



KINGDOM OF CAMBODIA

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Cambodia Agricultural Survey 2022 Statistical Release



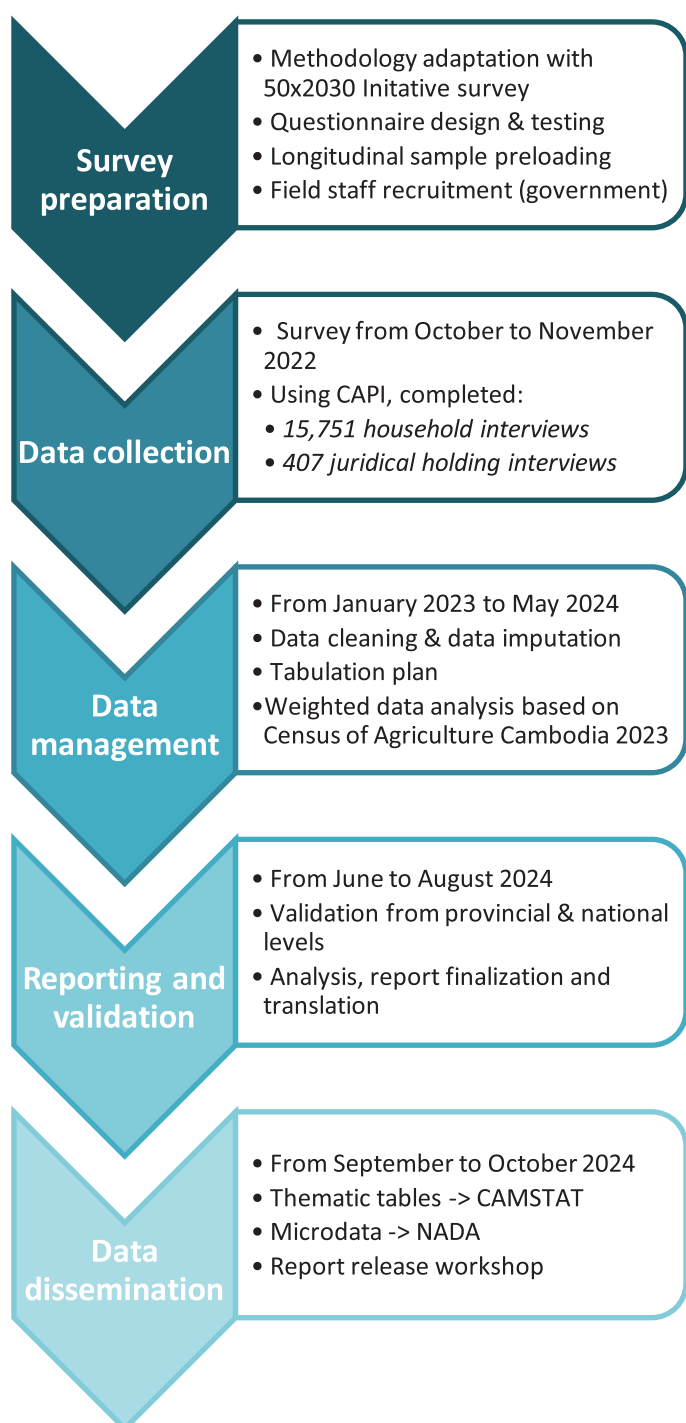
December 2024

The data presented in this Statistical Release comes from the Cambodia Agriculture Survey 2022 report (CAS2022), 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), under the scope of the 50x2030 Initiative to Close the Agricultural Data Gap. The 50x2030 is a multi-donor initiative implemented through a unique partnership between the World Bank, FAO and the International Fund for Agricultural Development (IFAD), with the aim to build national statistical capacity and to establish an efficient and durable national agricultural data collection system.

1. Survey methodology overview

During October to November 2022, two Royal Cambodian Government institutions (NIS and MAFF) undertook the CAS 2022, a follow-up to the Cambodia Inter-Censal Agriculture Survey 2019 (CIAS 2019) and Cambodia Agriculture Survey's 2020 and 2021 (CAS 2020 and 2021). This national survey collected information on crop cultivation, livestock and poultry raising, aquaculture and capture fishing, production methods and the environment.

