Ethiopia

Central Statistical Agency, Ministry of Finance and Economic Development

Agricultural Sample Survey 2006-2007 (1999 E.C)

Study Documentation

December 28, 2010

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Ethiopia (2006) Agricultural Sample Survey 2006-2007 (1999 E.C) (AgSS 2006-2007)

Overview	
Туре	Agricultural Survey [ag/oth]
Identification	ETH-CSA-AgSS-2006-v1.1
Version	Version 1.1: Edited and non anonymized dataset, for internal use only.

Abstract

The sound performance of agriculture warrants the availability of food crops. This accomplishment in agriculture does not only signify the adequate acquisition of food crops to attain food security, but also heralds a positive aspect of the economy. In regard to this, collective efforts are being geared to securing agricultural outputs of the desired level so that self reliance in food supply can be achieved and disaster caused food shortages be contained in the shortest possible time in Ethiopia. The prime role that agriculture plays in a country's political, economic and social stability makes measures of agricultural productions extremely sensitive. Statistics collected on agricultural productions are, therefore, fraught with questions of reliability by data users. To tackle these questions convincingly and dissipate the misgivings of users, information on agriculture has to be collected using standard procedures of data collection. Upholding this principle, the Central Statistical Agency (CSA) has been furnishing statistical information on the country's agriculture since 1980/81 to alert policy interventionists on the changes taking place in the agricultural sector. As part of this task the 2006-07 (1999 E.C) Agricultural Sample Survey (AgSS) was conducted to provide data on crop area and production of crops within the private peasant holdings for Main ("Meher") Season of the specified year.

The general objective of CSA's Agricultural Sample Survey (AgSS) is to collect basic quantitative information on the country's agriculture that is essential for planning, policy formulation, monitoring and evaluation of mainly food security and other agricultural activities.

The specific objectives of Main ("Meher") Season Post Harvest Survey are:

- To estimate the total crop area, volume of crop production and yield of crops for Main ("Meher") Season agriculture in Ethiopia.

- To estimate the total volume of inputs used, inputs applied area and number of holders using inputs.
- To estimate the total cultivated area and other forms of land use.

Kind of Data	Sample survey data [ssd]
Unit of Analysis	Agricultural household/ Holder/ Crop

Scope & Coverage

<u>Scope</u>

The scope of annual Agricultural Sample Survey included:

- Area identification and characteristics of agricultural holder's. This included household's geographic locations, holder's age, holder's sex and educational status.

- List of fields and agricultural practices for pure stand and mixed crops.
- List of permanent crops and number of tress.
- Records of quantity of improved seed, fertilizers and information on crop protection.
- Records of results of area measurements.
- List and selection of fields for crop cutting and details of record of crop cutting.

Geographic Coverage

The 2006-2007 (1999 E.C) annual Agricultural Sample Survey ("Meher" season) covered the entire rural parts of the country except Gambella Region, and the non-sedentary population of three zones of Afar & six zones of Somali regions.

Producers & Sponsors	
Primary Investigator(s)	Central Statistical Agency, Ministry of Finance and Economic Development
Funding Agency/ies	Government of Ethiopia (GoE)

Sampling

Sampling Procedure

Sampling Frame:

The list containing EAs of all regions and their respective agricultural households obtained from the 2001-2002 Ethiopian Agricultural Sample Enumeration (EASE) was used as the sampling frame in order to select the primary sampling units (EAs). Consequently, all sample EAs were selected from this frame based on the design proposed for the survey. Resettlement localities, on the other hand, are sub-samples of the list of all resettlements localities obtained from each region. The second stage sampling units, households, were selected from a fresh list of households that were prepared for each EA/ resettlement localities at the beginning of the survey.

Sample Design:

In order to select the sample a stratified two-stage cluster sample design was implemented. Enumeration areas (EAs) /resettlement localities were taken to be the primary sampling units (PSUs) and the secondary sampling units (SSUs) were agricultural households. The sample size for the 2006-2007 agricultural sample survey was determined by taking into account both the required level of precision for the most important estimates within each domain and the amount of resources allocated to the survey. In order to reduce non-sampling errors, manageability of the survey in terms of quality and operational control was also considered. Except Harari, Addis Ababa and Dire Dawa, where each region as a whole was taken to be the domain of estimation; each zone of a region / special wereda was adopted as a stratum for which major findings of the survey are reported. Moreover, values for the 2006/07 cultivated areas of crops and the expected amount of production for Gambella region are also provided. However, it is important to note that these values are not obtained from the survey but they are projections from the results of the 2003-2004 annual Crop Production Forecast Sample Survey.

Selection Scheme:

Enumeration areas/resettlement localities from each stratum were selected systematically using probability proportional to size sampling technique; size being number of agricultural households. The sizes for EAs were obtained from the 1994 Population & Housing Census and adjusted for the sub-sampling effect. Sizes for resettlement localities on the other hand were obtained from the 2004 listings of resettlement localities. From the fresh list of households prepared at the beginning of the survey 20 agricultural households within each sample EA/resettlement locality were selected systematically.

Note: Distribution of sampling units (sampled and covered EAs and resettlement localities) by stratum is also presented in Appendix III of 2006-2007 Agricultural Sample Survey, Volume I report which is provided as external resource.

Response Rate

To be covered by the survey, a total of 2,117 enumeration areas (EAs) and 250 resettlement localities were selected. However, due to various reasons that are beyond control, in 22 EAs and 2 resettlement localities the survey was disrupted. Thus, all in all the survey succeeded to cover 2,095 EAs and 248 resettlement localities (98.99%) throughout the regions. The Annual Agricultural Sample survey ("Meher" season) was conducted on the basis of 20 agricultural households selected from each EA/resettlement locality. Regarding the ultimate sampling units, it was intended to cover a total of 48,300 agricultural households, however, 46,702 (96.69%) were actually covered by the survey

Data Collection	
Data Collection Dates	start 2006-09 end 2006-12
Data Collection Mode	Face-to-face [f2f]

Data Collection Notes

Organization of field work:

The conduct of a survey cannot be executed without the arrangement of fieldwork. In recognition of this, the organization of fieldwork has been entrusted to the Department of Field Operations that liaises between the Head Office and the 25 Branch Statistical Offices spread across the regions. All Branch Offices took part in the survey execution especially in recruiting the enumerators, organizing the 2nd stage training, assigning the field staff to their sites of enumeration, supervising the data collection and retrieving completed questionnaires and submitting them to the Head Office for data processing. The Branch Offices were also responsible for administering the financial and logistic aspects of the survey within their areas of operation. A total of 2388 enumerators, 455 field supervisors, 25 coordinators and 50 statisticians were involved in the data collection. All the enumerators were supplied with the necessary survey equipment after the completion of the training to ensure the smooth operation of the survey. To facilitate the data collection activities, a total of 205 four-wheel drive vehicles were used.

Training of field staff:

The execution of a survey and quality of data acquired from the survey highly depend on the type of training given to the enumerators and supervisors and the consequent understanding of the tasks to be performed and the standard procedures to be followed by the enumerators and supervisors in the survey undertaking. The quality and completeness of data are ensured when the training meets its objective of producing responsible and fervent enumerators and supervisors. In light of this point, the training was given to the field staff in two stages. The first stage training, which took place at the Head Quarters of CSA and lasted 10 days targeted staff from the Head Office, statisticians and senior field supervisors from Branch Statistical Offices. The staff that took part in the first stage training was then assigned to conduct similar training for the enumerators and other supervisors for fifteen days in all the twenty- five Branch Statistical Offices, except in Gambella, distributed across the country. In the training the field staff was given detailed classroom instruction on how to collect data, method of area measurement, interviewing procedures, etc. The training also included field practice to reinforce the understanding of concepts, definitions and theories discussed in the classroom with regard to field measurement, crop cutting and interviewing methods.

Method of data collection:

The agricultural data for the year 2006-2007(1999 E.C) was collected from sedentary rural peasant households by interviewing the selected agricultural holders and physically measuring their fields to obtain data on crop yields and other items of interest. The data obtained were recorded in various forms designed for this purpose. Instruments like measuring tape; compass, kitchen balance, scientific calculators and others were used during data collection for a timely and smooth acquisition of accurate data. The procedures for measuring area under crop and area of non - crop fields operated by the holders were performed for the 30 selected households from each sampled E.A. using measuring tapes and compasses.

Questionnaires

The 2006-2007 annual Agricultural Sample Survey used structured questionnaires to collect agricultural information from selected sample households.

List of forms in the questionnaires:

- AgSS Form 99/0: It contains forms that used to list all households in the sample areas.
- AgSS Form 99/1: It contains forms that used to list selected households in the sample areas.
- AgSS Form 99/2A: It contains forms that used to collect information about crops, results of area measurements covered by crops and other land uses.

- AgSS Form 99/2B: It contains forms that used to collect information about miscellaneous questions for the holders.

- AgSS Form 99/4: It contains forms that used to collect information about list of temporary crop fields for selecting crop cutting plots.

- AgSS Form 99/5: It contains forms that used to collect information about list of temporary crop cutting results.

Note: The questionnaires are presented in the Appendix III of the 2006-2007 Agricultural Sample Survey report, Volume I which is provided as external resource.

Data Collector(s)	Central Statistical Agency of Ethiopia (CSA), Ministry of Finance and Economic
	Development

Data Processing & Appraisal

Data Editing

Editing, Coding and Verification:

Statistical data editing plays an important role in ensuring the quality of the collected survey data. It minimizes the effects of errors introduced while collecting data in the field, hence the need for data editing, coding and verification. Although coding and editing are done by the enumerators and supervisors in the field, respectively, verification of this task is done at the Head Office. An editing, coding and verification instruction manual was prepared and reproduced for this purpose. Then 43 editors-coders and verifiers were trained for two days in editing, coding and verification using the aforementioned manual as a reference and teaching aid. The completed questionnaires were edited, coded and later verified on a 100 % basis before the questionnaires took 35 days.

Data Entry, Cleaning and Tabulation:

Before data entry, the Natural Resources and Agricultural Statistics Department of the CSA prepared edit specification for the survey for use on personal computers for data consistency checking purposes. The data on the edited and coded questionnaires were then entered into personal computers. The data were then checked and cleaned using the edit specifications prepared earlier for this purpose. The data entry operation involved about 60 data encoders and it took 75 days to finish the job. Finally, summarization of the data was done on personal computers to produce statistical tables as per the tabulation plan.

Estimates of Sampling Error

Estimation procedure of totals, ratios, sampling error and the measurement of precision of estimates (CV) are given in Appendix I and II respectively of 2006-2007 Agricultural Sample Survey, Volume I report which is provided as external resource.

Accessibility	
Access Authority	Central Statistical Agency of Ethiopia (Ministry of Finance and Economic Development) , http://www.csa.gov.et , csa@csa.gov.et
Contact(s)	Data Administrator (Central Statistical Agency), http://www.csa.gov.et, data@csa.gov.et

Access Conditions

The Central Statistical Agency (CSA) is committed to achieving excellence in the provision of timely, reliable and affordable official statistics for informed decision making in order to maximize the welfare of all Ethiopians. This is achieved through the collection and analysis of censuses, surveys and the use of administrative data as well as the dissemination a range of statistical products and providing assistance and services to users.

A microdata dissemination policy is established by CSA to address the conditions and the manner in which anonymized microdata files may be released to users for research purposes. It also strives to identify the different levels of anonymization for different categories of data use. This policy is available at CSA website (http://www.csa.gov.et).

CSA will release microdata files for use by researchers for scientific research purposes when: The Director General is satisfied that all reasonable steps have been taken to prevent the identification of individual respondents. The release of the data will substantially enhance the analytic value of the data that have been collected For all but purely public files, researchers disclose the nature and objectives of their intended research, It can be demonstrated that there are no credible alternative sources for these data, and

The researchers have signed an appropriate undertaking.

Terms and conditions of use of public data files are the following:

The data and other materials provided by CSA will not be redistributed or sold to other individuals, institutions, or organizations without the written agreement of CSA.

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.

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. Any such discovery would immediately be reported to the CSA.

