



KINGDOM OF CAMBODIA

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Cambodia Agriculture Survey 2021

Report 4: Aquaculture & Capture Fishing



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



Food and Agriculture
Organization of the
United Nations

With technical support from the Food and
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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 the 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: <http://www.nis.gov.kh/index.php/km>). 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



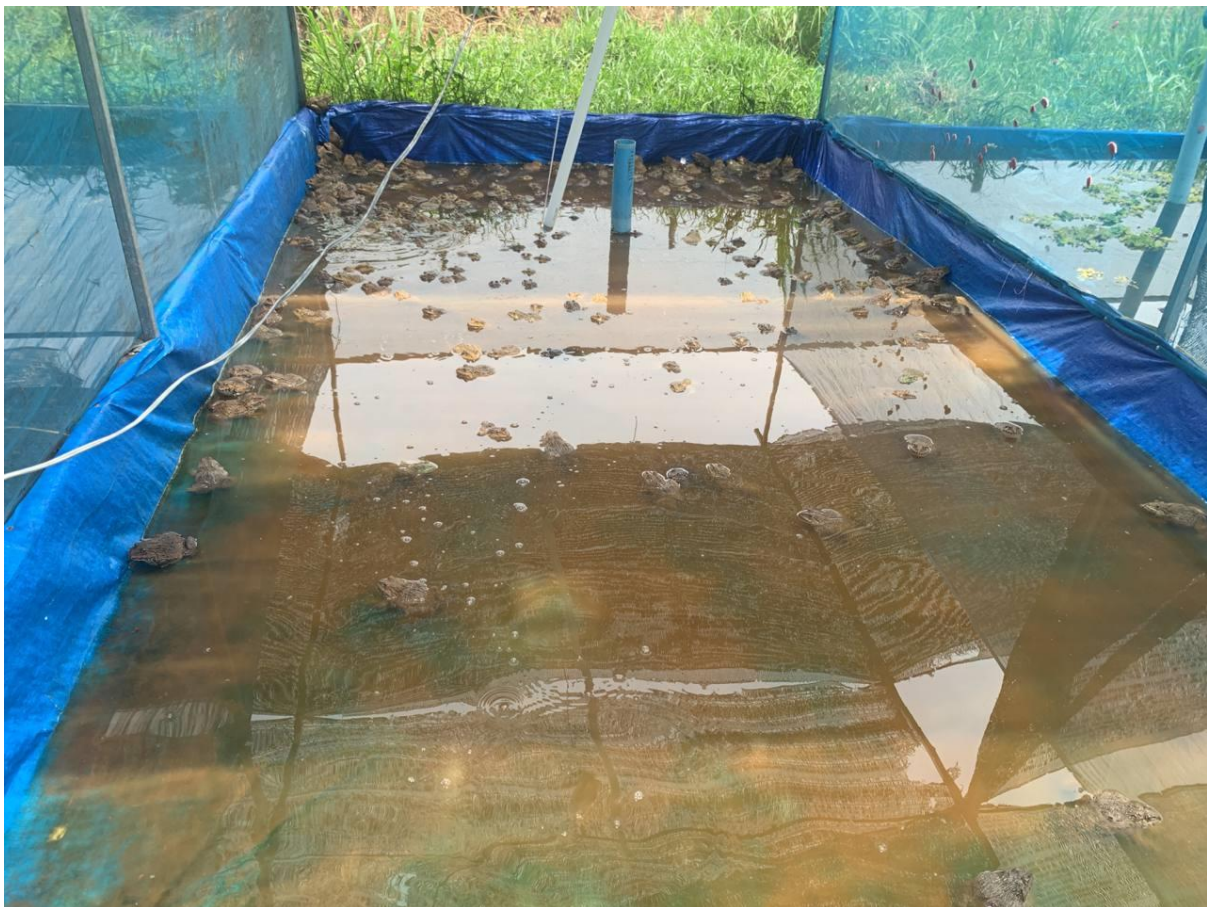
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presented, in most cases, at the national or regional level. Data users are encouraged to explore and conduct their own analysis using the full data tabulations disseminated on the NIS website (available at: <http://www.nis.gov.kh/index.php/km/>),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

Aquaculture and Capture Fishing

Aquaculture and capture fishing activity constitute an alternate or additional economic activity for household agricultural holdings in Cambodia. From the CAS 2021, it is estimated that 89,050 agricultural household holdings are involved in aquaculture activity while 476,630 agricultural household holdings are involved in capture fishing activity, and 26,790 agricultural household holdings were involved in both aquaculture and capture fishing activity. The zone with the largest number of households involved in aquaculture was the Plain Zone, with 60,450 household agricultural holdings reporting aquaculture activity. The zone with the largest number of households involved in capture fishing activity was the Tonle Sap Lake Zone, with 223,080 holdings reporting capture fishing activity.