Figure 1: Methodological overview



Source: Cambodia Agriculture Survey 2022.

The sampling approach for the CAS 2022 relied fully upon the sampling of CAS 2021 utilising a panel approach. The CAS 2021 had used statistical methods to select a representative sample of enumeration areas throughout Cambodia from the 2019 General Population Census of Cambodia 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 CAS 2022 used a Computer Assisted Personal Interviewing (CAPI) data collection method and tablet technology to record and manage data.

A fisherman catches fish in the lake. Source: NIS photograph, 2022



The household survey was conducted from 31 October to 17 November 2022 and the juridical holdings survey was conducted from 13-26 November 2022. A total of 429 staff (including 337 enumerators, 46 field supervisors and 46 data supervisors) completed data collection on a sample of 15,751 household holdings and 407 juridical holding interviews, across the 25 provinces of Cambodia.

This Statistical Release presents the main CAS2022 findings, for the household agricultural holdings only.

2. Household agricultural holdings

The CAS2022 survey estimated a total of 1,858,540 household agricultural holdings in Cambodia. Based on the General Population Census of Cambodia 2019, it is estimated that there are 3,553,021 households in the country and therefore an estimated 52 % of all

households are involved in agricultural production.

These household agricultural holdings were unevenly distributed across the country's socio-geographic zones: the Plain Zone has the largest number of agricultural holdings (41%), followed by the Tonle Sap Lake Zone (38%), the Plateau Zone (15%), and finally the Coastal Zone (7%).

Figure 2: Socio-geographic zones in Cambodia

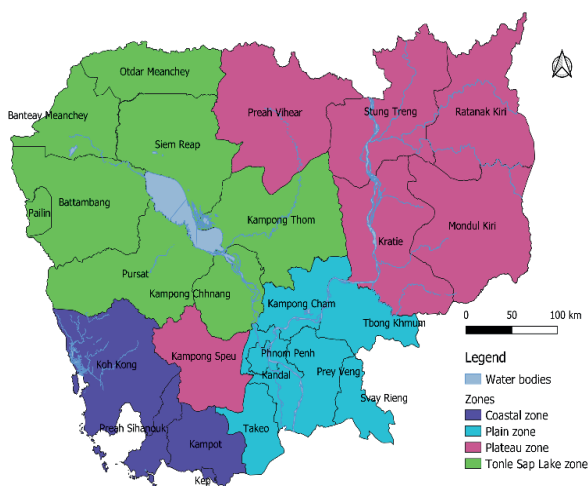
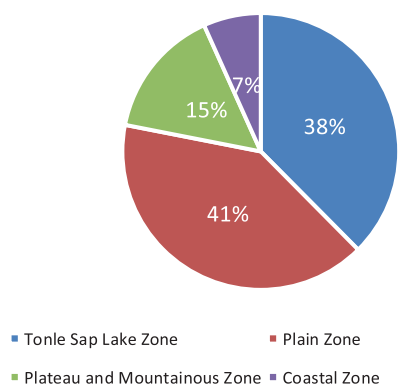


Figure 3: Percentage of household agricultural holdings by socio-geographic zone



Source: Cambodia Agriculture Survey 2022.

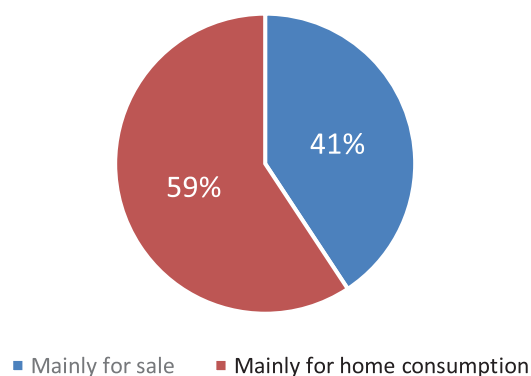
Home consumption was reported as the main agricultural product destination by 61% of the household holdings in Cambodia, while the other 39% mentioned that agricultural production was mostly for sale. This varied across zones with 88% of agricultural holdings in the Coastal Zone producing primarily for home consumption, followed by Plateau Zone (65%), Plain Zone (63%) and Tonle Sap Lake Zone (53%). An estimated 36,000 household agricultural holdings participated in farmers' associations (approximately 2%).

