

#### KINGDOM OF CAMBODIA

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## Cambodia Agriculture Survey 2021 Report 3: Raising of Livestock and Poultry









National Institute of Statistics, Ministry of Planning in collaboration with Ministry of Agriculture, Forestry and Fisheries.



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#### Cambodia Agriculture Survey 2021: Raising of Livestock and Poultry

## Note on Report Structure

The Cambodia Agriculture Survey 2021 analysis and reporting is split into 5 published written reports and additional statistical materials covering different aspects of the results as follows:

#### 1. Report 1: Methodological Reference Document

This report covers the background information of the survey. It includes the foreword and preface notes; the technical committee involved in the survey; acronyms and abbreviations used in the reports; an executive summary of the analysis from all reports; the scope, coverage and sample design of the data collection.

#### 2. Report 2: Crop Production

This report covers crop production by household holdings in Cambodia and includes information related to the number of holdings involved in both temporary and permanent crop production; land under agricultural usage; the area of planted and harvested crops; the yield of crops; use of fertilizers, chemicals and irrigation; types of seeds/plant varieties grown; soil types used and effects of erosion; and the value of crop sales.

#### 3. Report 3: Livestock and Poultry Raising

This report covers household holdings involved in the raising of livestock and poultry. Included within the report are the number of holdings engaged in raising livestock and poultry; the total number of animals in Cambodia; the average number of animals per holding; the purpose of raising animals; the value of sales from animals and the related input costs.

#### 4. Report 4: Aquaculture and Capture Fishing

This report covers household holdings involved in aquaculture and capture fishing activities. Included within the report is the number of holdings engaged in different types of aquaculture; the total area devoted to aquaculture; species raised by aquaculture and the volume of them produced; households engaged in fishing activities by water type; species fished; and total catch volume.

#### 5. Report 5: Labour and Economy

This report covers the rotating module of CAS 2021 and includes information on household and external workers on holdings; renting in; purchase and rent prices; expenditures of holdings; value of agricultural output; destinations of agricultural production; wages of external workers; holding profitability; participation in farmer associations; shocks affecting holdings and the responses to them including insurance and credit; loans and savings.

All 5 reports are available for download from the NIS website (available at: <a href="http://www.nis.gov.kh/index.php/km">http://www.nis.gov.kh/index.php/km</a>). These reports aim to provide an overview of the data included within the CAS 2021. They, however, are not fully comprehensive and some questions are not analysed within the scope of these documents. The information is analysed



and presented, in most cases, at the national or regional level. Data users are encouraged to explore and conduct their own analysis using the full data tabulations disseminated on the NIS website (available at: <a href="http://www.nis.gov.kh/index.php/km/">http://www.nis.gov.kh/index.php/km/</a>), the CAMSAT data tables (available at: <a href="https://camstat.nis.gov.kh/">https://camstat.nis.gov.kh/</a>) and the full anonymized microdata (available at: <a href="https://microdata.nis.gov.kh/">https://microdata.nis.gov.kh/</a>).



## Raising of Livestock and Poultry

Raising livestock and poultry in Cambodia is an important agricultural activity undertaken by agricultural households and plays a key role in supporting livelihoods and providing income in rural households. Of the total number of household agricultural holdings in Cambodia, 1,610,000 households were involved in all types of raising livestock/poultry/insects. In the CAS, large livestock included equine, cattle, and buffalo whereas small livestock referred to pigs and goats.

Table 3.1. Number of household agricultural holdings having a livestock or poultry production activity, in thousands

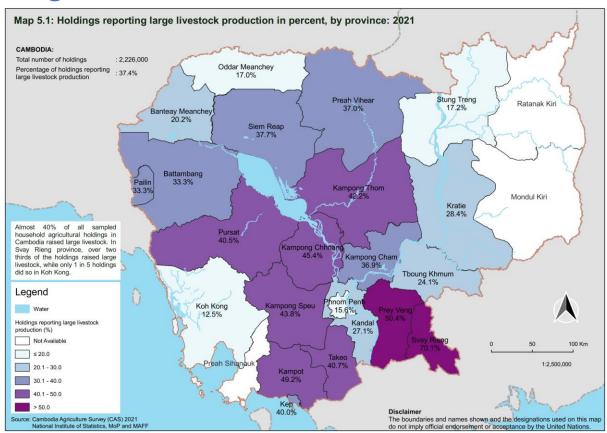
Cambodia (Number of holdings in thousands)			
Total holdings with livestock/poultry/ins ects production	Raising large livestock (cow, buffalo, horse)	Raising small livestock (pigs, goats)	Poultry (chicken, duck, swallow, etc.)
1,610	832	118	1,260

