be made of the identity of any person or establishment discovered inadvertently.
4. No attempt will be made to produce links among datasets provided by the Department or among data from the Department and other datasets that could identify individuals or organizations.
5. Any books, articles, conference papers, theses, dissertations, reports, or other publications that employ data obtained from the Department will cite the source of data in accordance with the Citation Requirement provided with each dataset.
6. An electronic copy of all reports and publications based on the requested data will be sent to the Department

The following rules apply to micro data released by the Department of Census and Statistics.

- Only the requests of Government Institutions, Recognized Universities, Students, and selected international agencies are entertained. However, the Data users are required to strictly adhere to the terms stipulated in the agreement form.
- All the data requests should be made to Director General (DG) of the DCS as the sole authority of releasing data is vested with the DG of the DCS. The DCS of Sri Lanka reserves sole right to approve or reject any data request made depending on the confidential nature of the data set and intended purpose of the study or analysis.
- Requests for micro data should be made through the agreement form designed by DCS for this purpose (Form D.R.1). The agreement form should be filled in triplicate and the Study/project proposal should accompany the filled agreement form. If requests are made for the micro data of more than one survey, a separate agreement should be signed.
- If the data request is from a student a letter from the respective Dept. Head/Dean/Supervisor, recommending the issue of data, should also be accompanied.
- If the request is approved only 25% of the data file is released at the first stage. The release of the total data file is considered only after reviewing the draft report prepared on the basis of the 25% sample data file.
- The released Data file should be used only for the specific study/Analysis mentioned in the agreement form and shall not be used for any other purpose without the prior approval of the Director General of the DCS. Moreover, Copies of the micro-data file, obtained from the DCS, shall not be given to anyone else without the prior written approval of the Director General of the DCS.
- The draft report of the Study/Analysis should be submitted to the DCS and the concurrence of the DG of the DCS, should be obtained before publishing it. Once published, a copy of the final report should be submitted to the DCS.

[Department : The Department of Census and Statistics (DCS)]

Source : http://www.statistics.gov.lk/databases/data_dissemination/DataDissaPolicy_2007Oct26.pdf

Citation Requirements

Department of Census and Statistics, Crop Estimation Survey on Paddy [Yala] 2008 [CESP(Y)2008], Version 1.0 of the internal use dataset September, 2009 provided by the National Data Archive, Data Processing Division, www.statistics.gov.lk"

Rights & Disclaimer

Disclaimer

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Files Description

Dataset contains 1 file(s)

Yala 2011	
# Cases	5204
# Variable(s)	37

Variables List

Dataset contains 37 variable(s)

File Yala 2011							
#	Name	Label	Type	Format	Valid	Invalid	Question
1	SNO	Serial Number	continuous	numeric-5.0	5204	0	-
2	QA	a. District	discrete	numeric-2.0	5204	0	-
3	QB	b. D.S Division	continuous	numeric-2.0	5204	0	-
4	QD	d. G.N Division	discrete	numeric-3.0	5204	0	-
5	QE	e. Village	continuous	numeric-2.0	5204	0	-
6	QAM	a. Mahaweli System	continuous	numeric-2.0	5204	0	-
7	QBM	b. Block Manager's Division	continuous	numeric-2.0	5204	0	-
8	QDM	d. Unit Manager's Division	discrete	numeric-3.0	5204	0	-
9	QC	c. A.S. Centre	discrete	numeric-4.0	5204	0	-
10	QF	f. Mode of Irrigation	discrete	numeric-1.0	5204	0	-
11	P2LAA	I. Extent sown in Parcel - A	continuous	numeric-4.0	5204	0	-
12	P2LRA	I. Extent sown in Parcel - R	discrete	numeric-1.0	5204	0	-
13	P2LPA	I. Extent sown in Parcel - P	continuous	numeric-2.0	5204	0	-
14	P2Q1A	1. System of Tenure	discrete	numeric-1.0	5204	0	-
15	P2Q21A	2.1 Method of preparation of land - By Tractor	discrete	numeric-1.0	5204	0	-
16	P2Q22A	2.2 Method of preparation of land - Buffalo Ploughed	discrete	numeric-1.0	5204	0	-
17	P2Q23A	2.3 Method of preparation of land - Buffalo Muddled	discrete	numeric-1.0	5204	0	-
18	P2Q24A	2.4 Method of preparation of land - By Mamote / Hoe	discrete	numeric-1.0	5204	0	-
19	P2Q25A	2.5 Did you use weedicide	discrete	numeric-1.0	5204	0	-
20	P2Q3A	3. Source of obtaining seed Paddy	discrete	numeric-1.0	5204	0	-
21	P2Q4A	4. Variety of seed Paddy	discrete	numeric-1.0	5204	0	-
22	P2Q5A	5. Method of Sowing	discrete	numeric-1.0	5204	0	-
23	P2Q6A	6. Application of Fertilizer	discrete	numeric-1.0	5204	0	-
24	P2Q651A	6.5.1. Used Quantity - MOP (Kg)	continuous	numeric-4.0	5204	0	-
25	P2Q652A	6.5.2. Used Quantity - TSP (Kg)	continuous	numeric-4.0	5204	0	-
26	P2Q653A	6.5.3. Used Quantity - Urea (Kg)	continuous	numeric-4.0	5204	0	-
27	P2Q7A	7. Weeding	discrete	numeric-1.0	5204	0	-
28	P2Q8A	8. Insecticide	discrete	numeric-1.0	5204	0	-