An estimated 31% of holders reported that about half of

their total household income (40% to 59%) was accounted for by agricultural income, 23% reported that most or almost all (60% to 99%) of their total household income was accounted for by agricultural income, and 5% reported that all (100%) of their total household income was accounted for by agricultural income.

Around one-quarter (26%) of the Cambodian household agricultural holdings reported that their agricultural income contributed less to their total household income than during the previous year; 63% reported a similar contribution, and 11% reported a greater contribution to their total household income than during the previous year.

Figure 4: Percentage of household agricultural holdings reporting their main agricultural product destination



Source: Cambodia Agriculture Survey 2022.

3. Crop production activity

The survey estimated that approximately 1,746,000 of the 1,858,540 household agricultural holdings were growing crops (94%). Numerous types of crops were reported during data collection, but the survey focused on roughly 30 crops of interest selected by MAFF, for which information on planted and harvested areas, input use (fertilizers, pesticides and irrigation), and production was obtained.

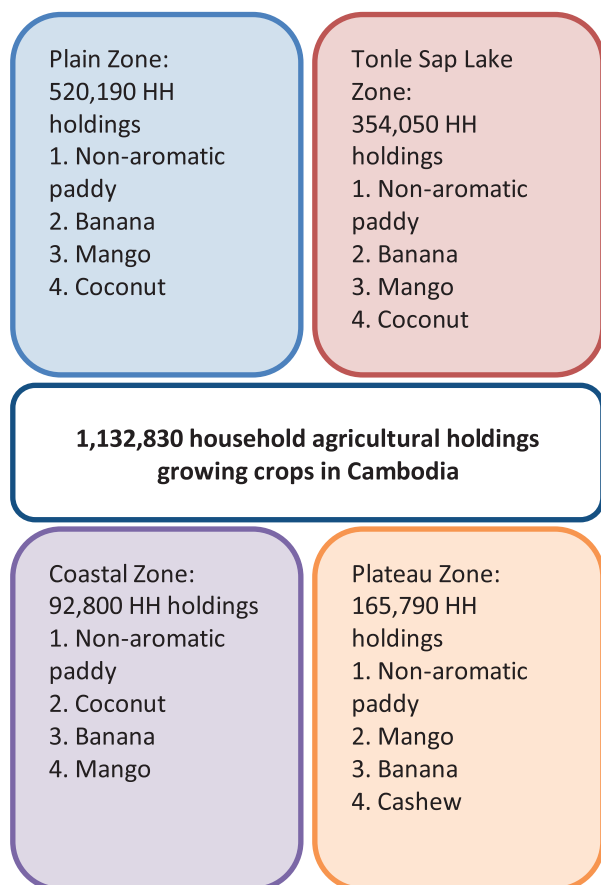
The survey ranked the four most prevalent crops in all four major zones of the country. Non-aromatic paddy was found to be the most widespread crop across the country. The CAS 2022 estimated that non-aromatic paddy had a total planted area of 1.80 million hectares and a total harvested area of 1.78 million hectares. The average production was estimated to be 2,900 kilograms per hectare, with a total national production estimated at 5.18 million tonnes.

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. Banana was the second most popular crop among farmers in the Plain and Tonle Sap zones (in terms of the number of holdings reporting they grew this crop). In the Plateau and Mountainous zone Mango was the second most popular whilst coconut was the second most popular in the Coastal Zone.

At the country level, about 22,000 hectares of Banana were planted and 14,000 hectares were harvested, with a total of 90,000 tonnes production. Mango had approximately 60,000 hectares harvested with 377,000 tonnes produced. Coconut had 10,000 hectares harvested with 99,000 tonnes produced and Cashews had 267,000 hectares harvested with 212,000 tonnes produced.

