

# KINGDOM OF CAMBODIA

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## Cambodia Inter-Censal Agriculture Survey 2019

Statistical Release





November 2020

The data presented in this Statistical Release comes from the Cambodia Inter-censal Agriculture Survey 2019 report (CIAS19), which was produced by the National Institute of Statistics (NIS), Ministry of Planning, in collaboration with the Ministry of Agriculture, Forestry and Fisheries (MAFF) and with technical support from the Food and Agriculture Organization of the United Nations (FAO). The FAO AGRISurvey Programme has been helping Cambodia to strengthen its national agricultural survey system and to promote access to and use of agricultural statistics.

### 1. Survey methodology overview

In July 2019, two Royal Cambodian Government institutions (NIS and MAFF) undertook the CIAS, the first large-scale survey of the agriculture sector since the Cambodia Agriculture Census in 2013. This national survey collected information on crop cultivation, livestock and poultry raising, aquaculture and capture fishing.

Figure 1: Methodological overview

Survey preparation

- AGRIS methodology adaptation
- Questionnaire design & testing
- Sample selection
- Field staff recruitment (government)

Data collection

- Screening phase in June 2019
- Survey from July to November 2019
- Using CAPI mode, completed:
- 15,994 household interviews
- 186 juridical holding interviews

Data management

- From July 2019 to April 2020
- Data cleaning & data imputation
- Weighted data analysis
- Tabulation plan

Reporting and validation

- Preliminary report (June 2020)
- Validation provincial & national levels
- Validation from Technical Committee
- Report finalization and translation

Data dissemination

- January 2021
- Thematic tables -> CAMSTAT
- Microdata -> NADA
- Report release workshop

Source: Cambodia Inter-Censal Agriculture Survey 2019.

The CIAS 2019 used statistical methods to select a representative sample of Enumeration Areas (EA)

throughout Cambodia, from the 2013 Agriculture Census Sampling Frame. Households within these EAs were screened for any agricultural activity. Using this basic information, the agricultural households were stratified and sampled for additional data collection. Juridical holdings, which are farm enterprises operated by corporations or government institutions, were also surveyed based on listings provided by MAFF and other governmental offices with knowledge of agricultural juridical holdings.

The CIAS 2019 used the Computer Assisted Personal Interviewing (CAPI) data collection mode and tablet technology to record and manage data.

Figure 2: Tablet-based data collection for CIAS 2019, NIS photograph



The household holdings survey was conducted from 8 to 23 July 2019, and the juridical holdings survey from 24 October to 8 November 2019.

More than 400 field staff (including 335 enumerators, 44 field supervisors and 40 data supervisors) completed a total of 15,994 household holding and 186 juridical holding interviews, across the 25 provinces of Cambodia.

This Statistical Release presents the main CIAS 2019 findings, for the household agricultural holdings only.

#### 2. Household agricultural holdings

The CIAS 2019 survey estimated a total of 1,726,000 household agricultural holdings in Cambodia, managed by a total of 1,735,000 households (some holdings were reportedly managed by several households), 23.5% of which were female-headed.

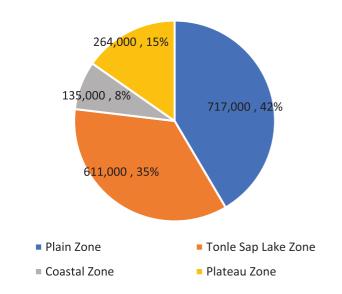
These household agricultural holdings were unevenly distributed across the country's socio-geographic zones: the Plain Zone has the largest number of agricultural holdings (42%), followed by the Tonle

Sap Lake Zone (35%), the Plateau Zone (15%), and finally the Coastal Zone (8%).

Figure 3: Socio-geographic zones in Cambodia



Figure 4: Number and percentage of household agricultural holdings by socio-geographic zone

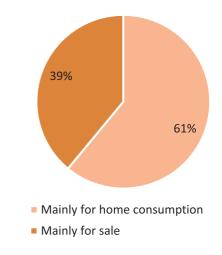


Source: Cambodia Inter-Censal Agriculture Survey 2019.

Home consumption was reported as the main agricultural product destination by 61% of the household holdings in Cambodia, while the other 39% mentioned that agricultural production was mostly for sale.