No attempt will be made to produce links among datasets provided by CSA, or among data from the CSA and other datasets that could identify individuals or organizations.

Any books, articles, conference papers, theses, dissertations, reports, or other publications that employ data obtained from CSA will cite the source of data in accordance with the Citation Requirement provided with each dataset.

An electronic copy of all reports and publications based on the requested data will be sent to CSA.

The original collector of the data, CSA, and the relevant funding agencies bear no responsibility for use of the data or for interpretations or inferences based upon such uses.

Cost Recovery Policy:

It is the policy of CSA to encourage broad use of its products by making them affordable for users. Accordingly, CSA attempts to ensure that the costs of creating anonymized microdata files are built-in to the survey budget.

At the same time, CSA attempts to recover costs associated with the provisions of special services that benefit only a specific group. Information on the price of each dataset is available at CSA website (www.csa.gov.et)

Citation Requirements

The following statement must be used as citation: "Central Statistical Authority of Ethiopia (CSA). Agricultural Sample Survey (AgSS2006-2007) "

Rights & Disclaimer

Disclaimer

The user of the data acknowledges that the original collector of the data, the authorized distributor of the data, and the relevant funding agency bear no responsibility for use of the data or for interpretations or inferences based upon such uses.

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Files Description

Dataset contains 3 file(s)

Holder Characteristics_NACR02	
# Cases	49709
# Variable(s)	15

File Content

Dataset collected at household holder level and contains information about holder's sex, age, educational background and type of holding.

Producer

Central Statistical Agency of Ethiopia

<u>Version</u>

Version 1.1: In this version of the dataset appropriate variable information are provided and missing variable documentation information is also given including value labels.

Field Characteristics main_99	
# Cases	596326
# Variable(s)	50

File Content

This file contains the area and production obtained from each field in addition to some agricultural practices information, like usage of fertilizer, irrigation usage information, improved seed, quantity of fertilizer and improved seed used etc.

Producer **Producer**

Central Statistical Agency of Ethiopia

Version

Version 1.1: In this version of the dataset appropriate variable information are provided and missing variable documentation information is also given including value labels.

Miscellaneous_NACR51	
# Cases	49638
# Variable(s)	23
File Content	

This file contains information on some agricultural practices like crop rotation, extension usage, and source of irrigation if used and use of credit service.

Producer

Central Statistical Agency of Ethiopia

<u>Version</u>

Version 1.1: In this version of the dataset appropriate variable information are provided and missing variable documentation information is also given including value labels.

Variables List

Dataset contains 88 variable(s)

File	Holder Cl	haracteristics_NAC	R02			_	
#	Name	Label	Туре	Format	Valid	Invalid	Question
1	reg	Region	discrete	numeric-2.0	49709	0	Region
2	zone	Zone	continuous	numeric-2.0	49709	0	Zone
3	dist	District	continuous	numeric-2.0	49709	0	District (wereda)
4	fa	Farmers association	continuous	numeric-3.0	49709	0	Farmers association (FA)
5	ea	Enumeration area	continuous	numeric-2.0	49709	0	Enumeration area
6	hh	Household id number	continuous	numeric-3.0	49709	0	Household id number
7	hhsex	Household head sex	discrete	numeric-1.0	49709	0	Household head sex
8	hid	Holder id number	continuous	numeric-1.0	49709	0	Holder id number
9	hweight	Holder weight	continuous	numeric-7.2	49709	0	Holder weight
10	age	Holder's age	continuous	numeric-2.0	49709	0	Holder's age
11	sex	Holder's sex	discrete	numeric-1.0	49709	0	Holder's sex
12	educ	Educational status or highest grade completed	discrete	numeric-2.0	49709	0	Educational status or highest grade completed
13	<u>v12</u>	Household size	continuous	numeric-2.0	49709	0	Household size
14	<u>htype</u>	Type of holding	discrete	numeric-1.0	49709	0	Type of holding
15	hratio	Holder ratio	continuous	numeric-9.7	49709	0	Holder ratio

#	Name	Label	Туре	Format	Valid	Invalid	Question
1	reg	Region	discrete	numeric-2.0	596326	0	Region
2	zone	Zone	continuous	numeric-2.0	596326	0	Zone
3	dist	District	continuous	numeric-2.0	596326	0	District (wereda)
4	<u>fa</u>	Farmers association	continuous	numeric-3.0	596326	0	Farmers association (FA)
5	ea	Enumeration area	continuous	numeric-2.0	596326	0	Enumeration area
6	<u>hh</u>	Household id number	continuous	numeric-3.0	596326	0	Household id number
7	<u>hhsex</u>	Household head sex	discrete	numeric-1.0	596326	0	Household head sex
8	hid	Holder id number	continuous	numeric-1.0	596326	0	Holder id number
9	parcel	Parcel	continuous	numeric-2.0	596326	0	Parcel
10	<u>fld</u>	Field	continuous	numeric-2.0	596326	0	Field
11	fweight	Fweight	continuous	numeric-7.2	596326	0	Sample weight
12	<u>part</u>	Part	continuous	numeric-1.0	596326	0	part
13	<u>fldtype</u>	Field type	discrete	numeric-1.0	596326	0	Field type
14	crop	Сгор	discrete	numeric-3.0	596326	0	Сгор
15	owntype	Ownership type	discrete	numeric-1.0	596326	0	Ownership type
16	<u>ext</u>	The field under extension program	discrete	numeric-1.0	458683	137643	Is the field under extension program?

#	Name	Label	Туре	Format	Valid	Invalid	Question
17	irrg	Used irrigation	discrete	numeric-1.0	488635	107691	Is field irrigated?
18	sirrg	Source of water for irrigation	discrete	numeric-1.0	14441	581885	If field irrigated, what is the source of water?
19	serro	Prevented from soil erosion	discrete	numeric-1.0	529083	67243	Prevention for soil erosion?
20	merro	Common way of prevention	discrete	numeric-1.0	272748	323578	Common way of prevention
21	trees	Number of fruit trees	continuous	numeric-7.0	66389	529937	Number of fruit trees
22	treesba	Number of fruit bearing trees	continuous	numeric-7.0	66381	529945	Number of fruit bearing trees
23	seedtype	Seed type	discrete	numeric-1.0	458577	137749	Seed / seedling type
24	wtimseed	Weight of improved seed	continuous	numeric-8.3	384647	211679	Weight of improved seed
25	<u>costimps</u>	Cost of improved seed	continuous	numeric-9.2	455994	140332	Cost of improved seed
26	wtniseed	Weight of non-improved seed	continuous	numeric-8.3	254225	342101	Weight of non-improved seed
27	<u>damage</u>	Crop damaged	discrete	numeric-1.0	456596	139730	Was crop dammaged?
28	dreason	Cause of damage	discrete	numeric-2.0	118951	477375	Cause of damage
29	dpercent	Percent of dammaged crop	continuous	numeric-3.0	118657	477669	Percent of dammaged crop
30	dmeasure	Measure taken to prevent the damage	discrete	numeric-1.0	456364	139962	Was prevention/precaution measure taken?
31	<u>dmtype</u>	Type of measure taken	discrete	numeric-1.0	378854	217472	Type of measure taken
32	dmchem	Chemical type used if any	discrete	numeric-1.0	6193	590133	Chemical type used if any
33	fert	Ferilizer used	discrete	numeric-1.0	457552	138774	Is fertilizer used?
34	<u>ferttype</u>	Ferilizer type	discrete	numeric-1.0	206268	390058	Ferilizer type
35	<u>d22a</u>	Chemical fertilizer type	discrete	numeric-1.0	62205	534121	Chemical fertilizer type
36	<u>d22b</u>	Quantity of chemical fertilizer	continuous	numeric-8.3	59497	536829	Quantity of chemical fertilizer
37	<u>d23</u>	Natural fertilizer type	discrete	numeric-1.0	150785	445541	Natural fertilizer type
38	<u>d24</u>	How often is temporary crop field is used	continuous	numeric-1.0	458512	137814	How often is temporary crop field is used in "Meher" (Main) season
39	<u>d25a</u>	If twice used, which crop is the second harvest (a)	discrete	numeric-3.0	84829	511497	If twice used, which crop is the second harvest (a)?
40	<u>d25b</u>	If twice used, which crop is the second harvest (b)	discrete	numeric-3.0	84743	511583	If twice used, which crop is the second harvest (b)?
41	<u>d25c</u>	If twice used, which crop is the second harvest (c)	discrete	numeric-3.0	84740	511586	If twice used, which crop is the second harvest (c)?
42	<u>d26</u>	Previous state of the field	discrete	numeric-1.0	459767	136559	What was the previous state of the field?
43	apercent	Percentage share of mixed crops	continuous	numeric-3.0	596322	4	Percentage share of mixed crops
44	cerror	Closure error	continuous	numeric-3.0	581220	15106	Closure error
45	enumarea	Enumerator area (SQ. M)	continuous	numeric-8.2	581267	15059	Enumerator area (SQ. M)
46	<u>comparea</u>	Computer area (SQ. M)	continuous	numeric-8.2	575657	20669	Computer area (SQ. M)
47	areb	Area in (SQ. M)	continuous	numeric-7.0	596311	15	Area in (SQ. M)

File	File Field Characteristics main_99							
#	Name	Label	Туре	Format	Valid	Invalid	Question	
48	landuse	Land use	discrete	numeric-1.0	596326	0	Land use	
49	areah	Area in hectare	continuous	numeric-8.6	596311	15	Area in Hectare	
50	prod99q	Production in quintal	continuous	numeric-10.5	382956	213370	Production in Quintal	

Label Format Valid Invalid # Name Type Question 1 reg Region discrete numeric-2.0 49638 0 Region 2 numeric-2 0 49638 0 Zone Zone. continuous zone numeric-2.0 3 dist District 49638 District (wereda) continuous 0 continuous 4 fa Farmers association numeric-3.0 49638 0 Farmers association (FA) 5 <u>ea</u> Enumeration area continuous numeric-2.0 49638 0 Enumeration area 6 hh Household id number continuous numeric-3.0 49638 0 Household id number 7 Household head sex discrete numeric-1.0 49638 0 Household head sex hhsex 8 hid Holder id number continuous numeric-1.0 49638 0 Holder id number 0 9 Awgt continuous numeric-7.2 49638 Sample weight awgt Crop rotation 10 discrete numeric-1.0 47684 1954 Do you exercise crop rotation on f1 your land holing? 11 f2 Reason for not using discrete numeric-1.0 47407 2231 Reason for not using chemical chemical fertilizers on any fertilizers on any one of your crop one of your crop fields fields 12 <u>f3</u> Reason for not discrete numeric-1.0 47459 2179 Reason for not participating in participating in Extension **Extension Program** Program 13 f4 Get credit services numeric-1.0 49620 18 Do you get credit services? discrete 14 f5 Reason for not using credit discrete numeric-1.0 37548 12090 Reason for not using credit services services Get advisory service 49598 40 Do you get advisory services? 15 <u>f6</u> numeric-1.0 discrete 22635 Reason for not Using Advice Service 16 <u>f7</u> Reason for not using discrete numeric-1.0 27003 advisory services 17 <u>f8</u> Major supplier of fertilizer discrete numeric-1.0 47761 1877 Major supplier of fertilizer 18 f9 Number of oxen have in continuous numeric-2.0 44451 5187 How many oxen do you have in this

File Miscellaneous_NACR51

Main ("Meher") season

Total number of fields

recorded for the holder

do you plough

If not have enough ox how

19

20

21

22

23

f10

<u>f11</u>

<u>f12</u>

f13

f14

Total number of crop fields recorded for the holder	continuous	numeric-2.0	47541	2097	Total number of crop fields recorded for the holder
Ploughed additional fields over that of the previous year	discrete	numeric-1.0	47550	2088	Has the holder ploughed additional fields over that of the previous year?
Previous state of the additional fields	discrete	numeric-1.0	8336	41302	What was the previous state of the additional fields?

