

## 1. HISTORICAL OUTLINE

The first Census of Agriculture (CA) in the Lao People's Democratic Republic (Lao PDR) was conducted in 1998/1999. The metadata review and data presented here refer to the second CA, conducted in 2010/2011.

## 2. LEGAL BASIS AND ORGANIZATION

### **Legal framework**

The CA 2010/2011 was carried out according to:

- Decree No. 140, of September 2009, for conducting the Lao PDR Census of Agriculture 2010/2011. Article 6 of the Decree mandates, *inter alia*, the Department of Statistics (DoS), under the Ministry of Planning and Investment (MPI), to conduct the Census of Agriculture, the Census of Population, and other censuses and surveys. The periodicity of the CA was established as being ten years.
- The Statistics Law of June 2010. The Law governs all statistical activities in Lao PDR.

### **Institutional framework and international collaboration**

The CA 2010/2011 was undertaken under the overall control of the Agricultural Census Steering Committee, chaired by the Deputy Prime Minister and comprising high-level representatives of the State Planning Committee (SPC) and of the Ministry of Agriculture and Forestry (MAF). The work on the census was undertaken by the Agricultural Census Office (ACO), which was established in the Department of Planning (DoP) of the MAF. The CA 2010/2011 was implemented in collaboration with the DoS. Financial support for the CA 2010/2011 was received from several donors: the Swiss Agency for Development and Cooperation (SDC), the International Fund for Agricultural Development (IFAD), the Australian Development Agency (AusAID), the French Development Agency (AFD) and the German Agency for Technical Cooperation (GIZ). The Government of Lao PDR also contributed, by means of the National Budget. FAO provided technical support for the census.

### **Census staff**

The census personnel included 2 333 field enumerators, supervised by 312 district supervisors, who worked during the fieldwork.

## 3. REFERENCE DATE AND PERIOD

**Reference day:** the day of the interview, for the identification of the holder, the holding's characteristics, livestock numbers, etc.

**Reference period:** the preceding 12 months (the 2010 wet season and the 2010/2011 dry season) for the area of the holding, crops, methods of cultivation, use of fertilizers and pesticides, etc.

## 4. ENUMERATION PERIOD

The field operations were undertaken in the period from 28 February to 8 April 2011.

## 5. SCOPE OF THE CENSUS AND DEFINITION OF THE STATISTICAL UNIT

The **census scope** covered agricultural activities (crop and animal production) and aquaculture production activities. A community survey was carried out together with the CA.

The **statistical unit** was the farm household (holding), defined as an economic unit of agricultural production under single management, comprising all livestock raised and all agricultural land operated, regardless of ownership, which engages agricultural operation above certain established thresholds of land, livestock or aquaculture (see section 7).

## 6. GEOGRAPHIC COVERAGE

The census covered urban and rural areas.

## 7. CUT-OFF THRESHOLD AND OTHER EXCLUSIONS

The following thresholds were established for the farm household in the CA 2010/2011: (i) the household operated at least 0.02 ha of agricultural land in the 2010 wet season or the 2010/11 dry season; or (ii) raised at least two cattle or buffaloes, five or more pigs, goats or sheep, or 20 or more poultry at the time of the census.

Holdings in the non-household sector were not included in the census.

## 8. METHODOLOGY

### **Methodological modality for conducting the census**

The modular approach was applied for the CA 2010/2011. The census had three components: (i) a household component (served as a core module, covered by complete enumeration); (ii) a farm household component (supplementary module, conducted by sample enumeration); and (iii) a village component (community survey, by complete enumeration of all villages). The supplementary census module included sections with detailed questions on crops, livestock, machinery, services, labour, forestry, aquaculture and fisheries.

### **Frame**

The census frame was built on the basis of the household listing form (Form 1; see the "Questionnaire(s)" subsection below for more details), using complete enumeration.

### **Complete and/or sample enumeration methods**

The census data collection was conducted using complete enumeration in combination with sample enumeration. A short census questionnaire was applied for data collection from all households (using the Form 4 questionnaire). For in-depth data collection from farm households (using Form 5), a sample enumeration was used.

### **Sample design (if sampling was used)**

For the sample component (Form 5), two-stage sampling was used, villages being the Primary Sampling Units (PSUs). In each district, a sample of villages was selected using stratified systematic PPS sampling. The estimated number of households in each village was used as the size measure for PPS sampling. The sample of farm households in each sample village was selected using stratified systematic random sampling. Altogether, 2 620 villages and 41 660 sample farm households were selected in the sample.

### **Data collection methods**

Information was collected in paper questionnaires filled through face-to-face interviews (using the PAPI method).

### **Questionnaire(s)**

Four questionnaires were used in the CA 2010/2011, as follows: (i) a form for listing the households in the village, Form 1; (ii) a questionnaire for the household component, Form 4; (iii) a questionnaire for the farm household (holding) component, Form 5; and (iv) a questionnaire for the village component, Form 3.

The 2010/2011 CA census questionnaires covered all 16 core items recommended for the WCA 2010 round.

## **9. USE OF TECHNOLOGY**

GIS was used for census data dissemination. Census results were released and are available online.

## **10. DATA PROCESSING AND ARCHIVING**

Completed questionnaires were returned to the ACO in Vientiane for processing. Data processing involved: checking that the census enumeration was complete; manually checking that the questionnaires had been correctly filled out; coding of descriptive responses (such as crop types); manual data entry; running computer checks to identify and correct errors; and producing tabulations of census data.

