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Catch Monitoring Survey at Marine Landing Sites, Cambodia

MaFReDI Technical Report

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Marine Fisheries Research and Development Institute (MaFReDI)

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Abbreviations

CPUE	Catch per Unit Effort
EU	European Union
$\varepsilon\%$	Relative Standard Error
FAO	Food and Agriculture Organization
FCMAS	Fish Catch Monitoring Assessment Survey
FiA	Fisheries Administration
FiAC	Fisheries Administration Cantonment
KHR	Khmer Riel
MaFReDI	Marine Fisheries Research and Development Institute
MT	Metric Tons
nei	not elsewhere included
SD	Standard Deviation
US\$	United States Dollars

Executive Summary

The CPUE of trawl fishing is the highest at 252.1 kg/fishing day, followed by middle-scale Mackerel gillnet (147.7kg/day), halfbeak gillnet (65.5 kg/day) and shrimps gillnet 61.0 kg/day, fish gillnet 60.0kg/day, Octopus trap long line 57kg/day, Centipede trap 23.5kg/day, Crab trap 23.3kg/day, Push net 20.3kg/day, Crab gillnet 17.8kg/day) and squid trap 14.7kg/day. There is a distinct difference in the CPUE for small and large trawlers, with trawlers of 6-12 meters reporting an average daily catch of 54.9 kg and trawlers 12-18 meters reporting 477.7 kg/day and large from 24 meter up is 2217.5kg/day.

A total of 28 individual species are recorded with *Encrasicholina heteroloba* (shorthead anchovie) contributing more than 27.73% of the total recorded catch for 224 landings of **128,104.6 kg**. The total value of the reported catch is **494,672,900.00** riels. In general, Fish contribute 58.9% of the total reported catch, followed by Shellfish 27.1%, Cephalopods 6.6%, Shrimps 3.1% and Crabs at 2.7%. In terms of value, Cephalopods contribute 26.8%, Crabs 18.7%, Shrimps 11.4 % and Shellfish 6%.

The total estimated catch for October 2023 is calculated at 7,450.4 MT, with most of it from trawl fishing (62.8%) and with small-scale fishing contributing more than 15.8%. The total value of the estimated catch, using the average reported price, is **28,773,560,000 KHR** or **US\$ 7,078,296**.

1. Introduction

With technical assistance from FAO CAPFISH project under EU budget support, Marine Fisheries Research and Development Institute (MaFReDI) has been conducting scientific catch monitoring at landing site in four provinces since June 2021. The aim of the survey is to estimate the Catch per Unit of Effort (CPUE) in kg/fishing day, for the main fishing gears used, the monthly fishing effort, species catch and value, as well as the total estimated catch, from data collected at the main landing sites in Kampot, Kep, Koh Kong and Preah Sihanouk provinces. This report describes the main results for marine fish catch monitoring at national level in Cambodia for October 2023.

Additional details on findings for individual provinces based on priority needs and requests from fisheries administration cantonment (FiAC) are included in a number of annexes.

2. Methodology

The methodology, sampling design and survey form for the Fish Catch Monitoring Assessment Survey (FCMAS) is included in a manual, which is available from the FiA web-site:

Fisheries Administration (FiA) 2021. Manual for Fish Catch Monitoring Assessment for Marine Fisheries in Cambodia. Marine Fisheries Research and Development Institute of the Fisheries Administration, Phnom Penh, Cambodia. 38 pages.

3. RESULTS

3. 1. Number of vessels/landings recorded in October

Data collection for October 2023 was conducted at 8 fishing landing sites, two in each coastal province (Table 1). Overall, landings for 56 small-scale vessels and 168 middle-scale vessels were recorded. Middle-scale vessels includes vessel length 12-24 and all trawlers regardless of size, as well as all vessels operating blood cockle dragnet.

Table 1. Number of the landings recorded by province and landing site.

Province	Landing Site	Vessel Class		Grand Total
		Small Scale	Middle Scale	
Kampot	Kampong Kandal	1	27	28
	Trapeang Ropov	19	9	28
Kep	Ampeng	7	21	28
	Ou Krasar	12	16	28
Koh Kong	Oknha Lyon Phat	4	24	28
	Thmasar	13	15	28
Preah Sihanouk	Stueng Hav		28	28
	Tumnup Rolok		28	28
Grand Total		56	168	224

All landing sites are covered for the same four consecutive survey days, recording the catches for seven random landings for each day, through a combination of interviews (recall survey) and trader/fisher records.