34080

48506

15558

1132

Main ("Meher") season?

plough?

the holder

If you have one or no ox how do you

Total number of fields recorded for

numeric-1.0

numeric-2.0

discrete

continuous

Variables Description

Dataset contains88 variable(s)

File Holder Characteristics_NACR02

#1 reg: F	Pegion								
Informatic		[Tupe= discrete] [Format=nu	meric] [Pange= 1	15] [Missing=*]					
Statistics		[Type= discrete] [Format=numeric] [Range= 1-15] [Missing=*] [Valid=49709 / 12521716.77] [Invalid=0 / 0]							
		-	J[IIIvalid=070]						
Literal que	estion	Region							
Value	Label		Cases	Weighted	Perc	centage (Weighted)			
1	Tigray		4151	764334.3	6.1%				
2	Afar		972	30791.6	0.2%				
3	Amhara		9258	3393266.8		27.1%			
4	Oromiya		16944	5167626.0		41.3%			
5	Somalie		1349	120059.1	1.0%				
6	Benshang	gul	1653	151864.2	1.2%	22 22/			
7	SNNP		13937	2850689.9	0.0%	22.8%			
12	Gambela		0	0.0	0.0%				
13	Harari	ha	487	17093.8	0.1%				
14	Addis aba		471	7515.1	0.1%				
15 Warning: the	Dire dawa	a ne number of cases found in the data f	487 ile. Thev cannot be int	18476.1 erpreted as summa		ulation of interest.			
^{#2} zone:	Zone								
Informatio	on	[Type= continuous] [Format=	numeric] [Range=	= 1-21] [Missing=	=*]				
Statistics	[NW/ W]	[Valid=49709 /-] [Invalid=0 /-] [Mean=7.373 /-] [StdDev=5.335 /-]							
Literal que	estion	Zone							
^{#3} dist: I	District								
Informatio	on	[Type= continuous] [Format=	numeric] [Range=	= 1-35] [Missing=	=*]				
Statistics	[NW/ W]	[Valid=49709 /-] [Invalid=0 /-]	[Mean=7.398 /-]	StdDev=6.524 /	/-]				
Literal que	estion	District (wereda)							
^{#4} fa: Fa	rmers assoc	iation							
nformatio	on	[Type= continuous] [Format=	numeric] [Range=	= 1-163] [Missing	g=*]				
Statistics	[NW/ W]	[Valid=49709 /-] [Invalid=0 /-]	=0 /-] [Mean=40.044 /-] [StdDev=43.905 /-]						
Literal que	estion	Farmers association (FA)							
^{#5} ea: Er	numeration a	irea							
Informatio	on	[Type= continuous] [Format=	numeric] [Range=	= 1-12] [Missing=	=*]				
Statistics	[NW/ W]	[Valid=49709 /-] [Invalid=0 /-]	[Mean=1.895 /-]	StdDev=1.268 /	/-]				
Literal que	estion	Enumeration area							
#6 hh: H	ousehold id	number							
Information [Type= continuous] [Format=numeric] [Range= 1-992] [Missing=*]									
	on	[Type= continuous] [Format=	numeric] [Range=	= 1-992] [Missing	9- 1				
		[Type= continuous] [Format= [Valid=49709 /-] [Invalid=0 /-]			-				

File Holder Characteristics_NACR02

	: Household	head sex						
Informatio	n	[Type= discrete] [Format=numeric	Format=numeric] [Range= 1-2] [Missing=*]					
Statistics [NW/ W]	[Valid=49709 / 12521716.77] [Inv	.21716.77] [Invalid=0 / 0]					
Literal que	stion	Household head sex						
Value	Label	1	Cases	Weighted	Percentage (Weighted)			
1	Male		40381	9995733.1		79.8%		
2	Female		9328	2525983.7	20.2%			
		e number of cases found in the data file. Th	ey cannot be in	terpreted as summar	y statistics of the population of interest.			
-	older id num	1			-			
Informatio		[Type= continuous] [Format=num			-			
Statistics [NW/ W] [Valid=49709 /-] [Invalid=0 /-			an=1.076 /-]	[StdDev=0.328 /-	-]			
Literal question Holder id number								
^{#9} hweig	ht: Holder w	eight						
Informatio	n	[Type= continuous] [Format=num	eric] [Range=	= 1-1131.91] [Mis	sing=*]			
Statistics [NW/ W]	[Valid=49709 /-] [Invalid=0 /-] [Mea	an=251.9 /-]	[StdDev=182.62	9 /-]			
Literal que	stion	Holder weight						
^{#10} age: I	Holder's age)						
Informatio	n	[Type= continuous] [Format=num	eric] [Range=	= 1-99] [Missing=	*]			
Statistics [NW/ W]	[Valid=49709 / 12521716.77] [Inv	/alid=0 / 0]					
Literal que	stion	Holder's age						
		Frequency t	able not show	vn (99 Modalities	5)			
				`	/			
#11 sex: h	-lolder's sex				, 			
		[Type= discrete] [Format=numeric	c] [Range= 1-	•	, 			
Informatio	n	1		•	,			
Information Statistics [n NW/ W]	[Type= discrete] [Format=numeric		•	, 			
Information Statistics [n NW/ W]	[Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv		•	, Percentage (Weighted)			
Information Statistics [Literal que	n NW/ W] stion	[Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv	valid=0 / 0]	2] [Missing=*]		80.0%		
Information Statistics [Literal que Value	n NW/ W] stion Label	[Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv	valid=0 / 0] Cases	2] [Missing=*] Weighted		80.0%		
Information Statistics [Literal que Value 1 2 Warning: these	n NW/ V/ stion Label Male Female e figures indicate the	[Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv Holder's sex	Cases 40408 9301 ey cannot be int	2] [Missing=*] Weighted 10013714.2 2508002.5 terpreted as summar	Percentage (Weighted)	80.0%		
Information Statistics [Literal que Value 1 2 Warning: these	n NW/ V/ stion Label Male Female e figures indicate the	[Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv Holder's sex	Cases 40408 9301 ey cannot be int	2] [Missing=*] Weighted 10013714.2 2508002.5 terpreted as summar	Percentage (Weighted)	80.0%		
Information Statistics [Literal que Value 1 2 Warning: these #12 educ:	n NW/ W] stion Label Male Female e figures indicate th : Educationa	[Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv Holder's sex	Cases 40408 9301 ey cannot be intro completed	2] [Missing=*] Weighted 10013714.2 2508002.5 kerpreted as summar	Percentage (Weighted)	80.0%		
Information Statistics [Literal que Value 1 2 Warning: these #12 educ: Information	n NW/ W] stion Label Male Female e figures indicate the Educationa	[Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv Holder's sex	Cases 40408 9301 ey cannot be intr completed	2] [Missing=*] Weighted 10013714.2 2508002.5 kerpreted as summar	Percentage (Weighted)	80.0%		
Information Statistics [Literal que Value 1 2 Warning: these #12 educ: Information Statistics [n NW/ W] stion Label Male Female e figures indicate the E Educational n	[Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv Holder's sex	valid=0 / 0] Cases 40408 9301 ey cannot be intro completed c] [Range= 1- valid=0 / 0]	2] [Missing=*] Weighted 10013714.2 2508002.5 serpreted as summar 99] [Missing=*]	Percentage (Weighted)	80.0%		
Information Statistics [Literal que Value 1 2 Warning: these #12 educ: Information Statistics [n NW/ W] stion Label Male Female e figures indicate the E Educational n	[Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv Holder's sex e number of cases found in the data file. Th al status or highest grade of [Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv	valid=0 / 0] Cases 40408 9301 ey cannot be intro completed c] [Range= 1- valid=0 / 0]	2] [Missing=*] Weighted 10013714.2 2508002.5 serpreted as summar 99] [Missing=*]	Percentage (Weighted)	80.0%		
Information Statistics [Literal que Value 1 2 Warning: these #12 educ: Information Statistics [Literal que	n NW/ W] stion Label Male Female e figures indicate the EEducationa n NW/ W] stion	[Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv Holder's sex e number of cases found in the data file. Th al status or highest grade of [Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv	Cases 40408 9301 ey cannot be intro completed c] [Range= 1- valid=0 / 0] de completed	2] [Missing=*] Weighted 10013714.2 2508002.5 serpreted as summar 99] [Missing=*]	Percentage (Weighted) 20.0% y statistics of the population of interest.			
Information Statistics [Literal que Value 1 2 Warning: these #12 educ: Information Statistics [Literal que Value	n NW/ VV] stion Label Male Female e figures indicate the c Educational n NW/ VV] stion	[Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv Holder's sex e number of cases found in the data file. Th al status or highest grade of [Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv Educational status or highest grad	Cases 40408 9301 ey cannot be intr completed c] [Range= 1- valid=0 / 0] de completed Cases	2] [Missing=*] Weighted 10013714.2 2508002.5 terpreted as summar 99] [Missing=*]	Percentage (Weighted) 20.0% y statistics of the population of interest. Percentage (Weighted) 7.8%			
Information Statistics [Literal que Value 1 2 Warning: these #12 educ: Information Statistics [Literal que Value 1	n NW/ VJ stion Label Male Female figures indicate the Editorial NW/ VJ stion NW/ VJ stion Label Illitrate Informal e Grade 1 c	[Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv Holder's sex e number of cases found in the data file. Th al status or highest grade of [Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv Educational status or highest grad	valid=0 / 0] Cases 40408 9301 ey cannot be imported completed c) [Range= 1- valid=0 / 0] de completed Cases 32481 3506 1131	2] [Missing=*] Weighted 10013714.2 2508002.5 terpreted as summar 99] [Missing=*] 99] [Missing=*] Weighted 8241287.8 975198.8 247744.2	Percentage (Weighted) 20.0% y statistics of the population of interest. Percentage (Weighted) 7.8% 2.0%			
Information Statistics [Literal que Value 1 2 Warning: these #12 educ: Information Statistics [Literal que Value 1 2 3 4	n NW/ VJ stion Label Male Female e figures indicate the c EdUCational n NW/ VJ stion Stion Label Illitrate Informal e Grade 1 c Grade 2 c	[Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv Holder's sex e number of cases found in the data file. The al status or highest grade of [Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv Educational status or highest grade education completed	ralid=0 / 0] Cases 40408 9301 ey cannot be imported completed completed cases 32481 3506 1131 2136	2] [Missing=*] Weighted 10013714.2 2508002.5 terpreted as summar 99] [Missing=*] 99] [Missing=*] Weighted 8241287.8 975198.8 247744.2 493399.3	Percentage (Weighted) 20.0% y statistics of the population of interest. Percentage (Weighted) 7.8% 2.0% 3.9%	65.8%		
Information Statistics [Literal que Value 1 2 Warning: these #12 educ: Information Statistics [Literal que Value 1 2 3	n NW/ VJ stion Label Male Female figures indicate the Editorial NW/ VJ stion NW/ VJ stion Label Illitrate Informal e Grade 1 c	[Type= discrete] [Format=numeric [Valid=49709 / 12521716.77] [Inv Holder's sex e number of cases found in the data file. The status or highest grade of the status or highest grade of [Valid=49709 / 12521716.77] [Inv Educational status or highest grade of the status	valid=0 / 0] Cases 40408 9301 ey cannot be imported completed c) [Range= 1- valid=0 / 0] de completed Cases 32481 3506 1131	2] [Missing=*] Weighted 10013714.2 2508002.5 terpreted as summar 99] [Missing=*] 99] [Missing=*] Weighted 8241287.8 975198.8 247744.2	Percentage (Weighted) 20.0% y statistics of the population of interest. Percentage (Weighted) 7.8% 2.0%			

File Holder Characteristics_NACR02

#12 educ: Educational status or highest grade completed

Value	Label	Cases	Weighted	Percentage (Weighted)
8	Grade 6 completed	1632	408130.4	3.3%
9	Grade 7 completed	1035	248603.0	2.0%
10	Grade 8 completed	810	208441.9	1.7%
11	Grade 9 complete through the old education system	251	64289.6	0.5%
12	Grade 10 completed through the old education system	136	33070.1	0.3%
13	Grade 11 completed through the old education system	43	10106.0	0.1%
14	Grade 12 completed through the old education system	206	45230.4	0.4%
15	Above grade 12	56	13995.3	0.1%
16	Grade 9 complete through the new education system	99	27061.7	0.2%
17	Grade 10 complete through the new education system	164	37651.5	0.3%
18	Studing at the vocational school after completion of grade 10 through the new education system	13	2907.3	0.0%
19	Obtained certificate after complition of voccational school through the new education system	26	6135.4	0.0%
20	Completed grade 11 preparatory studies for higher education	6	2298.7	0.0%
21	Completed grade 12 preparatory studies for higher education	4	1020.1	0.0%
22	Above from grade 12 preparatory studies	4	1806.6	0.0%
99	Not stated	1	162.2	0.0%