## **11. CENSUS DATA QUALITY**

To ensure census data quality, supervision was done at the central, provincial and district level. The data were confronted with external sources, such as the data from the previous census and current agricultural surveys. For the sampling component, statistical errors were computed.

## **12. DATA DISSEMINATION**

Census data were disseminated through printed publications and online. A census report with the final census results was released in May 2012. Various census output tables were prepared at the national, district and village level. Based on the census results, Lao PDR also produced the "Atlas of agriculture. Patterns and trends between 1999 and 2011" (available online).

## **13. DATA SOURCES**

**Agricultural Census Office.** 2012. *Lao Census of Agriculture 2010/11, Instruction Manual for Enumerators*. Vientiane, Lao PDR. (also available at [http://www.fao.org/fileadmin/templates/ess/ess\\_test\\_folder/World\\_Census\\_Agriculture/Country\\_info\\_2010/Reports/Manuals\\_4/LAO\\_ENG\\_MAN\\_enumerator\\_2011.pdf](http://www.fao.org/fileadmin/templates/ess/ess_test_folder/World_Census_Agriculture/Country_info_2010/Reports/Manuals_4/LAO_ENG_MAN_enumerator_2011.pdf)).

**Ministry of Agriculture and Forestry, Department of Planning and Cooperation.** 2014. *LAO PDR Lao Census of Agriculture 2010/11, Analysis of Selected Themes*. Vientiane, Lao PDR. (also available at <http://www.fao.org/3/a-at767e.pdf>).

**Steering Committee for the Agricultural Census, Agricultural Census Office.** 2012. *Lao Census of Agriculture 2010/11, Highlights*. Vientiane, Lao PDR. (also available at [http://www.fao.org/fileadmin/templates/ess/ess\\_test\\_folder/World\\_Census\\_Agriculture/Country\\_info\\_2010/Reports/Reports\\_4/LAO\\_ENG\\_REP\\_2010-2011.pdf](http://www.fao.org/fileadmin/templates/ess/ess_test_folder/World_Census_Agriculture/Country_info_2010/Reports/Reports_4/LAO_ENG_REP_2010-2011.pdf)).

## **14. CONTACT**

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THE LAO PEOPLE'S DEMOCRATIC REPUBLIC –  
CENSUS OF AGRICULTURE 2010/2011 – MAIN RESULTS

NUMBER OF HOLDINGS AND AREA, BY LAND TENURE		
	Holdings	Area (ha)
<b>Total</b>	<b>782 800</b>	<b>1 870 200</b>
Holdings without land	6 200	
Holdings with land	776 600	1 870 200
Owned land	730 800	1 738 400
Rented land	68 900	110 700
Other form of tenure	19 600	21 100

LAND FRAGMENTATION		
	Holdings	Number of parcels
<b>Total holdings with land</b>	<b>776 600</b>	<b>2 089 100</b>
1 parcel	117 900	n.a.
2–3 parcels	502 300	n.a.
4–5 parcels	122 700	n.a.
6 parcels and over	33 700	n.a.

DISTRIBUTION OF HOLDINGS BY LAND SIZE CLASSES		
	Holdings	Area (ha)
<b>Total</b>	<b>782 800</b>	<b>1 870 200</b>
Holdings without land	6 200	
Holdings with land	776 600	1 870 200
0,01–0,49 ha	58 100	16 900
0,50–0,99 ha	113 600	80 600
1,00–1,49 ha	148 600	171 900
1,50–1,99 ha	97 000	162 200
2,00–2,99 ha	150 500	350 400
3,00 ha and over	208 800	1 088 000

LAND USE		
	Holdings	Area (ha)
<b>Total</b>	<b>782 800</b>	<b>1 870 200</b>
Agricultural land	n.a.	1 623 100
Arable land	n.a.	1 428 200
Land under temporary crops	n.a.	1 230 000
Land temporarily fallow	n.a.	198 000
Land under permanent crops	n.a.	168 500
Permanent meadows and pastures	n.a.	26 400
Non-agricultural land	n.a.	247 100
Forest and other wooded land	n.a.	122 300
Other land	n.a.	124 800

HOLDERS, BY SEX	
	Number
<b>Holder is an individual</b>	<b>256 000</b>
Male	213 300
Female	42 700
<b>More than one co-holder (joint holders)</b>	<b>526 800</b>
Co-holders are male only	16 600
Co-holders are female only	8 600
Co-holders are both male and female	501 600

HOLDINGS BY HOUSEHOLD SIZE	
	Number
<b>Total</b>	<b>782 800</b>
1 person	3 400
2–3 persons	108 700
4–5 persons	294 300
6–9 persons	323 200
10 persons and over	53 200

MEMBERS OF HOLDER'S HOUSEHOLD, BY SEX	
	Number
<b>Total</b>	<b>4 501 000</b>
Male	2 262 400
Female	2 238 600
Engaged in agricultural activities on the holding	2 654 700
Male	1 317 300
Female	1 337 400

HOLDINGS BY MAIN PURPOSE OF PRODUCTION	
	Holdings
<b>Total producing mainly for</b>	<b>782 800</b>
Home consumption	551 800
Sale	231 000

LIVESTOCK		
	Holdings	Head
<b>Total holdings with livestock</b>	<b>n.a.</b>	
Cattle	297 000	1 586 200
Buffaloes	226 400	774 200
Goats	43 200	215 600
Pigs/swine	306 400	978 300
Poultry (1 000 head)	n.a.	n.a.
Chickens	n.a.	9 314
Local chickens	487 500	8 665
Commercial chickens	4 000	649
Ducks	212 800	1 791