3. 2. Catch per Unit of Effort by main gears

As the FCMAS uses random sampling of landings, the number of records for fishing gears varies between months, but reflect the occurrence and frequency of gears used at the landing sites covered by the survey. Only gears with 2 or more observations, are included in Table 2, as this allows to assess the statistical accuracy by calculating the relative standard error ($\epsilon\%$) of the average CPUE. Trawling has the highest CPUE at 252.1 kg/fishing day, followed by middle-scale mackerel gillnet (147.7 kg/day), halfbeak gillnet (67.5 kg/day), Shrimp gillnet (61.0 kg/day) Fish gillnet (60.0 kg/day), Octopus trap long line 57 kg/day, Centipede trap 23.5 kg/day crab trap 23.3 kg/day push net 20.3 kg/day crap gillnet 17.8 kg/day and squid trap 14.7 kg/day. CPUE for small-scale fishing is lower for the same gears used by middle-scale vessels.

Table 2. CPUE (kg/day) for main small- and middle-scale gears.

Middle Scale gear type	CPUE	N	SD	$\epsilon\%$
Trawl	252.1	97	469.6	18.9%
Mackerel Gillnet	147.7	9	34.1	7.7%
Halfbeak gillnet	67.5	2	46.0	48.1%
Shrimp gillnet	61.0	6	6.5	4.3%
Fish gillnet	60.0	4	34.6	28.9%
Octopus trap longline	57.0	8	21.5	13.3%
Centipede trap	23.5	2	9.2	27.7%
Crab trap	23.3	11	14.8	19.2%
Push net	20.3	2	5.3	18.5%
Crab gillnet	17.8	20	16.0	20.2%
Squid trap	14.7	3	2.4	9.5%
Small Scale gear type	CPUE	N	SD	$\epsilon\%$
Fish gillnet	46.2	20	31.6	15.3%
Octopus trap longline	35.4	2	2.9	5.9%
Push net	16.7	3	7.6	26.2%
Crab trap	16.5	7	9.3	21.4%
Fish hook	16.3	3	7.2	25.6%
Centipede trap	12.8	4	1.0	3.8%
Squid trap	10.7	2	1.0	6.7%
Crab gillnet	7.3	13	5.4	20.5%

The value for $\epsilon\%$ indicates the statistical precision, or the expected margin of the estimated average CPUE around the real value of the CPUE. If the value for the $\epsilon\%$, is higher than 25%, this indicates that the estimated average value is not reliable and should not be used. As Table 2, shows this only is an issue for a few gears that have a high variation relative to the estimated CPUE, most likely caused by differences in the amount of gear deployed. For most gears, the statistical precision is acceptable.

Table 3. CPUE (kg/day) for trawlers by vessel size.

Trawlers	Average CPUE	N	SD	$\epsilon\%$
Small 6-<12 Trawl	54.9	60	60.0	14.1%
Middle 12-18 Trawl	477.7	35	330.9	11.7%
Large-scale > 24m	2217.5	2	2322.8	74.1%

Gears operated both by small- and middle-scale vessels see limited differences, except for active fishing gears like trawlers. The CPUE for trawlers sees a high difference between vessel size class (Table 3), with the CPUE for middle-scale trawlers 12-18 meter at over 477.7 kg/day, more than 8.7 times higher than for 6–12-meter trawlers at 54.9 kg/day. The CPUE for large-scale vessels is not statistically acceptable and should not be used.

3. 3. Catch proportion by main gears

Trawlers have the highest contribution to the total reported catch, with 81.7% of the catch, with fish gillnets (0.8%), having the highest contribution to the total catch for small-scale vessels. Middle-scale fisheries, contribute more than 98.4% of the total recorded catch, besides trawl fisheries, other middle-scale fishing gears contribute 16.7% of the reported catches. Small-scale fishing only contributes 1.6% of the total recorded fisheries yield.

Table 4. Proportion of catch by main fishing gear for small-scale and middle scale gears.