#13 v12: Household size

Information		[Type= continuous] [Format=num	neric] [Range=	= 1-99] [Missing=	=*]	
Statistics [N	w/ w]	[Valid=49709 / 12521716.77] [In	valid=0 / 0]			
Literal ques	tion	Household size				
Value	Label		Cases	Weighted	Percentage (Weight	ed)
1	1		1825	317272.0	2.5%	
2	2		4228	1033744.4	8.3%	
3	3		6882	1716505.6		13.7%
4	4		8258	2100692.8		16.8%
5	5		7933	2062126.2		16.5%
6	6		7141	1851236.0		14.8%
7	7		5515	1398478.9	11.2%)
8	8		3706	958225.2	7.7%	
9	9		2060	542260.7	4.3%	
10	10		1165	291772.1	2.3%	
11	11		490	126683.8	1.0%	
12	12		292	68940.0	0.6%	

File Holder Characteristics_NACR02

#13 v12: Household size

Value	Label	Cases	Weighted	Percentage (Weighted)
13	13	94	23011.5	0.2%
14	14	70	18219.8	0.1%
15	15	26	6632.7	0.1%
16	16	16	3120.7	0.0%
17	17	3	836.6	0.0%
18	18	2	619.9	0.0%
19	19	1	404.9	0.0%
99	99	2	933.3	0.0%
Warning: these	figures indicate the number of cases fou	nd in the data file. They cannot be int	erpreted as summai	ry statistics of the population of interest.

^{#14} htype: Type of holding

Information [Type= discrete] [Format=numeric]			[Range= 1-	-9] [Missing=*]		
Statistics [I	Statistics [NW/ W] [Valid=49709 / 12521716.77] [Invalid=0 / 0]					
Literal question Type of holding						
Value	Label	abel		Weighted	Percentage (Weighted)	
1	Crop only		6136	1240101.3	9.9%	
2	Livestock	only	2442	519718.0	4.2%	
3	Both		41129	10761845.9		85.9%
9	Not stated		2	51.5	0.0%	
Warning: these	e figures indicate the	e number of cases found in the data file. The	y cannot be in	terpreted as summar	y statistics of the population of interest.	

#15 hratio: Holder ratio

Information	[Type= continuous] [Format=numeric] [Range= 0.0084719-1.5729272] [Missing=*]
Statistics [NW/ W]	[Valid=49709 /-] [Invalid=0 /-] [Mean=0.181 /-] [StdDev=0.281 /-]
Literal question	Holder ratio

#1 reg: Re	egion					
Informatior	1	[Type= discrete] [Format=r	numeric] [Range= 1-	15] [Missing=*]		
Statistics [I	NW/ W]	[Valid=596326 / 15742429	9.02] [Invalid=0 / 0]		
Literal ques	stion	Region				
Value	Label		Cases	Weighted	Percent	tage (Weighted)
1	Tigray		45150	9202222.9	5.8%	
2	Afar		3982	131752.3	0.1%	
3	Amhara		106399	40977213.1		26.0%
4	Oromiya		191250	61302895.4		38.9%
5	Somalie		7925	756821.6	0.5%	
6	Benshang	Jul	15532	1460820.4	0.9%	
7	SNNP		209219	43079886.4		27.4%
12	Gambela		0	0.0	0.0%	
13	Harari		7031	245147.7	0.2%	
14	Addis aba	ba	4557	70853.9	0.0%	
15	Dire dawa	l .	5281	196685.4	0.1%	
Warning: these	figures indicate the	e number of cases found in the dat	a file. They cannot be in	erpreted as summar	y statistics of the populatio	on of interest.

		actemetics main_95	•			
#2 zone: Zor	ne					
Information		[Type= continuous] [Format=nume	ric] [Range=	= 1-21] [Missing=*]	
Statistics [NW/	w]	[Valid=596326 /-] [Invalid=0 /-] [Me	an=7.562 /-	[StdDev=5.524 /	-]	
Literal question	n	Zone				
#3 dist: Dist	rict	1				
Information		[Type= continuous] [Format=nume	ric] [Range=	= 1-35] [Missing=*]	
Statistics [NW/	w]	[Valid=596326 /-] [Invalid=0 /-] [Me	an=7.285 /-	[StdDev=6.493 /	-]	
Literal question	n	District (wereda)				
#4 fa: Farme	rs assoc	iation				
Information		[Type= continuous] [Format=nume	ric] [Range=	= 1-163] [Missing=	=*]	
Statistics [NW/	w]	[Valid=596326 /-] [Invalid=0 /-] [Me	an=37.066	-] [StdDev=39.69	/-]	
Literal questio	n	Farmers association (FA)				
#5 ea: Enum	eration a	area				
Information		[Type= continuous] [Format=nume	ric] [Range=	= 1-12] [Missing=*]	
Statistics [NW/	w]	[Valid=596326 /-] [Invalid=0 /-] [Me	an=1.943 /-	[StdDev=1.271 /	-]	
Literal question	n	Enumeration area				
#6 hh: House	ehold id	number				
Information		[Type= continuous] [Format=nume	ric] [Range=	= 1-992] [Missing=	=*]	
Statistics [NW/	w]	[Valid=596326 /-] [Invalid=0 /-] [Me	an=118.92 /	-] [StdDev=90.72	2 /-]	
Literal question	n	Household id number				
#7 hhsex: Ho	ousehold	l head sex				
Information		[Type= discrete] [Format=numeric]	[Range= 1-	2] [Missing=*]		
Statistics [NW/	wj	[Valid=596326 / 157424299.02] [Ir	nvalid=0 / 0]		
Literal question	n	Household head sex				
Value	Label		Cases	Weighted	Percentage (Weighted)	
1	Male		507502	133010194.6		84.5%
2	Female	the second in the state fill. The	88824	24414104.5	15.5%	
#8 hid: Hold		ne number of cases found in the data file. The	y cannot be in	erpreted as summary	statistics of the population of interest.	
Information		[Type= continuous] [Format=nume	ricl (Pango-	- 1 7] [Missing=*]		
Statistics [NW/	. w/i	[Valid=596326 /-] [Invalid=0 /-] [Me				
Literal question	-	Holder id number	un- 1.010 /-		1	
#9 parcel: Pa						
Information		[Type= continuous] [Format=nume	ric] [Range:	= 1-88] [Missing=*	1	
Statistics [NW/	wi	[Valid=596326 /-] [Invalid=0 /-] [Me				
Literal question		Parcel			<u>.</u>	
#10 fld: Field						
Information		[Type= continuous] [Format=nume	ric] [Range:	= 1-99] [Missing=*	1	
Statistics [NW/	wi	[Valid=596326 /-] [Invalid=0 /-] [Me			1	
	1					

		acteristics main_9				
^{#10} fld: Field	ł					
Literal question	n	Field				
^{#11} fweight:	Fweight					
nformation		[Type= continuous] [Format=num	neric] [Range:	= 1-1131.91] [Mis	sing=*]	
Statistics [NW/	/ W]	[Valid=596326 /-] [Invalid=0 /-] [N	lean=263.99	/-] [StdDev=179.3	371 /-]	
Literal question	n	Sample weight				
^{#12} part: Par	rt	1				
nformation		[Type= continuous] [Format=num	neric] [Range:	= 1-3] [Missing=*]		
Statistics [NW/	/ W]	[Valid=596326 / 157424299.02]	[Invalid=0 / 0]		
Literal question	n	part				
Value	Label	I	Cases	Weighted	Percentage (Weighted)	
1	1		506814	134425484.0		85.4%
2	2		67560	17543118.7	11.1%	
3	3		21952	5455696.4	3.5%	
Varning: these figu	ires indicate th	e number of cases found in the data file. The	hey cannot be in	terpreted as summar	y statistics of the population of interest.	
^{#13} fldtype:	Field type)				
nformation		[Type= discrete] [Format=numeri	c] [Range= 1	-3] [Missing=*]		
Statistics [NW/	/ W]	[Valid=596326 / 157424299.02]	[Invalid=0 / 0]		
iteral questio	n	Field type				
Value	Label		Cases	Weighted	Percentage (Weighted)	
1	Temporary	/	301346	79889208.6		50.7%
2	Permaner	t	157112	40551314.2	25.8%	
3	Mixed		137868	36983776.3	23.5%	
		e number of cases found in the data file. The	ney cannot be in	terpreted as summar	y statistics of the population of interest.	
^{#14} crop: Cro	op		-1/D	0001 [] 41 +1		
nformation		[Type= discrete] [Format=numeri				
Statistics [NW/	-	[Valid=596326 / 157424299.02]	[Invalid=0 / 0]		
Literal question	n	Сгор				
			table not sho	wn (89 Modalities	<i>)</i>	
^{#15} owntype	: Owners					
nformation		[Type= discrete] [Format=numeri				
Statistics [NW/	_	[Valid=596326 / 157424299.02]	[Invalid=0 / 0]		
Literal question	n	Ownership type				
Value	Label		Cases	Weighted	Percentage (Weighted)	
1	Private		553737	145149449.7		92.2%
2	Rent/lease	ed	29576	8651195.5	5.5%	
3	Other		12725	3540518.7	2.2%	
9	Not stated		288	83135.1	0.1%	
		e number of cases found in the data file. The	hey cannot be in	terpreted as summary	y statistics of the population of interest.	
^{±16} ext: The	field und	er extension program				