The largest number of households raising large livestock and poultry was recorded in the Plain Zone, likely as this zone is most conducive to animal-raising activities. The plain zone was followed by the Tonle Sap Lake Zone, the Coastal Zone, and the lowest from the Plateau and Mountainous Zone. Small livestock, however, were raised in more household holdings in the Tonle Sap Lake zone, than that of the Plain zone.

activity, by zone, 2021 482 500 449 Number of household holdings (thousands) 450 382 400 350 275 300 250 205 200 123 150 112 100 63 50 34 50 0 Plain Zone Tonle Sap Lake Zone Coastal Zone Plateau and Mountainous Zone ■ Raising poultry ■ Raising large livestock (cattle & buffalo) ■ Raising small livestock (pig)

Figure 3.1: Number of agricultural holdings reporting livestock and poultry activity, by zone, 2021

## **Large Livestock**

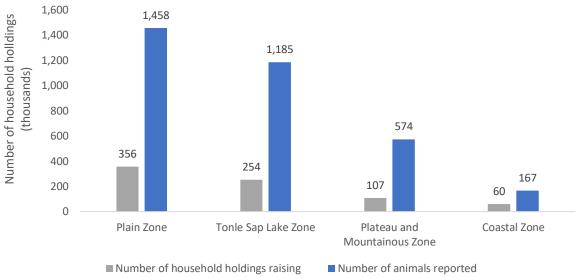


Source: Cambodia Agriculture Survey 2021 (CAS 2021) Selection of Thematic Maps; NIS-MOP, MAFF 2023.

#### Cattle

The most common large livestock raised in agricultural households were cattle. It is estimated that about 3,384,000 cattle were being raised in Cambodia. The plain zone has the highest number of cattle (1,458,000) followed by the Tonle Sap Lake Zone (1,185,000), the Plateau and Mountainous Zone (574,000), and the Coastal Zone (167,000) has the lowest number of cattle.

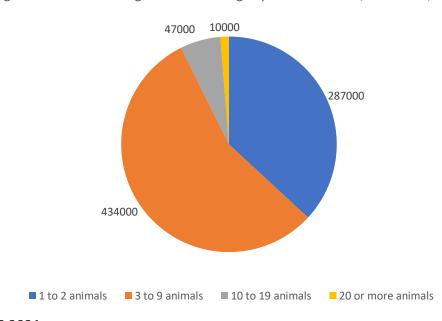
Figure 3.2: Number of agricultural holding reporting raising cattle and the number of cattle reported on those holdings, by zone, 2021



Source: CAS 2021

Across all of Cambodia, the average number of cattle per holding was 4.4. Most of the household agricultural holdings (434,000 agricultural holdings) have herds with a size of 3 to 9 cattle. 287,000 of the holdings reported having a herd size of 1 to 2 cattle and only 57,000 holdings reported having a herd size greater than 10 cattle.

Figure 3.3: Number of agricultural holdings by cattle herd size, Cambodia, 2021



Herds of cattle in household holdings were mostly comprised of females with 1.75 million (approximately 52%) of all cattle being females of more than 2 years of age. Males of 2 years old or older are the least frequent age and gender kept in agricultural holdings.

2000 1750 1800 1600 Number of cattle (thousands) 1400 1200 1000 800 674 582 600 378 400 200 Females 2 years or older Females less than 2 years Males less than 2 years Males 2 years or older

Figure 3.4: Number of cattle, by age and gender, Cambodia 2021

Source: CAS 2021

Cattle inventory added to a holding is most frequently birthed rather than purchased by household agricultural holdings. The exception to this was in the Coastal zone where slightly more cattle were bought (30,000) than birthed (29,000).

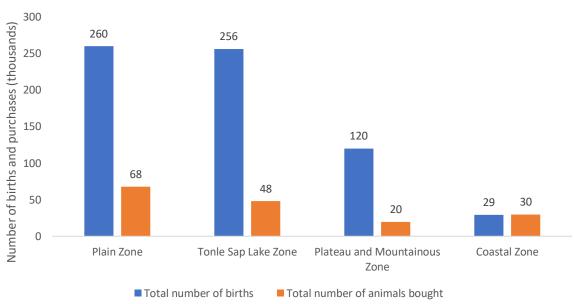


Figure 3.5: Number of cattle births and purchases, by zone, 2021



Of the outgoing cattle from a household agricultural holding, most are sold alive (505,000). Cattle deaths occurred to 110,000 animals nationwide, whilst theft occurred to a reported 7,000 animals.