Aquaculture



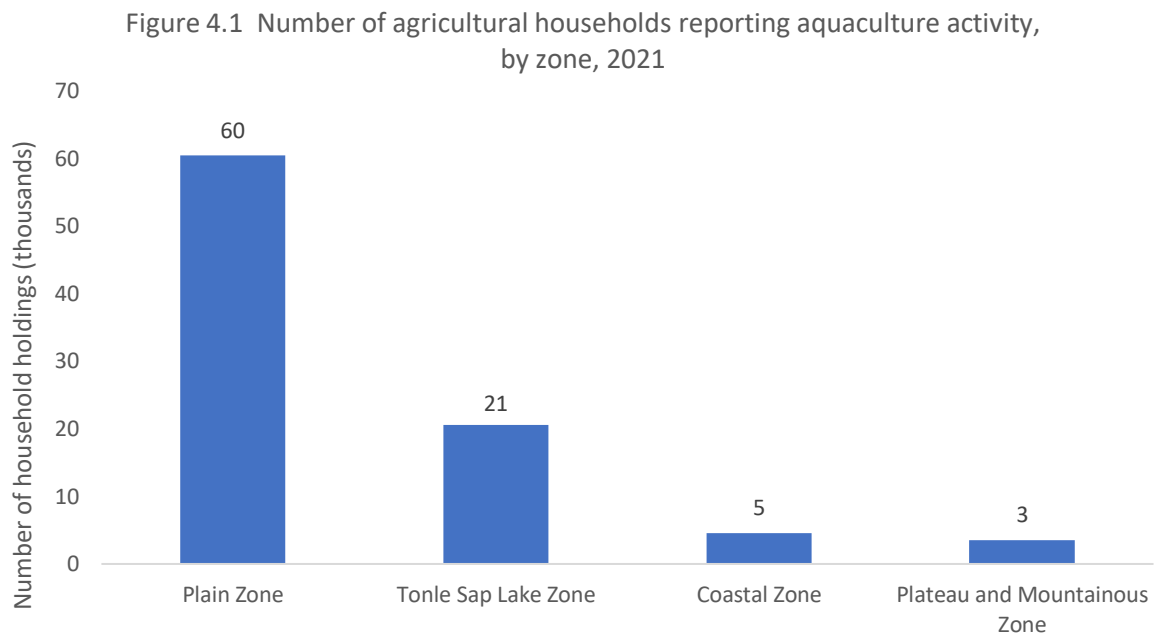
The frogpond of a household holding. Source: NIS-MOP photograph, 2022.

Aquaculture refers to the cultivation, under controlled conditions, of aquatic products in seas, lakes, rivers, swamps, ponds, paddy fields or other bodies of water. Of the different categories of aquaculture activity covered in the CAS, including pond, pen, cage, paddy field, culvert/tank/drum/aquariums, hatchery/nursery, or other aquaculture activity, the most prevalent activity was pond aquaculture with 73,097 agricultural holdings reporting it. An estimated 11,795 holdings were involved in aquaculture involving culvert/tank/drum/aquarium and approximately 3,285 agricultural holdings used a cage for their aquaculture activity. The total area devoted to aquaculture in household agricultural