#10 ext: 1n	e field un	der extension program				
Statistics [N	w/ w]	[Valid=458683 / 120497944.15] [Inva	alid=1376	43 / 36926354.8	7]	
Literal quest	ion	Is the field under extension program	?			
Value	Label		Cases	Weighted	Percentage (Weighted)	
1	Yes		24059	7663682.6	6.4%	
2	No		434624	112834261.5		93.6%
Sysmiss			137643	36926354.9		
-	-	he number of cases found in the data file. They c	annot be int	terpreted as summary	y statistics of the population of interest.	
^{#17} irrg: Us	sed irrigat	ion				
nformation		[Type= discrete] [Format=numeric] [F	Range= 1-	2] [Missing=*]		
Statistics [N	w/ w]	[Valid=488635 / 129772494.67] [Inva	alid=1076	91 / 27651804.3	5]	
Literal quest	ion	Is field irrigated?				
Value	Label		Cases	Weighted	Percentage (Weighted)	
1	Yes		14354	3027711.0	2.3%	
2	No		474281	126744783.7		97.7%
Sysmiss			107691	27651804.4		_
<i>Warning: these f</i>	igures indicate t	he number of cases found in the data file. They c	annot be int	erpreted as summary	y statistics of the population of interest.	
^{±18} sirrg: S	Source of	water for irrigation				
nformation		[Type= discrete] [Format=numeric] [F	Range= 1-	5] [Missing=*]		
Statistics [N	w/ w]	[Valid=14441 / 3055349.5] [Invalid=5	581885 / 1	154368949.52]		
Literal quest	ion	If field irrigated, what is the source of	f water?			
Value	Label		Cases	Weighted	Percentage (Weighted)	
Value 1	Label River		Cases 10701	Weighted 2102160.4	Percentage (Weighted)	68.8%
1				•	Percentage (Weighted)	68.8%
1 2	River		10701	2102160.4		68.8%
1 2 3	River Lake	d water	10701 301	2102160.4 78556.9	2.6%	68.8%
Value 1 2 3 4 5	River Lake Pond	d water	10701 301 1398	2102160.4 78556.9 363638.9	2.6% 11.9%	68.8%
1 2 3 4 5	River Lake Pond Harveste		10701 301 1398 971	2102160.4 78556.9 363638.9 213834.7	2.6% 11.9% 7.0%	68.8%
1 2 3 4 5 Sysmiss	River Lake Pond Harveste Others		10701 301 1398 971 1070 581885	2102160.4 78556.9 363638.9 213834.7 297158.5 154368949.5	2.6% 11.9% 7.0% 9.7%	68.8%
1 2 3 4 5 Sysmiss <i>Warning: these fi</i>	River Lake Pond Harveste Others		10701 301 1398 971 1070 581885	2102160.4 78556.9 363638.9 213834.7 297158.5 154368949.5	2.6% 11.9% 7.0% 9.7%	68.8%
1 2 3 4 5 Sysmiss <i>Warning: these fi</i> #19 Serro:	River Lake Pond Harveste Others	he number of cases found in the data file. They c	10701 301 1398 971 1070 581885 cannot be int	2102160.4 78556.9 363638.9 213834.7 297158.5 154368949.5 repreted as summary	2.6% 11.9% 7.0% 9.7%	68.8%
1 2 3 4 5 Sysmiss Warning: these fi	River Lake Pond Harveste Others	he number of cases found in the data file. They c from soil erosion	10701 301 1398 971 1070 581885 cannot be inter Range= 1-	2102160.4 78556.9 363638.9 213834.7 297158.5 154368949.5 terpreted as summary 2] [Missing=*]	2.6% 11.9% 7.0% 9.7% y statistics of the population of interest.	68.8%
1 2 3 4 5 Sysmiss <i>Warning: these fi</i> #19 Serro:	River Lake Pond Harveste Others igures indicate t Prevented	he number of cases found in the data file. They c from soil erosion [Type= discrete] [Format=numeric] [F	10701 301 1398 971 1070 581885 cannot be inter Range= 1-	2102160.4 78556.9 363638.9 213834.7 297158.5 154368949.5 terpreted as summary 2] [Missing=*]	2.6% 11.9% 7.0% 9.7% y statistics of the population of interest.	68.8%
1 2 3 4 5 Sysmiss <i>Warning: these fi</i> #19 Serro: Information Statistics [N	River Lake Pond Harveste Others igures indicate t Prevented	he number of cases found in the data file. They c from soil erosion [Type= discrete] [Format=numeric] [F [Valid=529083 / 139938043.22] [Inva	10701 301 1398 971 1070 581885 cannot be inter Range= 1-	2102160.4 78556.9 363638.9 213834.7 297158.5 154368949.5 terpreted as summary 2] [Missing=*]	2.6% 11.9% 7.0% 9.7% y statistics of the population of interest.	68.8%
1 2 3 4 5 Sysmiss <i>Warning: these fi</i> #19 Serro: nformation Statistics [NI Literal quest Value	River Lake Pond Harveste Others igures indicate t Prevented W/ W] ion	he number of cases found in the data file. They c from soil erosion [Type= discrete] [Format=numeric] [F [Valid=529083 / 139938043.22] [Inva Prevention for soil erosion?	10701 301 1398 971 1070 581885 cannot be im Range= 1- alid=6724	2102160.4 78556.9 363638.9 213834.7 297158.5 154368949.5 terpreted as summary 2] [Missing=*] 3 / 17486255.8]	2.6% 11.9% 7.0% 9.7% y statistics of the population of interest.	
1 2 3 4 5 Sysmiss <i>Varning: these fi</i> #19 Serro: nformation Statistics [NI Literal quest Value 1	River Lake Pond Harveste Others igures indicate to Prevented W/ W] ion Label	he number of cases found in the data file. They c from soil erosion [Type= discrete] [Format=numeric] [F [Valid=529083 / 139938043.22] [Inva Prevention for soil erosion?	10701 301 1398 971 1070 581885 cannot be inter Range= 1- alid=6724 Cases	2102160.4 78556.9 363638.9 213834.7 297158.5 154368949.5 terpreted as summary 2] [Missing=*] 3 / 17486255.8] Weighted	2.6% 11.9% 7.0% 9.7% y statistics of the population of interest.	54.2%
1 2 3 4 5 Sysmiss Warning: these fi #19 Serro: nformation Statistics [NN Literal quest Value 1 2	River Lake Pond Harveste Others Prevented W/W] ion Label Yes	he number of cases found in the data file. They c from soil erosion [Type= discrete] [Format=numeric] [F [Valid=529083 / 139938043.22] [Inva Prevention for soil erosion?	10701 301 1398 971 1070 581885 cannot be int Range= 1- alid=6724 Cases 272521	2102160.4 78556.9 363638.9 213834.7 297158.5 154368949.5 terpreted as summary 2] [Missing=*] 3 / 17486255.8] Weighted 75808835.5	2.6% 11.9% 7.0% 9.7% y statistics of the population of interest. Percentage (Weighted)	54.2%
1 2 3 4 5 Sysmiss Warning: these fi #19 serro: Information Statistics [NI Literal quest Value 1 2 Sysmiss	River Lake Pond Harveste Others Prevented W/W] ion Label Yes No	he number of cases found in the data file. They c from soil erosion [Type= discrete] [Format=numeric] [F [Valid=529083 / 139938043.22] [Inva Prevention for soil erosion?	10701 301 1398 971 1070 581885 cannot be int Range= 1- alid=6724 Cases 272521 256562 67243	2102160.4 78556.9 363638.9 213834.7 297158.5 154368949.5 terpreted as summary 2] [Missing=*] 3 / 17486255.8] Weighted 75808835.5 64129207.7 17486255.8	2.6% 11.9% 7.0% 9.7% y statistics of the population of interest. Percentage (Weighted) 45.8	54.2%
1 2 3 4 5 Sysmiss Varning: these fi	River Lake Pond Harveste Others M/W] ion Label Yes No	he number of cases found in the data file. They c from soil erosion [Type= discrete] [Format=numeric] [F [Valid=529083 / 139938043.22] [Inva Prevention for soil erosion?	10701 301 1398 971 1070 581885 cannot be int Range= 1- alid=6724 Cases 272521 256562 67243	2102160.4 78556.9 363638.9 213834.7 297158.5 154368949.5 terpreted as summary 2] [Missing=*] 3 / 17486255.8] Weighted 75808835.5 64129207.7 17486255.8	2.6% 11.9% 7.0% 9.7% y statistics of the population of interest. Percentage (Weighted) 45.8	54.2%
1 2 3 4 5 Sysmiss Warning: these fi #19 Serro: Information Statistics [Ni Literal quest Value 1 2 Sysmiss Warning: these fi	River Lake Pond Harveste Others M/W] ion Label Yes No	he number of cases found in the data file. They c from soil erosion [Type= discrete] [Format=numeric] [F [Valid=529083 / 139938043.22] [Inva Prevention for soil erosion? he number of cases found in the data file. They c	10701 301 1398 971 1070 581885 cannot be int Range= 1- alid=6724 Cases 272521 256562 67243 cannot be int	2102160.4 78556.9 363638.9 213834.7 297158.5 154368949.5 terpreted as summary 2] [Missing=*] 3 / 17486255.8] Weighted 75808835.5 64129207.7 17486255.8 terpreted as summary	2.6% 11.9% 7.0% 9.7% y statistics of the population of interest. Percentage (Weighted) 45.8	54.2%

^{#20} merro: (Common	way of prevention				
Value	Label		Cases	Weighted	Percentage (Weighted)	
1	Terracing		78875	23288472.0	30.7%	, D
2	Water cate	chments	33159	9508863.3	12.5%	
3	Afforestat	ion	2643	775407.7	1.0%	
4	Ploughing	alnog the contour	112810	28683267.0		37.8%
5	Others		45261	13613511.8	17.9%	
Sysmiss	uros indiasts th	o number of eaces found in the data	323578	81554777.2	y statistics of the population of interest.	
#21 trees: N			me. They cannot be m	lerpreteu as summar		
nformation		[Type= continuous] [Format	=numeric] [Range=	= 0-9999999] [Mi	ssing=*/9999999999999999	
Statistics [NW	// W]	[Valid=66389 / 16451633.74 497.69]	1] [Invalid=529937	/ 140972665.28] [Mean=109.942 / 140.37] [StdDev=442	2.041 /
Literal question	on	Number of fruit trees				
^{#22} treesba	: Number	of fruit bearing trees				
nformation		[Type= continuous] [Format	=numeric] [Range=	= 0-9999999] [Mi	ssing=*/99999999999999	
Statistics [NW	// W]	[Valid=66381 / 16449418.2 ⁻ 156.526]	l] [Invalid=529945	/ 140974880.81] [Mean=23.404 / 31.906] [StdDev=128.	768 /
Literal question	on	Number of fruit bearing tree	S			
^{#23} seedtyp	e: Seed ty	уре				
Information		[Type= discrete] [Format=n	umeric] [Range= 1-	-2] [Missing=*]		
Statistics [NW	// W]	[Valid=458577 / 120473387	.26] [Invalid=1377	49 / 36950911.7	6]	
Literal questio	on	Seed / seedling type				
Value	Label		Cases	Weighted	Percentage (Weighted)	
1	Improved		7399	2067558.6	1.7%	
2	Non_impr	oved	451178	118405828.6		98.3%
Sysmiss	ures indicate th	e number of cases found in the data	137749	36950911.8	y statistics of the population of interest.	
		t of improved seed	me. They cannot be m			
Information	J	[Type= continuous] [Format	=numeric] [Range=	= 0-9999.999] [M	issing=*/9999.999]	
Statistics [NW	// W]	[Valid=384647 / 98084263.9	92] [Invalid=21167	9 / 59340035.1]	[Mean=0.161 / 0.179] [StdDev=3.004 / 3	.124]
Literal question	on	Weight of improved seed				
#25 costimp	s: Cost o	f improved seed				
Information		[Type= continuous] [Format	=numeric] [Range=	= 0-999999.99] [I	Aissing=*/999999.99]	
Statistics [NW	// W]	[Valid=455994 / 119709726	.05] [Invalid=1403	32 / 37714572.9	7] [Mean=0.613 / 0.686] [StdDev=9.352	/ 10.241
Literal question	on	Cost of improved seed				
	d: Weight	of non-improved see	d			
^{#26} wtnisee			=numeric] [Range:	= 0-9999.9991 [M	issing=*/9999.999]	
^{#26} wtnisee		[Type= continuous] [Format	namonoj [rango		0 1	
	// W]] [Mean=11.091 / 12.314] [StdDev=22.97	76 /

^{#27} damag	je: Crop da	maged				
Information		[Type= discrete] [Format	=numeric] [Range= 1-	2] [Missing=*]		
Statistics [N	w/ w]	[Valid=456596 / 1199236	70.95] [Invalid=1397	30 / 37500628.0	7]	
Literal quest	tion	Was crop dammaged?				
Value	Label		Cases	Weighted	Percentag	ge (Weighted)
1	Yes		118951	31402502.2	26.2%	
2	No		337645	88521168.8		73.8%
Sysmiss			139730	37500628.1		
	-	e number of cases found in the o	lata file. They cannot be in	terpreted as summar	y statistics of the population of	of interest.
	on: Cause c					
nformation		[Type= discrete] [Format				
Statistics [N	W/ W]	[Valid=118951 / 3140250	2.19] [Invalid=47737	5 / 126021796.8	3]	
Pre-question	n	If "Yes" in "Was crop dan	naged?"			
_iteral quest	tion	Cause of damage				
Value	Label		Cases	Weighted	Percentag	ge (Weighted)
1	Too much	rain	19243	5004642.5		15.9%
2	Too little ra	ain	1973	437927.3	1.4%	
3	Insects		3781	1113396.0	3.5%	
4	Crop dise	ase	147	32353.4	0.1%	
5	Weeds		14188	3680817.2		11.7%
6	Hail		16167	3781711.7		12.0%
7	Frost		16938	5103217.4		16.39
8	Floods		6800	1494427.8	4.8%	
9	Wild anim	als	1187	309252.8	1.0%	
10	Locust		6585	2106953.0	6.7%	
11	Birds		9066	2207072.6	7.0%	6
12	Shortage		431	116074.1	0.4%	
13	Depletion		11062	3192035.6		10.2%
14	Security p	roblem	15	2525.7	0.0%	0.00/
15	Other		11368	2820095.2		9.0%
Sysmiss <i>Warning: these f</i>	figures indicate th	e number of cases found in the o	477375 lata file. They cannot be int	126021796.8 terpreted as summar	y statistics of the population of	of interest.
-	-	t of dammaged crop	-		· · · · · · · · · · · · · · · · · · ·	
nformation		[Type= continuous] [Forn		= 0-999] [Missind	=*/999]	
Statistics [N	w/ w]	[Valid=118657 / 3132399				
- Pre-questior	-	If "Yes" in "Was crop dan			-	
Literal quest		Percent of dammaged cr	ор			
		Fre	quency table not show	vn (87 Modalities	5)	
^{#30} dmeas	ure: Meası	ire taken to prevent	the damage			
Information		[Type= discrete] [Format	-	2] [Missing=*]		
Statistics [N	w/ w]	[Valid=456364 / 1198367			3]	
- Literal quest	-	Was prevention/precaution			-	