600

505

500

110

13

7

Sales

Deaths

Given away

Stolen

Figure 3.6: Number of outgoing cattle, Cambodia, 2021

Source: CAS 2021

Less than 1% (6,000) of household holdings reported raising their cattle under an exclusive contract. The majority (715,000) of the holdings report feeding their cattle through only grazing, whilst 62,000 holdings use a mixture of grazing and feeding.



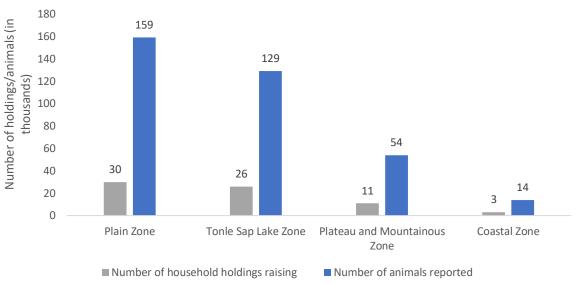


Cattle are fed in their housing located under the home of a household agricultural holding. Source: FAO photograph, 2022.

#### Buffalo

Approximately 356,000 total buffalo were reported by agricultural holdings throughout Cambodia. The Plain Zone had the highest number of buffalo (159,000), followed by the Tonle Sap Lake Zone (129,000), the Plateau and Mountainous Zone (54,000), and the Coastal Zone (14,000) had the lowest number of buffalo.

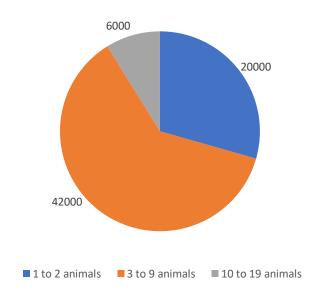
Figure 3.7: Number of agricultural holding reporting raising buffalo and the number of buffalo reported on those holdings, by zone, 2021



Source: CAS 2021

Across all of Cambodia, the average number of buffalo per holding was 5.1. Most of the household agricultural holdings (42,000 agricultural holdings) have herds with a size of 3 to 9 buffalo. 20,000 of the holdings reported having a herd size of 1 to 2 buffalo and only 6,000 holdings reported having a herd size greater than 10 buffalo.

Figure 3.8: Number of agricultural holdings by buffalo herd size, Cambodia, 2021





Household holdings buffalo herds were mostly comprised of females with approximately 51% of all buffalo being females of more than 2 years of age. Males of 2 years old or older are the least frequent age and gender kept in agricultural holdings.

200 181 180 160 Number of cattle (thousands) 140 120 100 80 63 61 60 51 40 20 Females 2 years or older Females less than 2 years Males less than 2 years Males 2 years or older

Figure 3.9: Number of buffalo, by age and gender, Cambodia, 2021

Source: CAS 2021

## **Small Livestock**

#### Pigs

About 116,000 household agricultural holdings raise pigs throughout Cambodia. The Tonle Sap Lake Zone had the highest number of household agricultural holdings raising pigs (49,000) followed by the Plain Zone (34,000), the Plateau and Mountainous Zone (26,000) and the Coastal Zone (7,000) had the lowest number of household agricultural holding raising pigs.

500 449 450 Number of household holdings 400 357 350 300 (thousands) 250 200 141 150 100 63 49 34 26 50 0 Tonle Sap Lake Zone Plain Zone Plateau and Mountainous Coastal Zone ■ Number of household holdings raising ■ Number of animals reported

Figure 3.10: Number of agricultural holding reporting raising pigs and the number of pigs reported on those holdings, by zone, 2021

Source: CAS 2021

Across all of Cambodia, the average number of pigs per holding was 8.7. The number of pigs per holding varied between the holdings. 38,000 holdings had 1 to 2 pigs, 43,000 holdings had 3 to 9 pigs, 21,000 holdings had 10 to 19 pigs and 15,000 holdings had more than 20 pigs.

21000

21000

43000

1 to 2 animals 3 to 9 animals 10 to 19 animals 20 or more animals

Figure 3.11: Number of agricultural holdings by cattle herd size, Cambodia, 2021

Source: CAS 2021

Pig herds in household holdings were mostly comprised of animals of less than 1 year of age (approximately 801,000 pigs or 79% of all pigs). Furthermore, with 582,000 female pigs in total, around 58% of the pigs were female.