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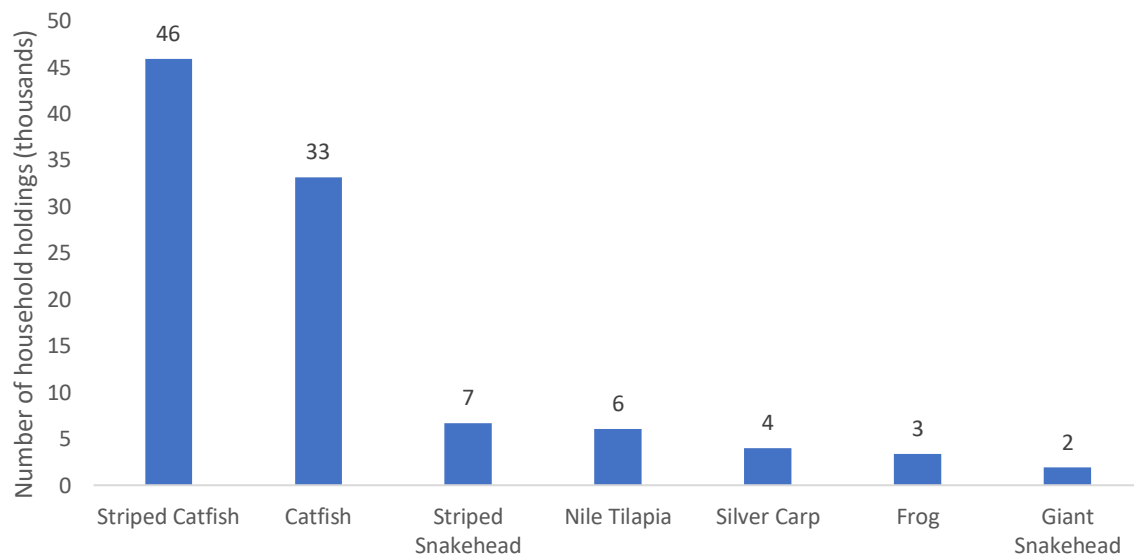
holdings was estimated to be 1,949 hectares. The Plain Zone reported the largest area devoted to aquaculture activities, with 1,258 hectares devoted to it.



Source: CAS 2021

Agricultural households raise a variety of species in their aquaculture, the most common species are Striped Catfish (raised by an estimated 46,000 households and with a total inventory of 68.3 million fish nationwide) and Catfish (raised by an estimated 33,000 households and with a total inventory of 51.3 million fish nationwide). Striped Snakehead, Nile Tilapia, Silver Carp, Frogs and Giant Snakehead are other species commonly raised by household holdings.

Figure 4.2: Number of agricultural households reporting species in aquaculture activities, Cambodia, 2021



Source: CAS 2021

Capture Fishing

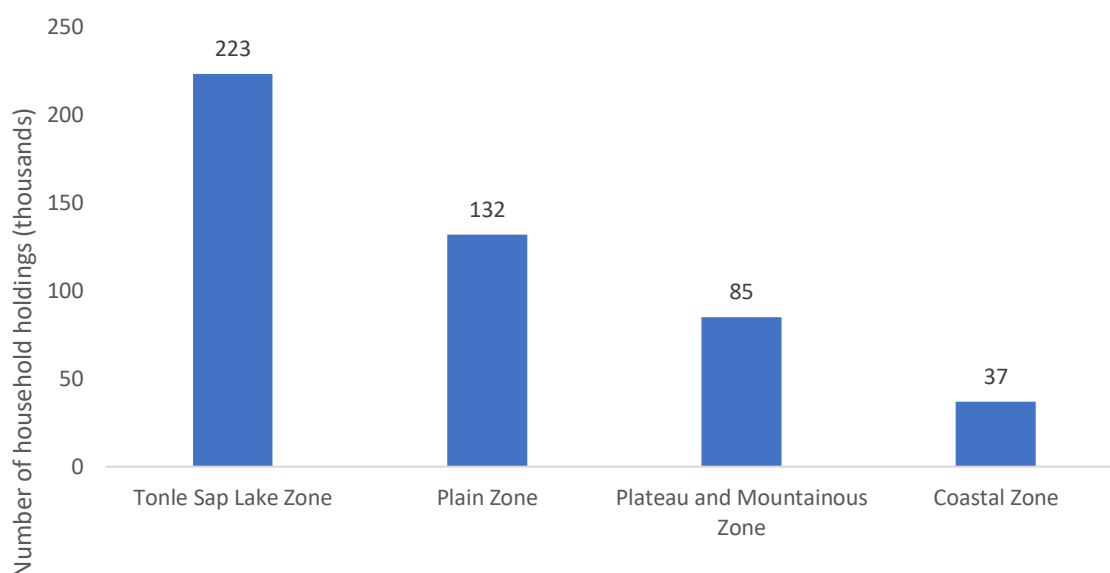


A fisherman inspecting his cast net catch in Banteay Meanchey province. Source: FAO photograph, 2022.