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Value	Label		Cases	Weighted	Percentage (Weighted)	
1	Yes		378864	98800601.0		82.4%
2	No		77500	21036151.9	17.6%	
Sysmiss			139962	37587546.1		
Warning: these f	igures indicate th	e number of cases found in the	data file. They cannot be in	terpreted as summa	ry statistics of the population of interest.	
#31 dmtyp	e: Type of I	measure taken				
Information		[Type= discrete] [Format	=numeric] [Range= 1-	-3] [Missing=*]		
Statistics [N	w/ w]	[Valid=378854 / 9879808	35.57] [Invalid=21747	2 / 58626213.45	5]	
Literal quest	ion	Type of measure taken				
Value	Label		Cases	Weighted	Percentage (Weighted)	
1	Chemical		6192	1961135.2	2.0%	
2	Non_cher	nical	356607	91859103.1		93.0%
3	Both		16055	4977847.2	5.0%	
Sysmiss			217472	58626213.5		
Narning: these f	igures indicate th	e number of cases found in the	data file. They cannot be in	terpreted as summa	ry statistics of the population of interest.	
^{#32} dmche	m: Chemic	cal type used if any				
nformation		[Type= discrete] [Format	=numeric] [Range= 1-	-9] [Missing=*]		
Statistics [N	W/ W]	[Valid=6193 / 1961308]	[Invalid=590133 / 155	462991.02]		
Literal quest	ion	Chemical type used if an	ıy			
Value	Label	·	Cases	Weighted	Percentage (Weighted)	
1	Pesticide		470	144545.4	7.4%	
2	Herbicide		4823	1548900.5		79.0%
3	Fungicide	•	202	66441.6	3.4%	
4	Pesticide	& herbcide	21	6847.3	0.3%	
5	Pesticide	& fungicide	2	1124.5	0.1%	
6	Herbicide	& fungicide	5	1830.4	0.1%	
7	All		6	265.6	0.0%	
9	Not stated	b	664	191352.8	9.8%	
Sysmiss			590133	155462991.0		
-	-		data file. They cannot be in	terpreted as summa	ry statistics of the population of interest.	
	erilizer use	Т				
nformation		[Type= discrete] [Format				
Statistics [N	w/ w]	[Valid=457552 / 1202178	392.46] [Invalid=1387	74 / 37206406.5	56]	
Literal quest	ion	Is fertilizer used?				
Value	Label		Cases	Weighted	Percentage (Weighted)	
1	Yes		206269	60901778.4		50.7%
2	No		251283	59316114.1		49.3%
Sysmiss			138774	37206406.6		
					ry statistics of the population of interest.	

^{#34} ferttype	e: Ferilizer	type				
Statistics [NV	v/ w]	[Valid=206268 / 60901475.99	9] [Invalid=39005	8 / 96522823.03	3]	
Pre-question		If fertilizer is used				
Literal questi	on	Ferilizer type				
Value	Label	1	Cases	Weighted	Percentage (Weighted))
1	Natural		144061	41976275.0		68.9%
2	Chemical		55481	16872913.5	27.7%	
3	Both		6726	2052287.5	3.4%	
Sysmiss			390058	96522823.0		
	-		le. They cannot be int	terpreted as summa	ry statistics of the population of interest.	
	nemical te	ertilizer type				
nformation		[Type= discrete] [Format=nur				
Statistics [NV	V/ W]	[Valid=62205 / 18924618.79]] [Invalid=534121	/ 138499680.23	3]	
Pre-question		If chemical fertilizer is used				
Literal questi	on	Chemical fertilizer type				
Value	Label		Cases	Weighted	Percentage (Weighted))
1	Urea		5574	1568304.3	8.3%	
2	Dap		26438	8520272.2		45.0%
3	Both		28514	8340845.7		44.1%
9	Not stated	1	1679	495196.6	2.6%	
Sysmiss		and the state of the	534121	138499680.2		
			ie. They cannot be int	erpreted as summa	ry statistics of the population of interest.	
	antity of	chemical fertilizer		- 0.04.0000.000	1 [Missis ===*/0000_000]	
nformation		[Type= continuous] [Format=				
Statistics [NV	v/ vvj	[Valid=59497 / 18026196.55] 35.515]] [Invalid=536829	/ 139398102.47	7] [Mean=24.624 / 22.645] [StdDev=3	9.367
Pre-question		If chemical fertilizer is used				
iteral questi	on	Quantity of chemical fertilizer				
^{≴37} d23: Na	tural fertil	izer type				
nformation		[Type= discrete] [Format=nur	neric] [Range= 1-	9] [Missing=*]		
Statistics [NV	v/ w]	[Valid=150785 / 44026961.67	7] [Invalid=44554	1 / 113397337.3	5]	
iteral questi	on	Natural fertilizer type				
Value	Label		Cases	Weighted	Percentage (Weighted)	
1	Manure		119061	34840321.1		79.1%
2	Compost		7796	2136933.0	4.9%	
3	Organic		59	20278.8	0.0%	
4	Manure &	compost	16457	5079713.2	11.5%	
5	Manure &	organic	54	24444.4	0.1%	
6	Compost	& organic	5	1951.2	0.0%	
7	All		109	41244.5	0.1%	
8	Others		4615	1117461.1	2.5%	
9	Not stated		2629	764614.5	1.7%	

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#37 d23: N	atural ferti	lizer type				
Value	Label		Cases	Weighted	Percentage (Weigl	hted)
Sysmiss	iquraa indiaata th	a number of access found in the data file	445541	113397337.3	y statistics of the population of interest.	
-	-	temporary crop field is	-	erpreteu as summar	y statistics of the population of interest.	
Information		[Type= continuous] [Format=n		= 0-81 [Missing=*	1	
Statistics [N	W/ W1				4] [Mean=1.185 / 1.185] [StdDev	/=0.393 / 0.393
Literal ques	-	How often is temporary crop fi				
		ed, which crop is the sec		. ,		
Information		[Type= discrete] [Format=num				
Statistics [N	w/ w1	[Valid=84829 / 22224794.8] [I				
Literal ques	-	If twice used, which crop is the		-		
-				wn (87 Modalities	s)	
#40 d25b :	f twice use	ed, which crop is the sec	cond harves	t (b)		
Information		[Type= discrete] [Format=num				
Statistics [N	w/ w]	[Valid=84743 / 22196024.37]				
Literal ques	ion	If twice used, which crop is the	e second harves	t (b)?	<u> </u>	
		Frequenc	cy table not show	vn (87 Modalities	s)	
#41 d25c:	f twice use	ed, which crop is the sec	cond harves	t (c)		
Information		[Type= discrete] [Format=num	eric] [Range= 1-	.999] [Missing=*]		
Statistics [N	w/ w]	[Valid=84740 / 22194597.95]	[Invalid=511586	/ 135229701.07]	
Literal ques	ion	If twice used, which crop is the	e second harves	t (c)?		
		Frequenc	cy table not show	wn (87 Modalitie:	s)	
#42 d26: P	revious sta	ate of the field				
Information		[Type= discrete] [Format=num	eric] [Range= 1-	9] [Missing=*]		
Statistics [N	w/ w]	[Valid=459767 / 120728154.57	7] [Invalid=1365	59 / 36696144.4	5]	
Literal ques	ion	What was the previous state of	f the field?			
Value	Label	,	Cases	Weighted	Percentage (Weigl	hted)
1	Fallow		12755	3131950.0	2.6%	
2	Cropp fiel	d	350431	92996900.5		77.0%
3	Virgin		8339	1500973.1	1.2%	
4	Rented in	crop field	8113	2149069.8	1.8%	
5	Others		1120	312132.6	0.3%	
9	Not stated	t	79009	20637128.6	17.1%	
Sysmiss			136559	36696144.5		
-	-			terpreted as summar	y statistics of the population of interest.	
-	nt: Percen	tage share of mixed cro	-			
Information	A.// 14/-	[Type= continuous] [Format=n			j=*]	
		[Valid=596322 / 157423558.86	o I [Invalid=4 / 74	10.16		
Statistics [N Literal quest	-	Percentage share of mixed cro				