450 422 379 400 Number of cattle (thousands) 350 300 250 200 161 150 100 49 50 Males 1 year old or more Females less than 1 year Males less than 1 year old Females 1 year old or more

Figure 3.12: Number of pigs, by age and gender, Cambodia 2021

Source: CAS 2021

Pig inventory added to a household holding was most frequently birthed rather than purchased.

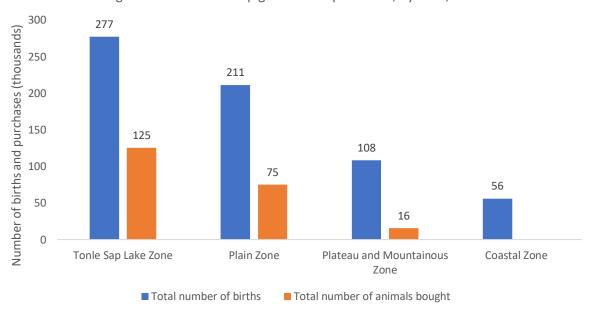
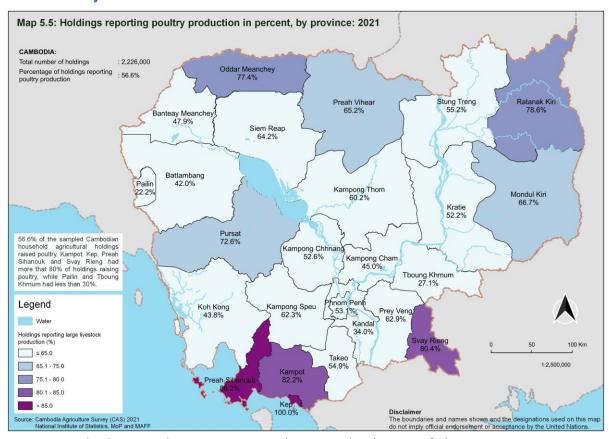


Figure 3.13: Number of pig births and purchases, by zone, 2021

## **Poultry**



Source: Cambodia Agriculture Survey 2021 (CAS 2021) Selection of Thematic Maps; NIS-MOP, MAFF 2023.

Survey data was collected on many types of poultry. Within the data tabulations results are disseminated for chickens, ducks and geese, however, this report focuses only on the most prevalent poultry types, chickens and ducks.





Caged chicken housing. Source: NIS-MOP photograph, 2022.

#### Chickens

Chickens were the most common poultry raised by household agricultural households, with an estimated 45 million chickens being raised across 1,216,000 household holdings. Chickens were more frequently raised in the Plain zone (468,000 holdings) and Tonle Sap Lake zone (441,000 holdings) compared to the Coastal zone (122,000 holdings) or Plateau and Mountainous zones (107,000 holdings). The average number of chickens raised per holding was 37.7.

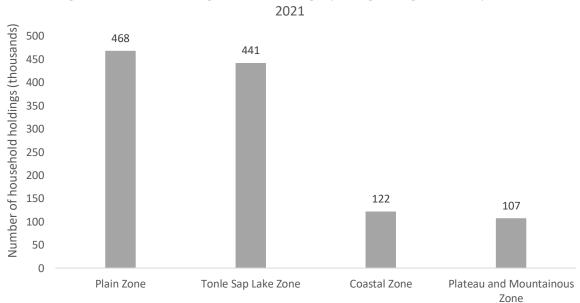


Figure 3.14: Number of agricultural holding reporting raising chicken, by zone,



Source: CAS 2021

There were approximately 17 million chickens reported in the Plain zone, 15.2 million in the Tonle Sap Lake zone and a reported 4.6 million in the Coastal zone. The number of chickens in the Plateau and Mountains zone did not meet the statistical disclosure control methods to be disseminated within this report.

18,000 16,975 15,232 16,000 Number of animals reported (thousands) 14,000 12,000 10,000 8,000 6,000 4,646 4,000 2,000 0 Plain Zone Tonle Sap Lake Zone Coastal Zone Plateau and Mountainous Zone

Figure 3.15: Number of chickens reported, by zone, 2021

Source: CAS 2021

Chickens were most frequently birthed rather than bought by household agricultural holdings. The Tonle Sap Lake zone was the zone with the highest number of births with 14.8 million chicken births. The Plain zone was second with 11.3 million births. The Coastal and Plateau and Mountainous zones unfortunately do not meet the statistical closure methods to have their birth/purchase data disclosed.