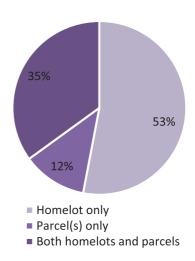
The CIAS 2019 estimated that out of these 1,726,000 household agricultural holdings, 53% conducted any agricultural activity on their homelot only, 12% on their separate parcel(s) only, and the remaining 35% on both their homelot and separate land parcel(s).

Figure 5: Percentage of household agricultural holdings reporting their main agricultural product destination



Source: Cambodia Inter-Censal Agriculture Survey 2019.

Figure 6: Percentage of household agricultural holdings with homelot, parcel(s) or both



Source: Cambodia Inter-Censal Agriculture Survey 2019.

# 3. Crop production activity

The survey estimated that approximately 1,517,000 of the 1,726,000 household agricultural holdings were growing crops. Numerous types of crops were reported during data collection, but the survey focused on 20 crops of interest selected by MAFF, for which information on planted and harvested areas, input use (fertilizers, pesticides and irrigation), and production was obtained.

The survey ranked the four most prevalent crops in all major four zones of the country. Non-aromatic paddy was found to be the most widespread crop across the country. The CIAS 2019 estimated that non-aromatic

paddy had a total planted area of 1.48 million hectares and a total harvested area of 1.41 million hectares. The average production was estimated to be at 2,504 kilograms per hectare, with a total national production estimated at 3.5 million tonnes.

Figure 7: Four most prevalent crop types reported in each zone (by number of household holdings reporting; HH: household)

Plain Zone: Tonle Sap Lake 624,000 HH Zone: holdings 529,000 HH 1. Non-aromatic holdings paddy 1. Non-aromatic 2. Mango paddy 3. Banana 2. Mango 4. Aromatic Paddy 3. Banana 4. Aromatic Paddy 1,517,000 household agricultural holdings growing crops in Cambodia Coastal Zone: Plateau Zone: 119,000 HH 246,000 HH holdings holdings 1. Non-aromatic 1. Non-aromatic paddy paddy 2. Coconut 2. Cashew 3. Banana 3. Banana 4. Mango 4. Mango

 $Source: Cambodia\ Inter-Censal\ Agriculture\ Survey\ 2019.$ 

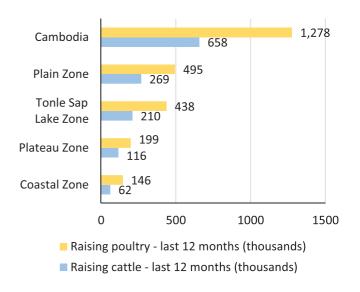
The survey showed that Cambodia produces many varieties of fruits including mangoes, bananas, custard apples, dragon fruits, durians, guavas, jackfruits, jambolen plums, longans, milk fruits, papayas and pineapples. Mango was the second most popular crop among farmers in the Plain and Tonle Sap Lake Zones (in terms of number of holdings reporting they grew this crop). At country level, about 96,765 hectares of mango were planted, and 55,944 hectares harvested, for a total estimated production of 359,758 tonnes. In the Coastal and Plateau Zones, coconut and cashew were the second most popular crops respectively.

Banana was the third most popular crop for Cambodian farmers in all four zones, who planted it across an estimated 10,870 hectares, harvested 8,375 hectares, for a total estimated production of about 154,000 tonnes.

### 4. Livestock & poultry raising activity

Raising livestock and/or poultry is an important agricultural activity in Cambodia, supporting livelihoods and providing income to 75% of the 1,726,000 household agricultural holdings in the country (or approximately 1,301,000 holdings). An estimated 1,278,000 holdings reported raising poultry and 658,000 raising cattle.

Figure 8: Number of household agricultural holdings reporting a livestock and/or poultry raising activity, by socio-geographic zone (in thousands)



 $Source: Cambodia\ Inter-Censal\ Agriculture\ Survey\ 2019.$ 

The largest number of household holdings raising cattle was recorded in the Plain zone (269,000 household agricultural holdings), followed by the Tonle Sap Lake Zone (210,000), the Plateau Zone (116,000) and the Coastal Zone (62,000).