Middle Scale (98.4%)	Catch (%)
Trawl	81.7%
Mackerel Gillnet	6.7%
Unspecified gears	3.5%
Octopus trap longline	1.8%
Crab trap	1.5%
Crab gillnet	1.1%
Halfbeak gillnet	0.9%
Squid trap	0.3%
Shrimp gillnet	0.3%
Squid tow longline	0.3%
Fish gillnet	0.2%
Other gears combined	0.1%

Small Scale (1.6%)	Catch (%)
Fish gillnet	0.8%
Octopus trap longline	0.5%
Other gears combined	0.4%

	Total (kg)	Kampot	Kep	Koh Kong	Preah Sihanouk
Trawl	103,389.5	0.9%	0.6%	68.0%	30.5%
Other middle-scale	21,046.8	27.4%	1.5%	36.8%	34.4%
Small-scale	2,087.3	46.8%	12.1%	41.1%	0.0%
Total	126,523.6	6.1%	1.0%	62.4%	30.6%

In addition, when considering the fisheries production by province, for October 2023, most of the trawl fisheries production is reported from Koh Kong, followed by Preah Sihanouk, which is a reversal from that in previous months. Kampot and Kep only contribute a very low amount to the total trawl catch, 1.5%. Most of the production by other middle-scale fisheries is by Koh Kong, Preah Sihanouk with most of the small-scale production reported in Kampot and Koh Kong (see for additional details Annex 3.)

3.4. Species group catch contribution by landed weight

The total reported catch for all species (or group) was **128,104.6 kg**, fish dominate the total reported catch with almost 58.9% of total weight followed by shellfish 27.1%, Cephalopods 6.6%, Shrimps at 3.1%, Crabs at 2.7% (see Annex 1). Other species groups (sharks, rays), contribute only 0.18%.

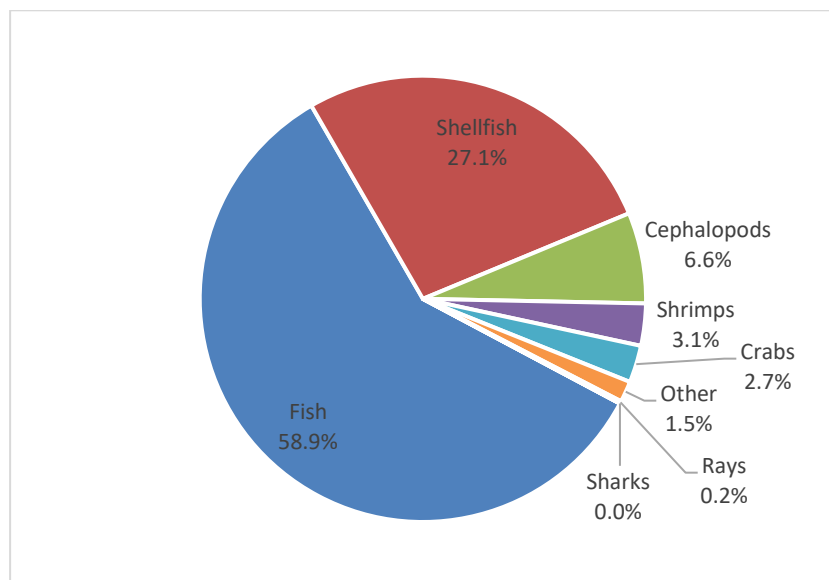


Figure 1. Catch composition by species group for all landings combined.

3.5. Species catch composition by reported catch weight for all landings

The total reported catch for October was **128,104.6 kg** the proportion catch by species is shown in Table 5. There are 28 unique species in the recorded catch. The most abundant species is the Shorthead anchovy (*Encrasicholina heteroloba*), which contributes 27.7% of the total reported catch. This is followed by a number of species groups, Shellfish nei (26.4%), Other fish nei (13.3%), Shortfin scad (5.8%) and Tuna (3.9%) and trash fish 2.7 %, Swimming crab 2.6%. The top 20 species contribute 97.8% of the reported catch.

Table 5. Catch composition by species for all landings.