Crop Estimating Survey on Paddy (Yala) - 2011 - Variables List

File Yala 2011 (cont.)							
#	Name	Label	Type	Format	Valid	Invalid	Question
29	P2Q9A	9. Adverse affects on crop	discrete	numeric-1.0	5204	0	-
30	P2Q10A	10. Method of Harvesting	discrete	numeric-1.0	5204	0	-
31	P2Q11A	11. Method of Thresing	discrete	numeric-1.0	5204	0	-
32	P2Q12A	12. Use of Straw	discrete	numeric-1.0	5204	0	-
33	P3Q2A	i. Yield - Seer	continuous	numeric-6.2	5204	0	-
34	P3Q6A	vi. Expected Yield (Bushels)	continuous	numeric-5.0	5204	0	-
35	P3Q7A	vii. Intend to do for your share of yield	discrete	numeric-1.0	5204	0	-
36	DISTCOPY	a. District	discrete	numeric-2.0	5204	0	-
37	filter_ <u>\$</u>	P3Q2A > 0 (FILTER)	discrete	numeric-1.0	5204	0	-

Variables Description

Dataset contains 37 variable(s)

File Yala 2011

#1 SNO: Serial Number

Information	[Type= continuous] [Format=numeric] [Range= 1-14362] [Missing=*]
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-] [Mean=94.312 /-] [StdDev=288.745 /-]

#2 QA: a. District

Information	[Type= discrete] [Format=numeric] [Range= 11-92] [Missing=*]
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
11	Colombo	62	1.2%
12	Gampaha	170	3.3%
13	Kaluthara	332	6.4%
21	Kandy	340	6.5%
22	Mathale	156	3.0%
23	Nuwara Eliya	0	0.0%
27	Mahaweli "H"	58	1.1%
29	Udawalawe	196	3.8%
31	Galle	254	4.9%
32	Matara	286	5.5%
33	Hanbantota	222	4.3%
41	Jaffna	0	0.0%
42	Mannar	0	0.0%
43	Vavuniya	4	0.1%
44	Mullativu	0	0.0%
45	Kilinochchi	78	1.5%
51	Batticaloa	168	3.2%
52	Ampara	192	3.7%
53	Trincomalee	190	3.7%
61	Kurunegala	628	12.1%
62	Puttalam	442	8.5%
71	Anuradhapura	588	11.3%
72	Polonnaruwa	96	1.8%
81	Badulla	154	3.0%
82	Monaragala	162	3.1%
91	Ratnapura	248	4.8%
92	Kegalle	178	3.4%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

File Yala 2011 (cont.)