#44 cerror: C	losure el	rror						
Information		[Type= continuous] [Format=nu	meric] [Range=	= 0-975] [Missing	g=*]			
Statistics [NW/	/ W]	[Valid=581220 / 153513114.49 106.357]] [Invalid=1510	6 / 3911184.53]	[Mean=139	9.321 / 138.204] [Si	tdDev=106	6.703 /
Literal questio	n	Closure error						
^{#45} enumare	a: Enum	erator area (SQ. M)						
Information		[Type= continuous] [Format=nu	meric] [Range=	= 0-96425.53] [M	lissing=*]			
Statistics [NW/	/ W]	[Valid=581267 / 153522302.2] 1805.56]	[Invalid=15059	9 / 3901996.82] [[Mean=990.	.555 / 942.396] [Sto	dDev=2068	3.203 /
Literal questio	n	Enumerator area (SQ. M)						
^{#46} compare	ea: Comp	uter area (SQ. M)						
Information		[Type= continuous] [Format=nu	meric] [Range=	= 0-96425.53] [M	lissing=*]			
Statistics [NW/	/ W]	[Valid=575657 / 152084573.12 1783.355]] [Invalid=2066	9 / 5339725.9] [[Mean=983.	.6 / 936.341] [StdD	ev=2038.7	42 /
Literal question	n	Computer area (SQ. M)						
#47 areb: Are	ea in (SQ	. M)						
Information		[Type= continuous] [Format=nu	meric] [Range=	= 3-8993148] [Mi	issing=*]			
Information Statistics [NW/ W]		[Valid=596311 / 157422135.55] [Invalid=15 / 2163.47] [Mean=97787.265 / 93662.459] [StdDev=188479.273 / 166932.671]						
		166932.671]						
Literal questio	n	166932.671] Area in (SQ. M)						
•		Area in (SQ. M)						
^{#48} landuse:		Area in (SQ. M)	ric] [Range= 1-	-6] [Missing=*]				
^{#48} landuse: Information	: Land us	Area in (SQ. M)						
#48 landuse: Information Statistics [NW/	: Land us	Area in (SQ. M) e [Type= discrete] [Format=nume						
^{#48} landuse: Information Statistics [NW/	: Land us	Area in (SQ. M) e [Type= discrete] [Format=nume [Valid=596326 / 157424299.02]				Percentage (We	eighted)	
^{#48} landuse: Information Statistics [NW/ Literal question	: Land us / W] n Label	Area in (SQ. M) e [Type= discrete] [Format=nume [Valid=596326 / 157424299.02]] [Invalid=0 / 0]		Percentage (We	eighted)	57.7%
^{#48} landuse: Information Statistics [NW/ Literal question	Land us (W] n Label Temporary	Area in (SQ. M) e [Type= discrete] [Format=nume [Valid=596326 / 157424299.02 Land use] [Invalid=0 / 0 Cases] Weighted		Percentage (We	eighted)	57.7%
^{#48} landuse: nformation Statistics [NW/ _iteral question Value 1 2	Land us (W] n Label Temporary	Area in (SQ. M) e [Type= discrete] [Format=nume [Valid=596326 / 157424299.02 Land use y crop land ht crop land] [Invalid=0 / 0 Cases 344600] Weighted 90786807.9	5.9%	18.6%	eighted)	57.7%
^{#48} landuse: Information Statistics [NW/ Literal question Value 1	Land us (W] n Label Temporary Permaner	Area in (SQ. M) e [Type= discrete] [Format=nume [Valid=596326 / 157424299.02] Land use y crop land th crop land and	[Invalid=0 / 0 Cases 344600 112449) Weighted 90786807.9 29353172.7	5.9%	18.6%	eighted)	57.7%
#48 landuse: Information Statistics [NW/ Literal question Value 1 2 3	Land us (W] n Label Temporary Permaner Grazing la	Area in (SQ. M)	Cases 344600 112449 30004) Weighted 90786807.9 29353172.7 9289515.4		18.6%	eighted)	57.7%
#48 landuse: Information Statistics [NW/ Literal question Value 1 2 3 4 5 6	Land us Label Temporary Permanen Grazing la Fallow lan Wood lanc Other lanc	Area in (SQ. M) e [Type= discrete] [Format=nume [Valid=596326 / 157424299.02] Land use y crop land nt crop land and and and and and and and and and	Cases 344600 112449 30004 26258 13839 69176	Weighted 90786807.9 29353172.7 9289515.4 6425482.3 4055498.6 17513822.0	4.1% 2.6% 1	18.6%		57.7%
#48 landuse: Information Statistics [NW/ Literal question Value 1 2 3 4 5 6 Warning: these figu	Label Temporary Permaner Grazing la Fallow lan Wood lanc Other lanc	Area in (SQ. M)	Cases 344600 112449 30004 26258 13839 69176	Weighted 90786807.9 29353172.7 9289515.4 6425482.3 4055498.6 17513822.0	4.1% 2.6% 1	18.6%		57.7%
#48 landuse: Information Statistics [NW/ Literal question Value 1 2 3 4 5 6 Warning: these figu #49 areah: A	Label Temporary Permaner Grazing la Fallow lan Wood lanc Other lanc	Area in (SQ. M)	[Invalid=0 / 0 Cases 344600 112449 30004 26258 13839 69176 They cannot be in] Weighted 90786807.9 29353172.7 9289515.4 6425482.3 4055498.6 17513822.0 terpreted as summar	4.1% 2.6% 1 ry statistics of	18.6% 1.1% the population of intere		57.7%
#48 landuse: Information Statistics [NW/ Literal question Value 1 2 3 4 5 6 Warning: these figu #49 areah: A Information	Land us N Label Temporary Permanen Grazing la Fallow lan Wood lanc Other lanc ures indicate the	Area in (SQ. M) e [Type= discrete] [Format=nume [Valid=596326 / 157424299.02] Land use y crop land nt crop land and d d d d d d d d d d d d d d d d] [Invalid=0 / 0 Cases 344600 112449 30004 26258 13839 69176 They cannot be in meric] [Ranges] Weighted 90786807.9 29353172.7 9289515.4 6425482.3 4055498.6 17513822.0 terpreted as summar	4.1% 2.6% 1 ry statistics of 8] [Missing=	18.6% 1.1% the population of intere =*]	ist.	
#48 landuse: Information Statistics [NW/ Literal question Value 1 2 3 4 5 6 Warning: these figu #49 areah: A Information Statistics [NW/	Land us Label Temporary Permanen Grazing la Fallow land Other land Other land trea in hed	Area in (SQ. M)] [Invalid=0 / 0 Cases 344600 112449 30004 26258 13839 69176 They cannot be in meric] [Ranges] Weighted 90786807.9 29353172.7 9289515.4 6425482.3 4055498.6 17513822.0 terpreted as summar	4.1% 2.6% 1 ry statistics of 8] [Missing=	18.6% 1.1% the population of intere =*]	ist.	
 #48 landuse: Information Statistics [NW/ Literal question Value 1 2 3 4 5 6 Warning: these figures #49 areah: A Information Statistics [NW/ Literal question 	Land us N Label Temporary Permanen Grazing la Fallow land Other land Other land Uood land Other land trea in hed	Area in (SQ. M)] [Invalid=0 / 0 Cases 344600 112449 30004 26258 13839 69176 They cannot be in meric] [Ranges] Weighted 90786807.9 29353172.7 9289515.4 6425482.3 4055498.6 17513822.0 terpreted as summar	4.1% 2.6% 1 ry statistics of 8] [Missing=	18.6% 1.1% the population of intere =*]	ist.	
 #48 landuse: Information Statistics [NW/ Literal question Value 1 2 3 4 5 6 Warning: these figu #49 areah: A Information Statistics [NW/ Literal question #50 prod99q 	Land us N Label Temporary Permanen Grazing la Fallow land Other land Other land Uood land Other land trea in hed	Area in (SQ. M)] [Invalid=0 / 0 Cases 344600 112449 30004 26258 13839 69176 They cannot be in meric] [Range=] [Invalid=15 / 2] Weighted 90786807.9 29353172.7 9289515.4 6425482.3 4055498.6 17513822.0 terpreted as summar = 3e-06-8.99314 2163.47] [Mean=	4.1% 2.6% 1 ry statistics of 8] [Missing= =0.0978 / 0.	18.6% 1.1% the population of intere =*] 0937] [StdDev=0.1	ist.	
1 2 3 4 5 6 <i>Warning: these figu</i> #49 areah: A Information Statistics [NW/ Literal question	Land us Label Temporary Permaner Grazing la Fallow land Other land Wood land Other land trea in hed (W] n : Product	Area in (SQ. M)] [Invalid=0 / 0 Cases 344600 112449 30004 26258 13839 69176 They cannot be im meric] [Range=] [Invalid=15 / 2 meric] [Range=] Weighted 90786807.9 29353172.7 9289515.4 6425482.3 4055498.6 17513822.0 terpreted as summar = 3e-06-8.993144 2163.47] [Mean=	4.1% 2.6% 1 ry statistics of 8] [Missing= =0.0978 / 0.	18.6% 1.1% the population of intere =*] 0937] [StdDev=0.1 sing=*]	188 / 0.167]

File Miscellaneous_NACR5	1
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#1 reg: Region

Information		[Type= discrete] [Format=nur	neric] [Range= 1-	15] [Missing=*]				
Statistics [NW/ W] [V		[Valid=49638 / 12501150.91] [Invalid=0 / 0]						
Literal questi	ion	Region						
Value Label			Cases	Weighted	Percer			
1	Tigray		4143	762697.2	6.1%			
2	Afar		961	30492.5	0.2%			
3	Amhara	Amhara		3388067.4		27.1%		
4	Oromiya	Oromiya		5156159.0			41.2%	
5	Somalie	Somalie		119958.8	1.0%			
6	Benshang	gul	1653	151864.2	1.2%			
7	SNNP		13929	2848826.9		22.8%		
12	Gambela		0	0.0	0.0%			
13	Harari	Harari		17093.8	0.1%			
14	Addis aba	Addis ababa		7515.1	0.1%			
15	Dire dawa	1	487	18476.1	0.1%			

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.

#2 zone: Zone

Information	[Type= continuous] [Format=numeric] [Range= 1-21] [Missing=*]
Statistics [NW/ W]	[Valid=49638 /-] [Invalid=0 /-] [Mean=7.375 /-] [StdDev=5.336 /-]
Literal question	Zone
#3 dist: District	
Information	[Type= continuous] [Format=numeric] [Range= 1-35] [Missing=*]
Statistics [NW/ W]	[Valid=49638 /-] [Invalid=0 /-] [Mean=7.395 /-] [StdDev=6.522 /-]
Literal question	District (wereda)
#4 fa: Farmers associ	ation
Information	[Type= continuous] [Format=numeric] [Range= 1-163] [Missing=*]
Statistics [NW/ W]	[Valid=49638 /-] [Invalid=0 /-] [Mean=40.065 /-] [StdDev=43.919 /-]
Literal question	Farmers association (FA)
#5 ea: Enumeration a	rea
Information	[Type= continuous] [Format=numeric] [Range= 1-12] [Missing=*]
Statistics [NW/ W]	[Valid=49638 /-] [Invalid=0 /-] [Mean=1.896 /-] [StdDev=1.268 /-]
Literal question	Enumeration area
#6 hh: Household id r	number
Information	[Type= continuous] [Format=numeric] [Range= 1-992] [Missing=*]
Statistics [NW/ W]	[Valid=49638 /-] [Invalid=0 /-] [Mean=120.107 /-] [StdDev=95.381 /-]
Literal question	Household id number
^{#7} hhsex: Household	head sex
Information	[Type= discrete] [Format=numeric] [Range= 1-2] [Missing=*]
Statistics [NW/ W]	[Valid=49638 /-] [Invalid=0 /-]
Literal question	Household head sex

^{#7} hhsex: I	Household	d head sex				
Value	Label			Cases	Percentage	
1	Male			40338		81.3%
2	Female			9300	18.7%	
Warning: these fi	igures indicate t	he number of cases found in the da	ta file. They cannot be int	erpreted as summa	ry statistics of the population of interest.	
^{#8} hid: Hol	der id nur	nber				
Information		[Type= continuous] [Form	at=numeric] [Range=	= 1-8] [Missing=*]	
Statistics [N	w/ w]	[Valid=49638 /-] [Invalid=0) /-] [Mean=1.075 /-]	[StdDev=0.326 /	-]	
Literal quest	ion	Holder id number				
^{#9} awgt: A	wgt					
nformation		[Type= continuous] [Form	at=numeric] [Range=	= 1-1131.91] [Mis	ssing=*]	
Statistics [N	stics [NW/ W] [Valid=49638 /-] [Invalid=0 /-] [Mean=			-] [StdDev=182.	645 /-]	
Literal quest	ion	Sample weight				
#10 f1: Cro	p rotation	1				
Information [Type= discrete] [Format=nur			numeric] [Range= 1-	2] [Missing=*]		
Statistics [NW/ W] [Valid=47684 / 12117238.04		04] [Invalid=1954 / 3	83912.87]			
Literal quest	ion	Do you exercise crop rota	tion on your land hol	ing?		
Value	Label		Cases	Weighted	Percentage (Weighted	l)
1	Yes		38290	9925371.2		81.9%
2	No		9394	2191866.9	18.1%	
Sysmiss			1954	383912.9		
-	-		-		ry statistics of the population of interest.	
	son for no	ot using chemical fert	•		rop fields	
Information		[Type= discrete] [Format=				
Statistics [N	-	[Valid=47407 / 12030629.		-		
Literal quest	ion	Reason for not using cher	nical fertilizers on an	y one of your cr	op fields	
Value	Label		Cases	Weighted	Percentage (Weighted	d)
1	Ignoranc	е	2554	538431.0	4.5%	
2	High pric	e	3336	866856.1	7.2%	
3	Lack of n	noney	10321	2665195.4	22.2%	
4	Supply is	unavailable	4042	634837.1	5.3%	
5	Lack of c	redit service	558	124160.6	1.0%	
6	Skeptical	of the outcome	2648	646658.8	5.4%	
7	Others		23948	6554490.9		54.5%
Sysmiss	auros indiante t	he number of second found in the stand	2231	470521.0	nu statistics of the nonvelotion of interest	
· ·	•	ot participating in Ext			ry statistics of the population of interest.	
nformation		[Type= discrete] [Format=				
	A// \A/1	[Valid=47459 / 12046411.				
Statistics [NW/ W] [Valid=4]		[vallu=4/459/12040411.	1/][IIIvallu=21/9/4	04/09./4]		