Figure 2: Poultry raising farm, NIS photograph



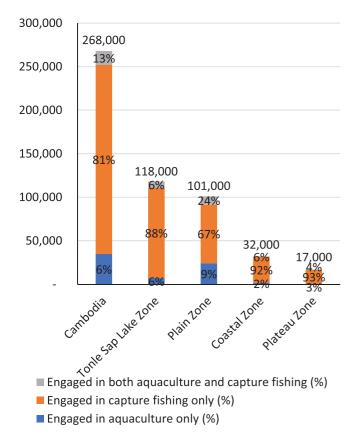
The Plain Zone recorded again the highest number of household agricultural holdings raising poultry (495,000), followed by the Tonle Sap Lake Zone (438,000), the Plateau Zone (199,000) and the Coastal Zone (146,000).

Nationwide, data shows that 76% of the household holdings raising cattle kept between 1 to 4 animals, with a national average of 3.8 cattle animals per holding. As for household holdings raising poultry, 91% reported they had between 1 to 49 birds, with a national average of 28.5 birds per holding.

### 5. Aquaculture & capture fishing activity

Aquaculture and capture fishing are additional economic activities for 16% of the household agricultural holdings in Cambodia (approximately 268,000 holdings). The zone with the largest number of household agricultural holdings practicing aquaculture and/or capture fishing was the Tonle Sap Lake Zone (118,000).

Figure 8: Number of household agricultural holdings reporting an aquaculture and/or capture fishing activity, and percentage of holdings for each activity, by sociogeographic zone



Source: Cambodia Inter-Censal Agriculture Survey 2019.

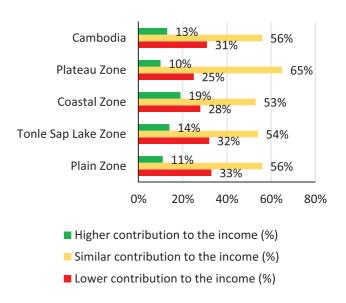
The Coastal Zone had a lower number of holdings engaged in aquaculture and/or fishing (32,000), but it had the highest share (24%) of household agricultural holdings engaged in any of these activities. Unsurprisingly, the Plateau zone had the lowest number of holdings involved in aquaculture and/or capture fishing activities (17,000).

Most household agricultural holdings with aquaculture and/or capture fishing activities were engaged in capture fishing only (81%), from coastal or fresh waters. A much smaller share of holdings (6%) practiced aquaculture only, understood as controlled cultivation of fish, which commonly takes place in ponds or paddy fields. 13% of the surveyed household holdings reported they practiced both aquaculture and capture fishing.

### 6. Economy

Agriculture remains essential to secure the livelihoods of the Cambodian population. An estimated 32% of holders reported that about half of their total household income (40% to 59%) was accounted for by agricultural income, 17% reported that most or almost all (60% to 99%) of their total household income was accounted for by agricultural income, and 4% reported that all (100%) of their total household income was accounted for by agricultural income.

Figure 9: Percentage of household agricultural holdings reporting a higher, similar or lower contribution of their agricultural income to their household's total income, compared with the previous year, by socio-geographic zone



 $Source: Cambodia\ Inter-Censal\ Agriculture\ Survey\ 2019.$ 

Around one third (31%) of the Cambodian household agricultural holdings reported that their agricultural income contributed less to their total household income than during the previous year; 56% reported a similar contribution, and 13% reported a greater contribution to their total household income than during the previous year.

#### **Resources**

National Institute of Statistics, Ministry of Planning, in collaboration with Ministry of Agriculture, Forestry and Fisheries, *Cambodia Inter-Censal Agriculture Survey 2019 (CIAS19) Final Report*, December 2020.

#### **Contact**

FAO AGRISurvey Programme	
Agricultural Integrated Survey (AGRISurvey) Programme http://www.fao.org/in-action/agrisurvey/en/	Statistics Division (ESS) Food and Agriculture Organization of the United Nations (FAO) Viale delle Terme di Caracalla 00153 Rome - Italy
National Institute of Statistics (NIS), Ministry of Planning (MoP) https://www.nis.gov.kh/	National Institute of Statistics (NIS), Ministry of Planning (MoP), Royal Government of Cambodia Building C, E and F, #386 Preah Monivong Blvd, Boeung Keng Kong 1, Chamkarmorn Phnom Penh, Kingdom of Cambodia
Ministry of Agriculture, Forestry and Fisheries (MAFF) https://web.maff.gov.kh/	Ministry of Agriculture, Forestry and Fisheries (MAFF) 255, 200 Preah Norodom Blvd (41), Phnom Penh





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