#3 QB: b. D.S Division

Information	[Type= continuous] [Format=numeric] [Range= 0-92] [Missing=*]
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-] [Mean=24.069 /-] [StdDev=17.011 /-]

#4 QD: d. G.N Division

Information	[Type= discrete] [Format=numeric] [Range= 0-3] [Missing=*]
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
0		5194	99.8%
1		4	0.1%
2		4	0.1%
3		2	0.0%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#5 QE: e. Village

Information	[Type= continuous] [Format=numeric] [Range= 0-70] [Missing=*]
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-] [Mean=4.725 /-] [StdDev=7.81 /-]

#6 QAM: a. Mahaweli System

Information	[Type= continuous] [Format=numeric] [Range= 0-29] [Missing=*]
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-] [Mean=1.577 /-] [StdDev=6.37 /-]

#7 QBM: b. Block Manager's Division

Information	[Type= continuous] [Format=numeric] [Range= 0-28] [Missing=*]
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-] [Mean=0.496 /-] [StdDev=2.251 /-]

#8 QDM: d. Unit Manager's Division

Information	[Type= discrete] [Format=numeric] [Range= 0-0] [Missing=*]
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
0		5204	100.0%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#9 QC: c. A.S. Centre

Information	[Type= discrete] [Format=numeric] [Range= 0-8] [Missing=*]
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File Yala 2011 (cont.)

#9 QC: c. A.S. Centre (cont.)

Statistics [NW/ W] [Valid=5204 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
0		5200	99.9%
1		2	0.0%
8		2	0.0%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#10 QF: f. Mode of Irrigation

Information [Type= discrete] [Format=numeric] [Range= 0-3] [Missing=*]

Statistics [NW/ W] [Valid=5204 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
0		2	0.0%
1	Major	2108	40.5%
2	Minor	1780	34.2%
3	Rainfed	1314	25.2%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#11 P2LAA: I. Extent sown in Parcel - A

Information [Type= continuous] [Format=numeric] [Range= 0-95] [Missing=*]

Statistics [NW/ W] [Valid=5204 /-] [Invalid=0 /-] [Mean=1.097 /-] [StdDev=1.916 /-]

#12 P2LRA: I. Extent sown in Parcel - R

Information [Type= discrete] [Format=numeric] [Range= 0-6] [Missing=*]

Statistics [NW/ W] [Valid=5204 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
0		2378	45.7%
1		672	12.9%
2		1707	32.8%
3		445	8.6%
5		1	0.0%
6		1	0.0%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#13 P2LPA: I. Extent sown in Parcel - P

Information [Type= continuous] [Format=numeric] [Range= 0-38] [Missing=*]

Statistics [NW/ W] [Valid=5204 /-] [Invalid=0 /-] [Mean=2.131 /-] [StdDev=6.678 /-]

File Yala 2011 (cont.)

#14 P2Q1A: 1. System of Tenure

Information	[Type= discrete] [Format=numeric] [Range= 0-4] [Missing=*]		
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]		
Value	Label	Cases	Percentage
0		129	2.5%
1	Singly Owned	3724	71.6%
2	Jointly Owned	421	8.1%
3	Ande	784	15.1%
4	Other	146	2.8%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#15 P2Q21A: 2.1 Method of preparation of land - By Tractor

Information	[Type= discrete] [Format=numeric] [Range= 0-3] [Missing=*]		
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]		
Value	Label	Cases	Percentage
0		681	13.1%
1	By Tractor	4522	86.9%
3		1	0.0%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#16 P2Q22A: 2.2 Method of preparation of land - Buffalo Ploughed

Information	[Type= discrete] [Format=numeric] [Range= 0-2] [Missing=*]		
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]		
Value	Label	Cases	Percentage
0		4891	94.0%
2	Buffalo Ploughed	313	6.0%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#17 P2Q23A: 2.3 Method of preparation of land - Buffalo Muddled

Information	[Type= discrete] [Format=numeric] [Range= 0-3] [Missing=*]		
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]		
Value	Label	Cases	Percentage
0		5115	98.3%
3	Buffalo Muddled	89	1.7%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

File Yala 2011 (cont.)