Scientific name	English Name	Khmer name	Catch (kg)	Catch (%)
<i>Encrasicholina heteroloba</i>	Shorthead anchovy	កាកឹម	35,520.0	27.7%
	Mollusks nei	ខ្យង ម៉ឹក ក្តាមផ្សេងៗ	33,850.0	26.4%
	Other fish nei	ប្រភេទត្រីចំរុះ	17,020.0	13.3%
<i>Decapterus macrosoma</i>	Shortfin Scad	ត្រីកាម៉ុងឬត្រីញាតូ	7,424.0	5.8%
	Tuna	ត្រីឈាម	5,000.0	3.9%
	Trash fish	ត្រីដី	3,520.0	2.7%
<i>Portunus pelagicus</i>	Swimming crab	ក្តាមសេះ	3,291.9	2.6%
	Cephalopods (squids/cuttlefish)	ពពួកមឹកស្លុកនិងមឹកបំពង់	2,893.0	2.3%

Scientific name	English Name	Khmer name	Catch (kg)	Catch (%)
	Squids nei	មីក	2,152.0	1.7%
<i>Rastrelliger faughni</i>	Island mackerel	ត្រីប៉ាឡាំង	2,100.0	1.6%
	Octopus	មីកពីងពាង	1,987.0	1.6%
	Other catch nei	ផ្សេងៗ	1,946.0	1.5%
	Shrimps nei	ពពួកបង្កាគ្រប់ប្រភេទទាំងអស់	1,624.0	1.3%
<i>Penaeus sp.</i>	Prawns nei	បង្កា	1,311.5	1.0%
<i>scomberoides tala</i>	Barred queenfish	ត្រីកាឡាំង	1,200.0	0.9%
	Needlefish nei	ត្រីធ្នាំង	1,199.0	0.9%
<i>Anodontostoma chacunda</i>	Chacunda gizzard shad	ត្រីកាម៉ឺយ	1,055.0	0.8%
	Cephalopods (Octopus)	ពពួកមីកពីងពាង	931.0	0.7%
	Shellfish nei	ងាវចំរុះ	800.0	0.6%
<i>Suborder Sepiina</i>	Cuttlefish	មីកស្លឹក	477.0	0.4%
	Other species		2,803.2	2.2%
Grand total			128,104.6	

3.6. Species group contribution by landed value

The total reported value for October was 494,672,900 Riels, Fish contribute 33.9%, Cephalopods 26.8%, Crabs 18.7% and Shrimps 11.4%. Unspecified species groups contribute 3 %, while Sharks, rays and shellfish contribute 0.2% of the total value (more details are included in Annex 2).

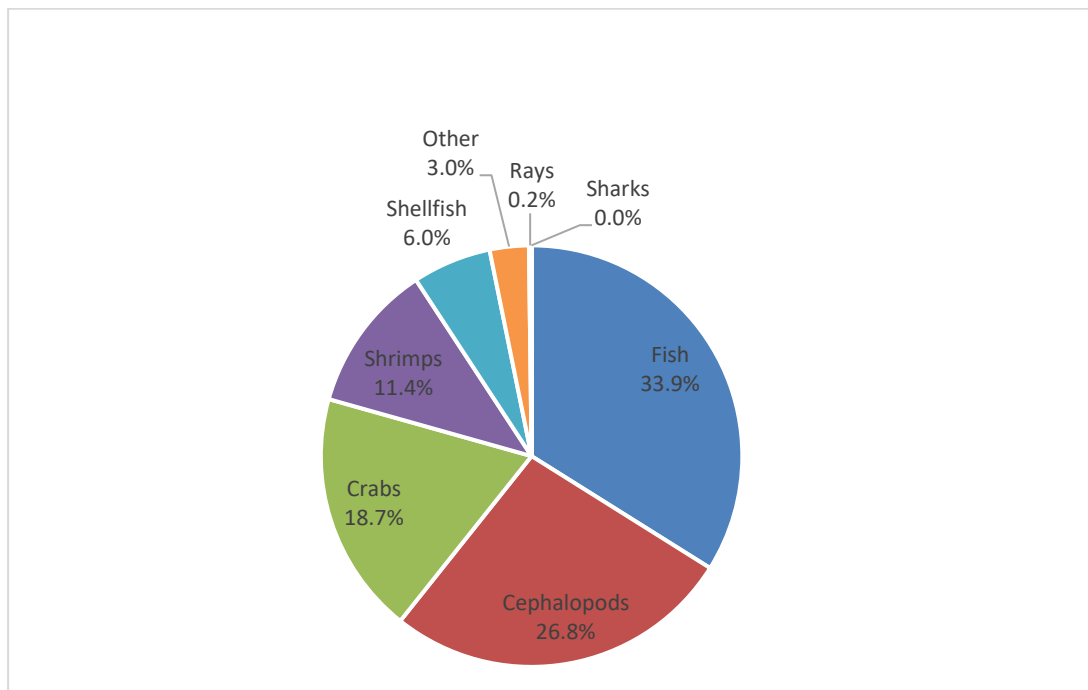


Figure 2. The value of the catch by main species groups for all landings

3.7. Species catch composition by reported catch value for all landings

The total reported value for October was 494,672,900 Riels, for all species, the value and price for the top 20 species is shown in Table 6. The species (group) with the highest reported value is swimming crab (18.4%), followed by Cephalopods (9.4%) and Squids (7.6%) and other fish nei (9.3%). Shorthead anchovy (7.1%), Shortfin scad (7%) and Prawns nei (5%), also are important, either through their bulk or high prices. Other species, outside the top 20, contribute 3% of the total reported value.