#12 f3: Re	ason for n	ot participating in Exte	nsion Progran	n		
Value	Label		Cases	Weighted	Percentage (Weighted)	
1	Ignoranc	e	4663	1171015.8	9.7%	
2	Lack of r	noney	12270	3212291.3		26.7%
3	Skeptica	Skeptical of the program		928872.1	7.7%	
4	Program	s unavailable	10587	2271804.3	18.9%	
5	Lack of a	dequate crop fields	5078	1341894.8	11.1%	
6	Others		11164	3120532.8		25.9%
Sysmiss			2179	454739.7		
Narning: these	figures indicate t	he number of cases found in the data	file. They cannot be int	erpreted as summa	ry statistics of the population of interes	st.
^{±13} f4: Ge	t credit sei	rvices				
nformation	l	[Type= discrete] [Format=n	umeric] [Range= 1-	2] [Missing=*]		
Statistics [N	w/w]	[Valid=49620 / 12497255.4] [Invalid=18 / 3895	5.51]		
Literal ques	stion	Do you get credit services?	1			
Value	Label		Cases	Weighted	Percentage (We	ighted)
1	Yes		11913	3396118.1	27.2%	
2	No		37707	9101137.3		72.8%
Sysmiss			18	3895.5		
Warning: these	figures indicate t	he number of cases found in the data	file. They cannot be int	erpreted as summa	ry statistics of the population of interes	st.
Statistics [NW/ W] [Valid=37548 / 9060830.13] [I Pre-question If "No" in "Do you get credit set			3440320.78]			
Literal ques		Reason for not using credit				
Value	Label		Cases	Weighted	Percentage (Weighted)	
1	Service i	s not available	11897	2321695.7		25.6%
2		p pay the loan	12025	3304283.2		36.5%
		ate service provided	8405	1993204.0	22.0	
3		•	1498	378776.8	4.2%	
	Ignoranc				2.4%	
3 4 5	Ignoranc Doesn't y	/ield any results	826	217793.9	2.4 /0	
4	-	vield any results	826 2897	217793.9 845076.5	9.3%	
4 5 6	Doesn't y	vield any results				
4 5 6 Sysmiss	Doesn't y Others		2897 12090	845076.5 3440320.8		st.
4 5 6 Sysmiss <i>Warning: these</i>	Doesn't y Others	he number of cases found in the data	2897 12090	845076.5 3440320.8	9.3%	st.
4 5 6 Sysmiss <i>Warning: these</i> #15 f6: Ge	Doesn't y Others figures indicate t t advisory	he number of cases found in the data	2897 12090 file. They cannot be int	845076.5 3440320.8 erpreted as summa	9.3%	st.
4 5 6 Sysmiss <i>Warning: these</i> #15 f6: Ge Information	Doesn't y Others figures indicate t t advisory	he number of cases found in the data	2897 12090 file. They cannot be int umeric] [Range= 1-	845076.5 3440320.8 erpreted as summa 2] [Missing=*]	9.3%	st.
4 5 6 Sysmiss <i>Warning: these</i> #15 f6: Ge Information Statistics [N	Doesn't y Others figures indicate t t advisory W/ W]	he number of cases found in the data service [Type= discrete] [Format=n	2897 12090 file. They cannot be int umeric] [Range= 1- 7] [Invalid=40 / 117	845076.5 3440320.8 erpreted as summa 2] [Missing=*]	9.3%	st.
4 5 6 <i>Sysmiss</i> <i>Warning: these</i> #15 f6: Ge Information Statistics [N	Doesn't y Others figures indicate t t advisory W/ W]	he number of cases found in the data service [Type= discrete] [Format=n [Valid=49598 / 12489376.9	2897 12090 file. They cannot be int umeric] [Range= 1- 7] [Invalid=40 / 117	845076.5 3440320.8 erpreted as summa 2] [Missing=*]	9.3%	
4 5 6 Sysmiss Warning: these #15 f6: Ge Information Statistics [N Literal ques	Doesn't y Others figures indicate t t advisory W/ W] stion	he number of cases found in the data service [Type= discrete] [Format=n [Valid=49598 / 12489376.9	2897 12090 file. They cannot be int umeric] [Range= 1- 7] [Invalid=40 / 117 es?	845076.5 3440320.8 erpreted as summar 2] [Missing=*] 73.94]	9.3% ry statistics of the population of interes	
4 5 6 Sysmiss <i>Warning: these</i> #15 f6: Ge Information Statistics [N Literal quest Value	figures indicate t t advisory W/W] stion Label	he number of cases found in the data service [Type= discrete] [Format=n [Valid=49598 / 12489376.9	2897 12090 file. They cannot be int umeric] [Range= 1- 7] [Invalid=40 / 117 es? Cases	845076.5 3440320.8 erpreted as summar 2] [Missing=*] 73.94] Weighted	9.3% ry statistics of the population of interes	ighted) 48.9%
4 5 6 Sysmiss <i>Warning: these</i> #15 f6: Ge Information Statistics [N Literal quest Value 1	Doesn't y Others figures indicate t t advisory NW/ W] stion Label Yes	he number of cases found in the data service [Type= discrete] [Format=n [Valid=49598 / 12489376.9	2897 12090 file. They cannot be int umeric] [Range= 1- 7] [Invalid=40 / 117 es? Cases 22577	845076.5 3440320.8 erpreted as summar 2] [Missing=*] 73.94] Weighted 6110355.8	9.3% ry statistics of the population of interes	ighted)

#16 f7: Rea	ison for no	ot using advisory servi	ces			
Information	nation [Type= discrete] [Format=nume			5] [Missing=*]		
Statistics [NW/ W] [Valid=27003 / 6371597.28] [[Invalid=22635 / 6	6129553.63]		
Pre-question	1	If "No" in "Do you get adviso	ory services?"			
Literal quest	_iteral question Reason for not Using Advice					
Value	Label	Cases Weighted Perc		Percentage (W	eighted)	
1	Non avail	ability of the service	10968	2268087.5		35.6%
2		te services provided	9558	2319002.0		36.4%
3	Ignorance		4154	1117878.6	17.5%	
4	Does not	yield any results	860	204311.2	3.2%	
5	Others		1463	462318.0	7.3%	
Sysmiss			22635	6129553.6		
Varning: these f	igures indicate th	ne number of cases found in the data	file. They cannot be int	terpreted as summary	statistics of the population of inter-	est.
^{⊭17} f8: Maj	or supplie	r of fertilizer				
Information [Type= discrete] [Format=num			ımeric] [Range= 1-	5] [Missing=*]		
Statistics [NW/ W] [Valid=47761 / 12116680.17]][Invalid=1877/3	84470.74]		
_iteral quest	ion	Major supplier of fertilizer				
Value	alue Label		Cases	Weighted	Percentage (W	eighted)
1	Government organizations		10045	2874167.6	23.7%	
2	Private organizations		1197	361076.5	3.0%	
3	Merchant	S	4623	1450518.4	12.0%	
4	Others		3221	1066603.2	8.8%	
5	Never us	ed fertilizer	28675	6364314.5		52.5%
Sysmiss			1877	384470.7		
Narning: these f	igures indicate th	ne number of cases found in the data	file. They cannot be int	erpreted as summar	/ statistics of the population of inter	est.
^{#18} f9: Nur	nber of ox	en have in Main ("Meh	er") season			
nformation		[Type= continuous] [Formate	=numeric] [Range=	= 0-53] [Missing=	*]	
Statistics [N	w/ w]	[Valid=44451 / 11196078.14] [Invalid=5187 / 1	305072.77] [Me	an=0.963 / 1.015] [StdDev=1	.156 / 1.114]
Literal quest	ion	How many oxen do you hav	e in this Main ("Me	her") season?		
#19 f10: lf ı	not have e	nough ox how do you	plough			
nformation		[Type= discrete] [Format=nu	imeric] [Range= 1-	7] [Missing=*]		
Statistics [N	w/ w]	[Valid=34080 / 8422235.11]	[Invalid=15558 / 4	078915.8]		
- Literal quest	ion	If you have one or no ox how	-	-		
Value	Label	1	Cases	Weighted	Percentage (W	eighted)
1	By renting	g ox	3014	603132.5	7.2%	- /
2		g mine with someone's ox	10270	2626129.1		31.2%
3	By pairing mine with cow/horse		601	178650.3	2.1%	
4	Using horses or cows		437	104593.3	1.2%	
5	Hand dig		9137	2079429.4		24.7%
		rrowed oxen	8484	2293407.2		27.2%
0						
7	Others		2137	536893.3	6.4%	

File Misc	ellane	ous_NACR51					
#19 f10: If no	t have er	nough ox how do you p	lough				
Warning: these figur	res indicate the	e number of cases found in the data fil	e. They cannot be int	terpreted as summary	statistics of the population of interest.		
#20 f11: Tota	l number	of fields recorded for t	he holder				
Information		[Type= continuous] [Format=r	at=numeric] [Range= 0-87] [Missing=*]				
Statistics [NW/ W] [Valid=48506 / 12187084.1			[Invalid=1132 / 3	314066.78] [Mean	=10.418 / 10.999] [StdDev=6.]	761 / 6.828]	
Literal question	ו	Total number of fields recorde	d for the holder				
#21 f12: Tota	l number	of crop fields recorded	d for the hold	ler			
Information		[Type= continuous] [Format=r	numeric] [Range=	= 0-90] [Missing=*]			
Statistics [NW/	w]	[Valid=47541 / 12024365.07]	[Invalid=2097 / 4	176785.84] [Mean	=7.727 / 8.066] [StdDev=5.36	8 / 5.39]	
Literal question Total number of crop fields recorded for th			corded for the ho	lder			
#22 f13: Plou	ghed ad	ditional fields over that	of the previo	ous year			
Information	nation [Type= discrete] [Format=nu			2] [Missing=*]			
Statistics [NW/ W] [Valid=47550 / 12062080.86			86] [Invalid=2088 / 439070.05]				
Literal question Has the holder ploughed ad			additional fields over that of the previous year?				
Value	Label		Cases	Weighted	Percentage (Weig	jhted)	
1	Yes		8754	2083519.9	17.3%		
2	No		38796	9978561.0		82.7%	
Sysmiss			2088	439070.0			
		e number of cases found in the data fil		erpreted as summary	statistics of the population of interest.		
-	ious stat	e of the additional field	-	43 (5.4)			
Information		[Type= discrete] [Format=num					
Statistics [NW/	w]	[Valid=8336 / 1983622.51] [Ir	valid=41302 / 10	0517528.4]			
Pre-question		If yes in question # 13					
Literal question	ו	What was the previous state of	of the additional f	ields?			
Value	Label	Cases Weighted Percentage (Wei		Percentage (Weig	Inted)		
1	Holder's v	irgin land	2615	543322.2	27.4%		
2	Public/cor	nmunity virgin land	1637	303620.6	15.3%		
3	Borrowed	fallow land	3636	1022989.5		51.6%	
4	Others		448	113690.2	5.7%		
Sysmiss Warning: these figur	res indicate th	e number of cases found in the data fil	41302 e. They cannot be int	10517528.4 terpreted as summary	statistics of the population of interest		

Documentation

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Reports and analytical documents

Study Documentation, Central Statistical Agency, Ethiopia [eth], English [eng], "Doc\Reports \AgSS_2006_Metadata.pdf"

Agricultural Sample Survey 2006-2007 (1999 E.C) Volume I, Area and Production of Crops, *Private Peasant Holdings, "Meher" Season*, Central Statistical Agency, July 2007, Ethiopia [eth], English [eng], "Doc\Reports \productionreport99.pdf"

Agricultural Sample Survey 2006-2007 (1999 E.C) Volume III, Farm Management Practices, *Private Peasant Holdings, "Meher" Season*, Central Statistical Agency, August 2007, Ethiopia [eth], English [eng], "Doc\Reports \practicereport99.pdf"

Agricultural Sample Survey 2006-2007 (1999 E.C) Volume IV, Land Utilisation, *Private Peasant Holdings,* "Meher" Season, Central Statistical Agency, July 2007, Ethiopia [eth], English [eng], "Doc\Reports\landreport99.pdf"

Questionnaires

Agricultural Sample Survey 2006-2007 (1999 E.C) - Questionnaire, Central Statistical Agency, Ethiopia [eth], English [eng], "Doc\Questionnaires\productionreport99_Questionnaire.pdf"

Technical documents

Form for Requesting Access to Raw Data, Central Statistical Agency, Ethiopia [eth], English [eng], "Doc \Technical\CSA_data_request_form.pdf"

Agricultural Sample Survey 2006-2007 (1999 E.C) - Enumerators Manual, Central Statistical Agency, Ethiopia [eth], Amharic [amh], "Doc\Technical\agri_complete_manual_99.pdf"