#18 P2Q24A: 2.4 Method of preparation of land - By Mamote / Hoe

Information [Type= discrete] [Format=numeric] [Range= 0-4] [Missing=*]

Statistics [NW/ W] [Valid=5204 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
0		4836	92.9%
4	By Mamote/Hoe	368	7.1%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#19 P2Q25A: 2.5 Did you use weedicide

Information [Type= discrete] [Format=numeric] [Range= 0-2] [Missing=*]

Statistics [NW/ W] [Valid=5204 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
0		1930	37.1%
1	Yes	1333	25.6%
2	No	1941	37.3%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#20 P2Q3A: 3. Source of obtaining seed Paddy

Information [Type= discrete] [Format=numeric] [Range= 0-5] [Missing=*]

Statistics [NW/ W] [Valid=5204 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
0		284	5.5%
1	Owned	2013	38.7%
2	From other farmer	1508	29.0%
3	From Dept. of Agriculture	834	16.0%
4	From other approved source	511	9.8%
5	Other	54	1.0%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#21 P2Q4A: 4. Variety of seed Paddy

Information [Type= discrete] [Format=numeric] [Range= 0-5] [Missing=*]

Statistics [NW/ W] [Valid=5204 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
0		192	3.7%
1	Short Grain (Red)	323	6.2%
2	Long Grain (Red)	838	16.1%
3	Short Grain (White)	1189	22.8%

File Yala 2011 (cont.)

#21 P2Q4A: 4. Variety of seed Paddy (cont.)

Value (cont.)	Label	Cases	Percentage
4	Long Grain (White)	2620	50.3%
5	Other	42	0.8%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#22 P2Q5A: 5. Method of Sowing

Information	[Type= discrete] [Format=numeric] [Range= 0-5] [Missing=*]
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
0		145	2.8%
1	Broadcasting	4776	91.8%
2	Transplanted in Rows	53	1.0%
3	Transplanted not in Rows	192	3.7%
4	Parachute Method	28	0.5%
5	Other	10	0.2%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#23 P2Q6A: 6. Application of Fertilizer

Information	[Type= discrete] [Format=numeric] [Range= 0-4] [Missing=*]
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]

Value	Label	Cases	Percentage
0		200	3.8%
1	Chemical Fertilizer only	2776	53.3%
2	Organic Fertilizer only	131	2.5%
3	Both Chemical and Organic Fertilizer	1924	37.0%
4	None	173	3.3%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#24 P2Q651A: 6.5.1. Used Quantity - MOP (Kg)

Information	[Type= continuous] [Format=numeric] [Range= 0-4553] [Missing=*]
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-] [Mean=45.453 /-] [StdDev=114.332 /-]

#25 P2Q652A: 6.5.2. Used Quantity - TSP (Kg)

Information	[Type= continuous] [Format=numeric] [Range= 0-7500] [Missing=*]
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-] [Mean=48.157 /-] [StdDev=140.02 /-]

Crop Estimating Survey on Paddy (Yala) - 2011 - Variables Description

File Yala 2011 (cont.)

#26 P2Q653A: 6.5.3. Used Quantity - Urea (Kg)

Information	[Type= continuous] [Format=numeric] [Range= 0-3000] [Missing=*]
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-] [Mean=108.074 /-] [StdDev=123.722 /-]

#27 P2Q7A: 7. Weeding

Information	[Type= discrete] [Format=numeric] [Range= 0-5] [Missing=*]		
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]		
Value	Label	Cases	Percentage
0		134	2.6%
1	Hand Weeding	470	9.0%
2	Using Weedicide	4268	82.0%
3	By use of Water	108	2.1%
4	No Weeding	222	4.3%
5		2	0.0%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#28 P2Q8A: 8. Insecticide

Information	[Type= discrete] [Format=numeric] [Range= 0-2] [Missing=*]		
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]		
Value	Label	Cases	Percentage
0		265	5.1%
1	Used	3343	64.2%
2	Not Used	1596	30.7%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#29 P2Q9A: 9. Adverse affects on crop

Information	[Type= discrete] [Format=numeric] [Range= 0-7] [Missing=*]		
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]		
Value	Label	Cases	Percentage
0		585	11.2%
1	Drought	27	0.5%
2	Flood	26	0.5%
3	Pests	15	0.3%
4	Other Adverse factors	14	0.3%
5	Not affected	3771	72.5%
6	Affected but harvested	734	14.1%
7		32	0.6%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

Crop Estimating Survey on Paddy (Yala) - 2011 - Variables Description

File Yala 2011 (cont.)