Table 6. Total value (1000 Riel) by species for all landing

Species name	Common name	Value (1000 Riels)	Value (%)	Price (Riel/kg)
<i>Portunus pelagicus</i>	Swimming crab	91,245	18.4%	24,425
	Cephalopods (squids/cuttlefish)	46,588	9.4%	16,425
	Other fish nei	46,186	9.3%	2,800
	Squids nei	37,797	7.6%	15,525
<i>Encrasicholina heteroloba</i>	Shorthead anchovy	35,216	7.1%	850
<i>Decapterus macrosoma</i>	Shortfin scad	34,761	7.0%	3,825
	Octopus	33,388	6.7%	11,800
	Shellfish nei	29,360	5.9%	1,300
<i>Penaeus sp.</i>	Prawns nei	29,098	5.9%	18,950
	Other catch nei	14,835	3.0%	16,800
<i>Suborder Sepiina</i>	Cuttlefish	14,754	3.0%	19,000
	Tuna	13,500	2.7%	2,700
<i>Rastrelliger faughni</i>	Island mackerel	12,000	2.4%	5,500
	Shrimps (unsorted)	11,101	2.2%	7,150
<i>Metapenaeus spp.</i>		8,764	1.8%	20,275
	Needlefish nei	7,867	1.6%	8,450
<i>scomberoides tala</i>	Barred queenfish	4,800	1.0%	4,000
<i>Rastrelliger kanagurta</i>	Indian mackerel	3,300	0.7%	11,000
	Mantis shrimp	2,573	0.5%	46,700
	Shrimps nei	2,495	0.5%	162,775
	Other species	15,045	3.0%	
Grand Total		494,673		

The comparatively high reported catch for October, low contribution by anchovies and conversely a higher proportion of more valuable species, means that the average price is about 3862 KHR/kg

3.8. Total calculated catch

The total estimated catch is calculated separately for a number of vessel-gear classes to reduce the variability in the observed CPUE. In view of the importance of trawl fisheries and high variability in CPUE which is closely related to vessel length and engine power, trawlers are separated into three size-based classes¹, in addition to standard FiA vessel classes. Monthly vessel yield is based on independent estimates for the CPUE (average daily catch) and the monthly fishing days, while extrapolation uses number of vessels for each vessel-gear category obtained from the 2018 vessel census, while assuming only 85% are operating².

¹ Trawl gears are not reported by detailed trawl gear type in the 2023 data

² Based on information by FiAC staff

Table 7. Total estimated catch by main vessel gear categories.

Vessel-gear category	Recorded landings	CPUE	ε%	Effort	Monthly vessel yield (kg)	Active Vessels (85%)	Total Monthly yield (MT)	%Total
Very small<6 meter	0	5.5	(7.0%)	5.0	27.5	775.2	21.3	0.3%
Small-scale 6-<12 meter	56	25.4	13.4%	17.2	436.6	2658	1,160.6	15.5%
Trawl 6-<12 meter	60	54.9	14.1%	19.5	1,073.1	952	1,021.5	13.7%
Trawl 12-18 meter	35	477.7	11.7%	21.7	10,344.6	339.15	3,508.4	47.0%
Trawl 18-<24 meter	0	220.8	(88.7%)	16.0	3,533.3	42.5	150.2	2.0%
Other gears 12-18 m	61	49.4	13.9%	16.7	824.1	1588.7	1,309.2	17.5%
Other gears 18-<24 m	10	82.0	21.2%	18.4	1,509.5	55.25	83.4	1.1%
Large-scale 24+ meter	2	1,340.7	(63.8%)	17.5	23,462.5	9	211.2	2.8%
October Total Estimated Catch							7,465.8	

The total calculated catch for October 2023, is 7,465.8 MT. As for the reported catch, by far the largest contribution to the total estimated catch is by trawlers, for a total of 62.7%, with small-scale vessels contributing more than 15.5%. Because of insufficient observations for some vessel-gear categories for individual months, the monthly total estimated catch calculation in Table 7, is using the annual average values for the CPUE and Effort for Small-scale < 6-meter, Trawler 18-24 meter and Large-scale > 24 meter. Only a few landings for these vessel-gear classes are recorded over the year, the value for ε% therefore represents the annual values.