For the CAS, capture fishing activity was categorized as river or lake (freshwater), rice field (freshwater), sea (marine water) or estuary (brackish water). Capture fishing included catching fish and other sea or river species with or without the use of boats or specialized equipment.

In the 2021 reference period (from 1 July 2020 to 30 June 2021), the Tonle Sap Lake zone had the highest number of household agricultural holdings reporting capture fishing activities with an estimated 223,000 households involved in the activity. The Plain zone had an estimated 132,000 household holdings reporting capture fishing and the Plateau and Mountains region and Coastal zones had an estimated 85,000 and 37,000 household holdings involved respectively.

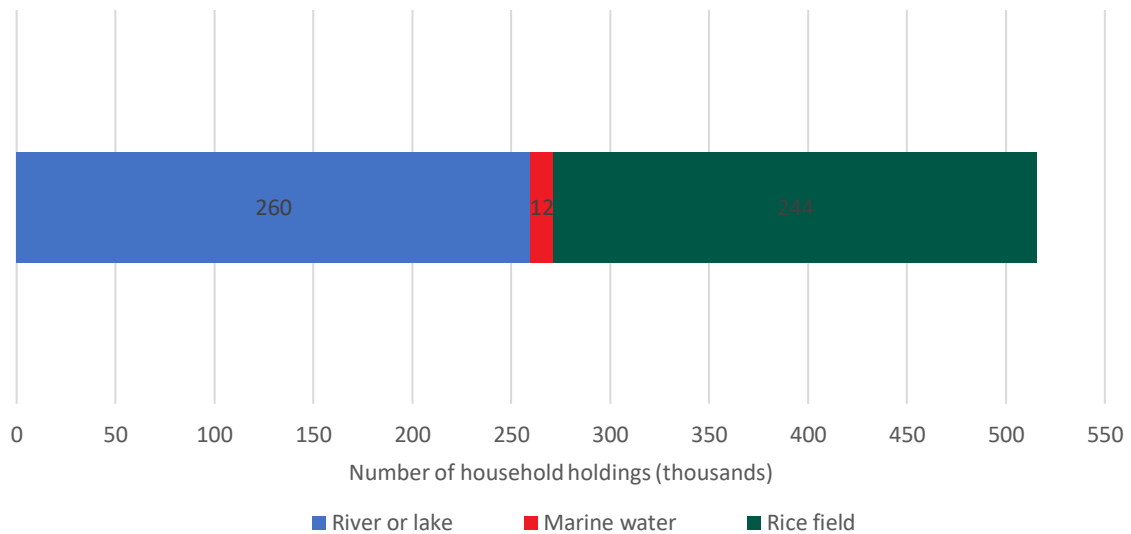
Figure 4.3 Number of agricultural households reporting capture fishing activities, by zone, 2021



Source: CAS 2021

Capture fishing activities were reported by household holdings to occur mostly within rivers or lakes (260,000 household holdings) and in rice fields (244,000 household holdings). Comparatively few household holdings report capture fishing within marine water (12,000 household holdings).

Figure 4.4 Number of agricultural households involved in capture fishing by water type, Cambodia, 2021