#30 P2Q10A: 10. Method of Harvesting

Information	[Type= discrete] [Format=numeric] [Range= 0-2] [Missing=*]
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Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]
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Value	Label	Cases	Percentage
0		434	8.3%
1	By manually	3266	62.8%
2	By Threshing Machine	1504	28.9%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#31 P2Q11A: 11. Method of Threshing

Information	[Type= discrete] [Format=numeric] [Range= 0-6] [Missing=*]
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Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]
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Value	Label	Cases	Percentage
0		355	6.8%
1	By Buffalo	73	1.4%
2	By Tractor	503	9.7%
3	By Agrimec	1142	21.9%
4	By Tsunami Machine	1947	37.4%
5	By Combine Harvester	1152	22.1%
6	Manually / Other	32	0.6%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#32 P2Q12A: 12. Use of Straw

Information	[Type= discrete] [Format=numeric] [Range= 0-5] [Missing=*]
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Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]
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Value	Label	Cases	Percentage
0		397	7.6%
1	Use of straw in the parcel	3937	75.7%
2	Firing	460	8.8%
3	For animal feed	154	3.0%
4	For roofing	9	0.2%
5	Other	247	4.7%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#33 P3Q2A: i. Yield - Seer

Information	[Type= continuous] [Format=numeric] [Range= 0-60] [Missing=*]
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Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-] [Mean=6.761 /-] [StdDev=9.732 /-]
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File Yala 2011 (cont.)

#34 P3Q6A: vi. Expected Yield (Bushels)

Information	[Type= continuous] [Format=numeric] [Range= 0-8120] [Missing=*]
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Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-] [Mean=66.798 /-] [StdDev=296.542 /-]
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#35 P3Q7A: vii. Intend to do for your share of yield

Information	[Type= discrete] [Format=numeric] [Range= 0-4] [Missing=*]
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Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]
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Value	Label	Cases	Percentage
0		1382	26.6%
1	For Home consumption only	1118	21.5%
2	For sale only	91	1.7%
3	For Home consumption and sale	2570	49.4%
4	Other	43	0.8%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#36 DISTCOPY: a. Distrcit

Information	[Type= discrete] [Format=numeric] [Range= 11-92] [Missing=*]
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Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]
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Value	Label	Cases	Percentage
11	Colombo	62	1.2%
12	Gampaha	170	3.3%
13	Kaluthara	332	6.4%
21	Kandy	340	6.5%
22	Mathale	156	3.0%
23	Nuwara Eliya	0	0.0%
31	Galle	254	4.9%
32	Matara	286	5.5%
33	Hanbantota	344	6.6%
41	Jaffna	0	0.0%
42	Mannar	0	0.0%
43	Vavuniya	4	0.1%
44	Mullativu	0	0.0%
45	Kilinochchi	78	1.5%
51	Batticaloa	168	3.2%
52	Ampara	192	3.7%
53	Trincomalee	190	3.7%
61	Kurunegala	634	12.2%
62	Puttalam	442	8.5%
71	Anuradhapura	640	12.3%

File Yala 2011 (cont.)

#36 DISTCOPY: a. Distrcit (cont.)

Value (cont.)	Label	Cases	Percentage
72	Polonnaruwa	96	1.8%
81	Badulla	154	3.0%
82	Monaragala	210	4.0%
91	Ratnapura	274	5.3%
92	Kegalle	178	3.4%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#37 filter_\$: P3Q2A > 0 (FILTER)

Information	[Type= discrete] [Format= numeric] [Range= 0-1] [Missing= *]		
Statistics [NW/ W]	[Valid=5204 /-] [Invalid=0 /-]		
Value	Label	Cases	Percentage
0	Not Selected	3260	62.6%
1	Selected	1944	37.4%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

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Crop Estimation Survey on Paddy - Survey Schedule, "Documentation\CC3.pdf"

Technical documents

Formulae to Calculate Avg. Yield & Variance for a given Stratum, "Documentation\Formulae to Calculate Avg. Yield & Variance for a given Stratum.doc"

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Crop Estimation Survey on Paddy - Preliminary Cultivator Information Collecting Form, Form. C.C.1, "Documentation\CC1.pdf"

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