While the values for ε%, for most of the vessel-gear categories is acceptable, even when taking annual estimates, the statistical precision for trawlers larger than 18 meters and large-scale vessels is insufficient. However, since these vessel-gear classes contribute less than 4.8% to the total estimated catch, there is confidence that the total catch is close to the actual value.

Using the average reported price (3862 Riel), the total value of the estimated catch can be calculated as **30,647,109,000 KHR** or **US\$ 7,474,905**.

Annex 1. Catch composition by species group for all landing, by weight and value.

Species group	Total weight (kg)	Total weight% (kg)
Fish	75,440	58.89%
Shellfish	34,684	27.07%
Cephalopods	8440	6.59%
Shrimps	3,910.2	3.05%
Crabs	3,451.4	2.69%
Other	1,946	1.52%
Rays	221	0.17%
Sharks	12	0.01%
Grand Total	128,104.6	

Species Group	Total value (1000 Riels)	Total value (%)
Fish	167,774.1	33.92%
Cephalopods	132,527	26.79%
Crabs	92,278.3	18.65%
Shrimps	56,392.5	11.40%
Shellfish	29,874	6.04%
Other	14,835	3.00%
Rays	920	0.19%
Sharks	72	0.01%
Grand Total	494,672.9	
Average price	3862 KHR/kg	

Annex 2. Catch contribution for single-gear landings by province.

Gear Type	Koh Kong	Preah Sihanouk	Kampot	Kep	Grand Total (kg)
Trawl	68.0%	30.5%	0.9%	0.6%	103,389.5
Mackerel Gillnet	23.8%	76.2%	-	-	8,420.0
Unspecified gears	-	-	100.0%	-	4,400.0
Octopus trap longline	100.0%	-	-	-	2,910.0
Crab trap	84.4%	-	12.0%	3.6%	2,019.3
Crab gillnet	64.3%	18.4%	0.0%	17.3%	1,486.5
Fish gillnet	0.4%	-	91.7%	7.9%	1,200.0
Halfbeak gillnet	-	14.9%	85.1%	-	1,175.0
Squid trap	100.0%	-	-	-	570.0
Shrimp gillnet	-	100.0%	-	-	365.8
Squid tow longline	100.0%	-	-	-	350.0
Centipede trap	-	-	-	100.0%	98.0
Push net	100.0%	-	-	-	90.5
Fish hook	16.3%	-	-	83.7%	49.0
Multiple gears	-	-	99.6%	0.4%	1581
Grand Total	61.6%	30.2%	7.2%	0.9%	128,104.6

The multiple gears category includes landings using combinations of different types of trawl, fish gillnets and/or traps

Annex 3. Calculated CPUE by province

Province	Vessel Class	Gear Type	Average CPUE	N	SD	ε%		
Kampot	Middle Scale	Unspecified gear	191.7	2	110.8	40.9%		
		Fish gillnet	76.7	3	11.5	8.7%		
		Trawl	39.7	23	12.3	6.5%		
			Crab trap	22.7	6	2.2	4.0%	
	Small Scale	Fish gillnet	59.5	14	27.6	12.4%		
		Crab trap	21.4	5	4.4	9.2%		
Kep	Middle Scale	Trawl	30.4	21	3.2	2.3%		
		Centipede trap	23.5	2	9.2	27.7%		
		Crab gillnet	17.2	11	12.4	21.8%		
			Crab trap	9.6	2	2.9	21.7%	
	Small Scale	Fish hook	20.5	2	0.7	2.4%		
		Fish gillnet	17.0	5	12.4	32.7%		
		Centipede trap	12.8	4	1.0	3.8%		
			Crab gillnet	11.3	6	4.2	15.1%	
	Koh Kong	Middle Scale	Trawl	635.8	13	1053.6	46.0%	
Mackerel Gillnet			150.7	3	22.3	8.5%		
Octopus trap longline			57.0	8	21.5	13.3%		
Crab trap			33.8	3	27.0	46.1%		
Push net			20.3	2	5.3	18.5%		
Squid trap			14.7	3	2.4	9.5%		
			Crab gillnet	13.3	6	23.0	70.8%	
Small Scale		Octopus trap longline	35.4	2	2.9	5.9%		
		Push net	16.7	3	7.6	26.2%		
		Squid trap	10.7	2	1.0	6.7%		
				Crab gillnet	3.9	7	3.8	36.6%
		Preah Sihanouk	Middle Scale	Trawl	365.8	40	292.8	12.7%
	Mackerel Gillnet			146.2	6	40.7	11.4%	
Shrimp gillnet	61.0			6	6.5	4.3%		
Crab gillnet	28.9			3	9.7	19.4%		