Figure 5: Four most prevalent crop types reported in each zone (by number of household holdings reporting; HH: household)



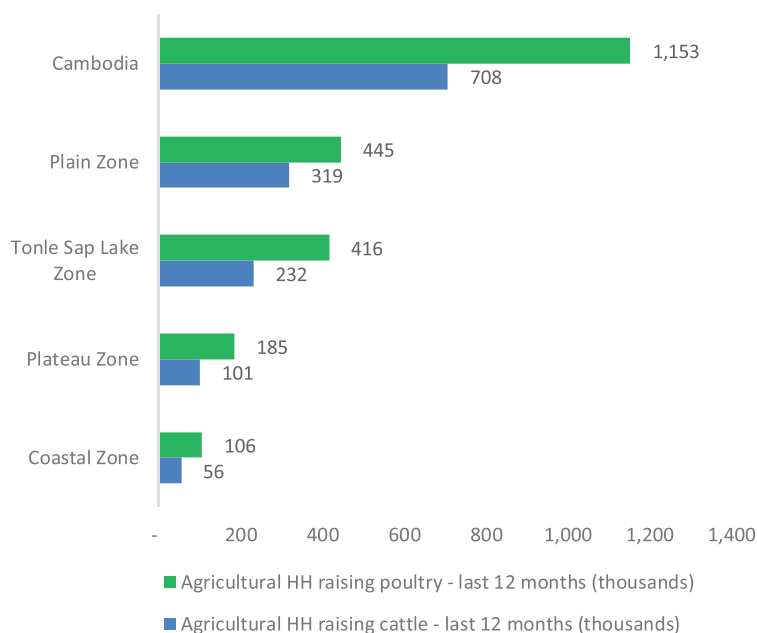
Source: Cambodia Agriculture Survey 2022.

4. Livestock & poultry raising activity

Raising livestock and/or poultry is an important agricultural activity in Cambodia, supporting livelihoods and providing income to an estimated 1,424,110 household agricultural holdings (76%) in the

country. Keeping or raising livestock and/or poultry was highest among agricultural households in the Coastal Zone where they were kept in 87% of agricultural households and lowest in the Plain Zone where they were kept in 75%. An estimated 1,152,830 holdings reported raising poultry and 707,550 raising cattle.

Figure 6: Number of household agricultural holdings reporting a livestock and/or poultry raising activity, by socio-geographic zone (in thousands)



Source: Cambodia Agriculture Survey 2022.

The Plain Zone was the zone with the largest number of household holdings raising cattle (319,130 household agricultural holdings). This was followed by the Tonle Sap Lake Zone (232,010), the Plateau Zone (100,530) and the Coastal Zone (55,880).

Cattle are fed in their housing located under the tree of a household agricultural holding. Source: NIS photograph, 2022



The Plain Zone recorded again the highest number of household agricultural holdings raising poultry

(445,150), followed by the Tonle Sap Lake Zone (416,480), the Plateau Zone (184,930) and the Coastal Zone (106,240).

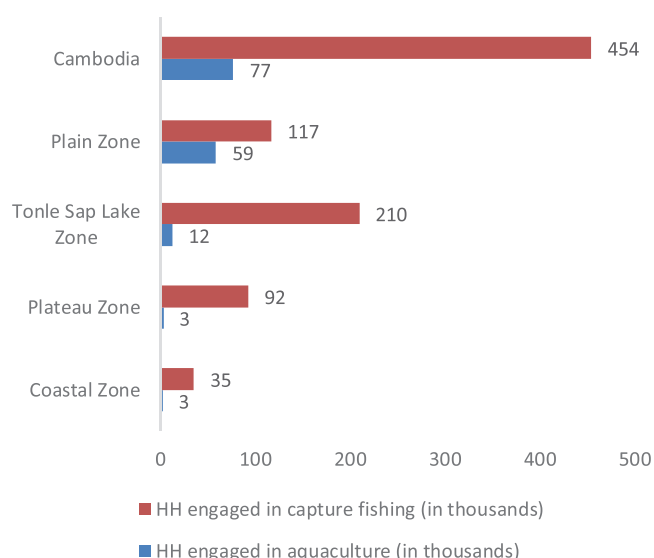
Nationwide, data shows that the average number of cattle per household holding raising cattle was 4.4. As for households raising poultry, the average number of birds per household holding was 24.