16,000 14,834 Number of births and purchases (thousands) 14,000 11,309 12,000 10,000 8,000 6,000 5,082 4,853 4,000 1,546 1,196 2,000 0 Tonle Sap Lake Zone Plain Zone Coastal Zone Plateau and Mountainous Zone ■ Total number of births ■ Total number of animals bought

Figure 3.16: Number of chicken births and purchases, by zone, 2021

Source: CAS 2021

In total, approximately 15.7 million chickens were sold alive within the 2021 reference period, 11.2 million were slaughtered and 19.4 million died from natural causes including disease or illness.

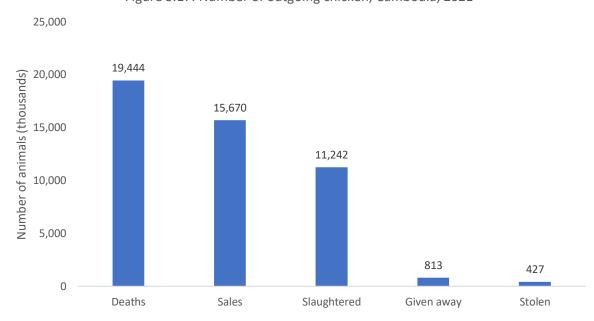


Figure 3.17: Number of outgoing chicken, Cambodia, 2021





A holding's duck pond. Source: NIS-MOP photograph, 2022.

#### **Ducks**

Ducks were the second most common poultry raised by household agricultural households, with an estimated 14.7 million ducks being raised across 237,000 household holdings. Ducks were more frequently raised in the Plain zone (94,000 holdings) and Tonle Sap Lake zone (81,000 holdings) compared to the Coastal zone (32,000 holdings) or Plateau and Mountainous zones (31,000 holdings). The average number of ducks raised per holding was 62.3.

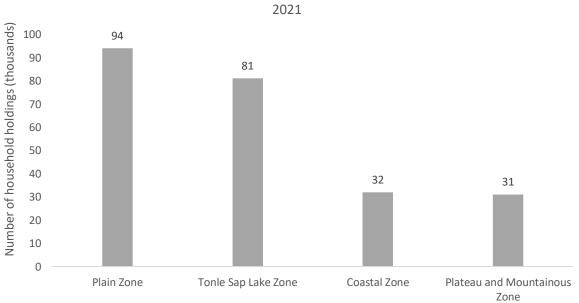


Figure 3.18: Number of agricultural holding reporting raising ducks, by zone,



Source: CAS 2021

There were approximately 6.2 million ducks reported in the Plain zone, 6.2 million in the Tonle Sap Lake zone and a reported 1.6 million in the Coastal zone and close to 700,000 in the Plateau and Mountainous zone.

7,000 6,204 6,239 6,000 Number of animals reported (thousands) 5,000 4,000 3,000 2,000 1,611 679 1,000 0 Tonle Sap Lake Zone Plain Zone Coastal Zone Plateau and Mountainous Zone

Figure 3.19: Number of ducks reported, by zone, 2021

Source: CAS 2021

Ducks were more often purchased by household agricultural holdings rather than being bred or born with them. The Tonle Sap Lake zone was the zone with the highest number of births with 1.5 million duck births. The Plain zone was second with 1.1 million births. The Coastal zone had approximarely 500,000 duck births and the Plateau and Mountainous zone around 300,000.

1,600 1,457 1,400 Number of births (thousands) 1,200 1,104 1,000 800 539 600 400 326 200 0 Plain Zone Coastal Zone Plateau and Mountainous Tonle Sap Lake Zone Zone

Figure 3.20: Number of duck births, by zone, 2021

Source: CAS 2021

In total, approximately 5.2 million ducks were sold alive within the 2021 reference period, 2.3 million died from natural causes including disease or illness and 1.3 million were slaughtered.

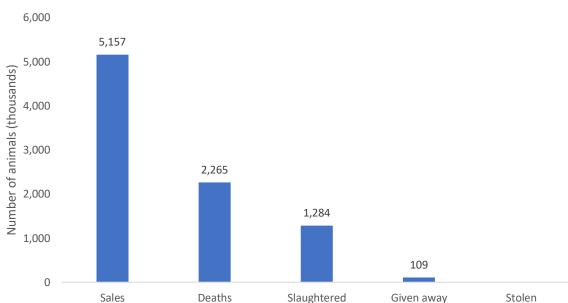


Figure 3.21: Number of outgoing ducks, Cambodia, 2021

Source: CAS 2021

#### Veterinary care

For all animal species curative treatments were performed more often than preventative treatments for internal or external parasites. Although chickens are raised by more household holdings, treatments were given to cattle more often, likely due to the much higher sale value and longer time to raise a cattle than a chicken.



3.22: Veterinary care provided by holdings to animals, Cambodia, 2021