Annex 4. Species catch by province

Scientific name	English Name	Khmer name	Koh Kong	Preah Sihanouk	Kampot	Kep	Catch (kg)	Catch (%)
<i>Encrasicholina heteroloba</i>	Shorthead anchovy	កាកឹម	42.2%	57.8%	0.0%	0.0%	35,520.0	27.7%
	Shellfish nei	ខ្យង មីក ក្តាមផ្សេងៗ	100.0%	0.0%	0.0%	0.0%	33,850.0	26.4%
	Other fish nei	ប្រភេទត្រីចំរុះ	79.3%	16.4%	3.3%	1.0%	17,020.0	13.3%
<i>Decapterus macrosoma</i>	Shortfin scad	ត្រីកម្ពុំឬត្រីឆ្មាធូ	0.0%	87.2%	12.8%	0.0%	7,424.0	5.8%
	Tuna	ត្រីឈាម	100.0%	0.0%	0.0%	0.0%	5,000.0	3.9%
	trash fish	ត្រីដី	1.0%	95.4%	0.0%	3.6%	3,520.0	2.7%
<i>Portunus pelagicus</i>	Swimming crab	ក្តាមសេះ	66.8%	15.2%	7.8%	10.2%	3,291.9	2.6%
	Cephalopods (squids/cuttlefish)	ពពួកមីកស្តុកនិងមីកបំពង់	67.7%	32.1%	0.1%	0.0%	2,893.0	2.3%
	Squids nei	មីក	99.1%	0.0%	0.9%	0.0%	2,152.0	1.7%
<i>Rastrelliger faughni</i>	Island mackerel	ត្រីប៉ាឡាំង	0.0%	0.0%	100.0%	0.0%	2,100.0	1.6%
	Octopus	មីកពីងពាង	91.6%	0.0%	6.8%	1.6%	1,987.0	1.6%
	Other catch nei	ផ្សេងៗ	0.0%	0.0%	100.0%	0.0%	1,946.0	1.5%
	Shrimps (unsorted)	ពពួកបង្កាគ្រប់ប្រភេទទាំងអស់					1,624.0	1.3%
<i>Penaeus sp.</i>	Prawns nei	បង្កា	6.6%	74.8%	0.0%	18.6%	1,311.5	1.0%
<i>scomberoides tala</i>	Barred queenfish	ត្រីកាឡាំង	100.0%	0.0%	0.0%	0.0%	1,200.0	0.9%
	Needlefish nei	ត្រីធ្មោង	0.0%	14.6%	84.4%	1.0%	1,199.0	0.9%
<i>Anodontostoma chacunda</i>	Chacunda gizzard shad	ត្រីកាម៉យ	0.0%	1.7%	97.2%	1.1%	1,055.0	0.8%
	Cephalopods (octopus)	ពពួកមីកពីងពាង	0.0%	100.0%	0.0%	0.0%	931.0	0.7%
	Shellfish nei	ងាវចំរុះ	100.0%	0.0%	0.0%	0.0%	800.0	0.6%
<i>Suborder Sepiina</i>	Cuttlefish	មីកស្តុក	90.1%	0.6%	1.9%	7.3%	477.0	0.4%