5. Aquaculture & capture fishing activity

Aquaculture is an additional economic activity undertaken by 4% of household agricultural holdings (approximately 76,910 holdings) whilst capture fishing occurs in an estimated 24% of holdings (approximately 454,630 holdings). Included within the above totals, there were 25,480 (1.4% of all agricultural holdings) that were involved in both aquaculture and capture fishing activities.

The zone with the largest number of household agricultural holdings practising aquaculture was the Plain Zone (58,610 holdings, 8% of agricultural holdings) whilst the zone practising the most capture fishing was the Tonle Sap Lake Zone (209,700 holdings, 30% of agricultural holdings).

Figure 7: Number of household agricultural holdings reporting aquaculture or capture fishing activity, by socio-geographic zone



Source: Cambodia Agriculture Survey 2022.

While 79% of the holdings who reported the capture fishing activity captured fish, 13% captured crabs and 4% captured snails. The total catch reported for fish in capture fishing was 375 million kilograms.

6. The Environment

The rotating module of CAS 2022 focused on “Production Methods and the Environment.” Within this module a number of environmental statistics were explored including environmental shocks, contributors to climate change, soil degradation, hazardous materials and waste.

Empty packaging and used plastic film were the two most commonly identified farm waste products with 24% and 19% of holdings generating these types of waste. The waste generated was most frequently burned on the holding (reported by 31%), buried (14%) or left on the farm/no treatment (12%).

Fifty percent of holdings use petroleum fuel as their energy source on their holding, this was followed by network electricity with 26% and solar with only 2%. Holdings reported, on average, higher fees for fuel expenses agricultural machinery, equipment and vehicles during the dry season than the rainy season with an average of 172,000 Khmer Riels per month compared to 154,000 Khmer Riels.

Thirty-nine percent of holdings did not note any environmental concerns during the reference year. From those who did have concerns, the main reported were droughts (25% of holdings), extreme temperatures (19% of holdings) and floods (18% of holdings).

Nineteen percent of household agriculture holdings identified an adaptation practice that they had adopted during the previous year, the most frequent of which was use of seeds adapted to local conditions and stresses (11%).

Seventeen percent of household agricultural holders identified that they had experienced some form of severe shock during the last 12 months. Most frequently, floods were identified among the holders with 9% having been affected by a severe flood.

Solid manure was the main organic fertilizer used by the household agricultural holdings with 28% of holdings reporting its use. The second most used organic fertilizer was vegetable material or compost, used by 2% of household holdings.

Chemical fertilisers remain dominant with Urea (40% of household agricultural holdings), NPK (33%) and DAP (16%) used in a far greater number of holdings than organic fertilisers. In total, 9% of household holdings reported no fertiliser use, the most frequent reason reported was because fertilisers were too expensive. Of the holdings reporting chemical fertiliser use, 64%

reported that they were aware of the environmental risks associated with excessive use or misuse of them, yet 61% did not take any specific measures to mitigate environmental risks associated with them.

Various pesticides are also used in a large number of holdings, with Herbicides (liquid) used in 31% of holdings, insecticides used in 22%, herbicides (solid) used in 10% and molluscicides used in 6% of household agricultural holdings.

Of the holdings reporting pesticide use, 75% reported that they were aware of the environmental and health risks associated with the excessive use or misuse of them. Fifty-six percent reported taking specific measures to mitigate the health risks whilst 47% reported taking specific measures to mitigate the environmental risks.

Fieldwork conducted, NIS photograph



7. Contact

Cambodia Agriculture Survey

FAO Cambodia
<https://www.fao.org/cambodia/en/>

Ministry of Agriculture, Forestry and Fisheries (MAFF), #200, Preah Norodom Blvd, Tonle Basac, Chamkarmon, Phnom Penh, Cambodia, P.O. Box: 53.

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, 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, Cambodia.

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