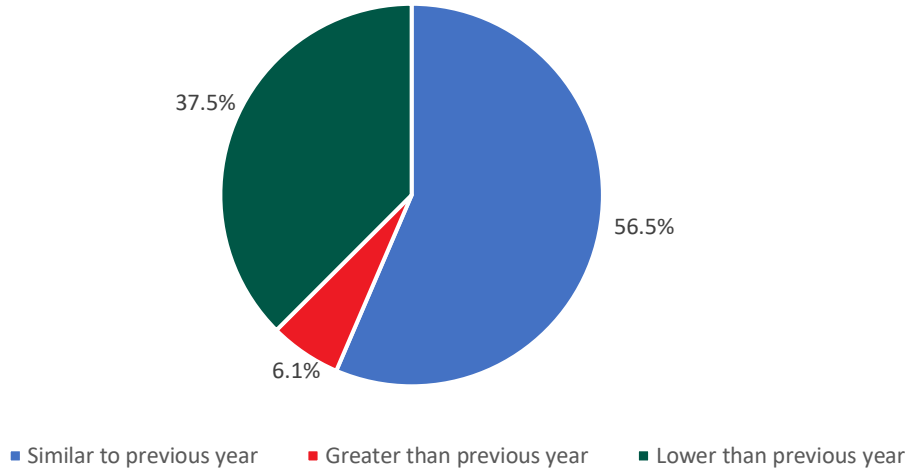
Source: CAS 2021

The total catch reported for fish totaled 331.2 million kilograms in Cambodia in 2021. Respondents reporting capture fishing within the survey were asked to compare their holdings catch in 2021 to their catch in the previous reference period. More than half of the respondents (56.5%) reported a similar catch to the previous year. However, only 6.1% reported a catch greater than that of the previous year and more than one-third (37.5%) reported a lower catch when compared to the previous year. At the national level, for agricultural households reporting capture fishing activity, it was estimated that 86.5% of the fish catch was used for household consumption and 11.5% was sold whilst the remainder was processed or used for other purposes.



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Figure 4.5 Comparison of current year fish catch to previous year fish catch, household agricultural holdings, Cambodia, 2021



Source: CAS 2021

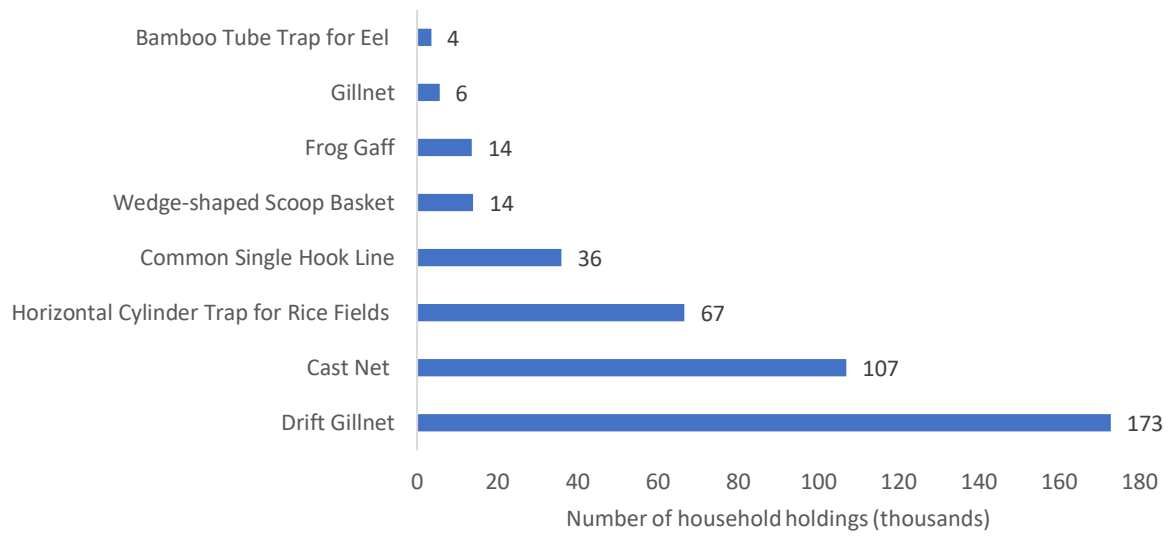
The CAS collected data on multiple species caught including fish, crabs, snails and eel. 79.1% of the holdings who reported capture fishing activity captured fish (454,080 household holdings), 12.4% captured crabs (71,320 household holdings), 5.4% captured snails (31,080 household holdings) and 1.7% captured eels (9,480 household holdings).

Various types of fishing equipment are used in Cambodia. The CAS estimates how many households use each type of equipment in their fishing activities. The equipment used most by holdings was a drift gillnet reported to be used by an estimated 173,000 household holdings. Cast nets (107,000 holdings), horizontal cylinder traps for rice fields (67,000 holdings) and common single hook lines (36,000 holdings) were other commonly used equipment.



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Figure 4.6: Number of agricultural households reporting use of fishing equipment, Cambodia, 2021



Source: CAS 2021