	Small mixed shrimp nei	គង	0.0%	100.0%	0.0%	0.0%	451.0	0.4%
<i>Metapenaeus spp.</i>	Shrimps (Metapeneus)	បង្កាឌីខាក់	5.5%	94.5%	0.0%	0.0%	381.0	0.3%
<i>Rastrelliger kanagurta</i>	Indian mackerel	ត្រីកាម៉ុងខ្លួនវែង	0.0%	0.0%	100.0%	0.0%	300.0	0.2%
<i>Carangoides bajad</i>	Orange-spotted trevally	ត្រីឆែកាម	100.0%	0.0%	0.0%	0.0%	300.0	0.2%
<i>Scomberoides commersonianus</i>	Talang queenfish	ត្រីកាឡាំង	0.0%	0.0%	98.0%	2.0%	255.0	0.2%
<i>Siganus canaliculatus</i>	Whitespotted Spinefoot	ត្រីកន្តាំងក្រអូម	0.0%	0.0%	100.0%	0.0%	227.0	0.2%
	Rays nei	បបែល	0.0%	0.5%	99.5%	0.0%	208.0	0.2%
	Mantis shrimp	បង្កងកណ្តុប	17.7%	9.5%	72.8%	0.0%	126.9	0.1%
<i>Rastrelliger brachysoma</i>	Short mackerel	ត្រីផ្កាចូ ឬត្រីកាម៉ុងខ្លួនខ្លី	40.0%	0.0%	60.0%	0.0%	125.0	0.1%
	Crabs nei	ក្តាមផ្សេងៗ	0.0%	0.0%	0.0%	100.0%	84.0	0.1%
	Crabs (swimming/mud crab)	ពពួកក្តាម (រួមទាំងក្តាមសេះ ក្តាមថ្ម ក្តាមជ័រ ជាដើម)	100.0%	0.0%	0.0%	0.0%	55.0	0.0%
<i>Sillago sihama</i>	Silver sillago	ត្រីព្រលួស	0.0%	0.0%	6.0%	94.0%	50.0	0.0%
	Emperors, scavengers nei	ត្រីគ្រាប់ខ្នុរ	0.0%	0.0%	100.0%	0.0%	42.0	0.0%
	Mollusks nei	សប្បីសត្វ ពពួកខ្យង ត្រី ងាវ	0.0%	44.1%	0.0%	55.9%	34.0	0.0%
<i>Leiognathus smithhursti</i>	Smithhurst's ponyfish	ត្រីកិខ្លួនខ្លី	0.0%	0.0%	0.0%	100.0%	25.0	0.0%
	Parrot fish	ត្រីសេក	0.0%	0.0%	66.7%	33.3%	21.0	0.0%
<i>Eleutheronema tetradactylum</i>	Fourfinger threadfin	ត្រីកាវ៉ាវ	50.0%	0.0%	0.0%	50.0%	16.0	0.0%
	Shrimps nei	បង្កងប៉ាក	0.0%	74.7%	0.0%	25.3%	15.8	0.0%
<i>Episesarma versicolor</i>	Violet vinegar crab	ក្តាមជ័រ	100.0%	0.0%	0.0%	0.0%	15.0	0.0%
	Congers nei	អន្លង់សមុទ្រ	0.0%	0.0%	0.0%	100.0%	14.0	0.0%
<i>Pseudorhombus arsius</i>	Large tooth flounder	ត្រីអណ្តាតវៃ	84.6%	0.0%	0.0%	15.4%	13.0	0.0%
<i>Chiloscyllium griseum</i>	Grey bambooshark	ឆ្ការគីងក់ឬឆ្ការមឆ្កុត	0.0%	0.0%	0.0%	100.0%	12.0	0.0%

<i>Maculabatis gerrardi</i>	Whitespotted whipray	បំបែលសាច់អុជ	0.0%	0.0%	0.0%	100.0%	10.0	0.0%
<i>chacunda gizzard shad</i>	Anodontostoma chacuda	ត្រីកាម៉ាយ	0.0%	100.0%	0.0%	0.0%	8.0	0.0%
<i>Scylla serrata</i>	Mud crab	ក្ដាមថ្មី	100.0%	0.0%	0.0%	0.0%	5.5	0.0%
<i>Anampses geographicus</i>	Geographic wrasse	ត្រីកសេក	0.0%	0.0%	100.0%	0.0%	4.0	0.0%
<i>Brevitrygon imbricata</i>	Scaly whipray	បំបែលមាន់	0.0%	0.0%	0.0%	100.0%	3.0	0.0%
<i>Pampus argenteus</i>	Silver pomfret	ត្រីចាបស	0.0%	0.0%	0.0%	100.0%	2.0	0.0%
Grand Total			61.6%	30.2%	7.2%	0.9%	128,104.6	