







Monthly Statistical Report for Scientific Catch Monitoring Survey at Marine Landing Sites in Cambodia

September 2021

By Marine Fisheries Research and Development Institute

MaFReDI, with technical assistance from FAO CAPFISH project under EU budget support, is currently piloting scientific catch monitoring at marine landing sites in the four coastal provinces in Cambodia. The aim is to obtain better information on catch and effort by marine fisheries in Cambodia, and to develop a sustainable catch monitoring methodology for implementation by provincial fisheries administrations, supported by MaFReDI. Coverage of landing sites and fishery sectors is gradually expanded, since the start of catch monitoring in July 2021. The current statistical report, provides preliminary analysis based on sample data and focuses on the main indicators that are covered by the catch monitoring sample survey. Therefore, the results do not represent final estimates and may be changed in future updates.

A description of the methodology can be found in: 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.

Data collection for September 2021 was conducted at 3 fish landing sites in Kampot and Sihanouk provinces.

Table 1. Number of random selected landings recorded by vessel class and landing site.

		Small-	Middle-
Province	Landing Site	Scale	Scale
Kampot	Kampong Kandal	23	5
Preah Sihanouk	Steung Hav	1	27
Preah Sihanouk	Tonum Rolok	1	27
Total		25	59

Middle-scale vessels includes vessel length 12-24 and all trawlers regardless of size, as well as all vessels operating blood cockle dragnet

Table 2. Mean reported catch in sampled landings (kg), by landing site, and vessel class, with standard deviation, 90% confidence level and standard error.

Small-scale vessels

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Province	Landing site	Landings	Mean	SD	CL	3			
Kampot	Kampong Kandal	23	34.20	16.90	6.21	18.2%			
Preah Sihanouk	Steung Hav	1	19.00						
Preah Sihanouk	Tonum Rolok	1	93.00						
	Overall	25	35.94	20.32	7.11	19.8%			

Middle-scale vessels

Province	Landing site	Landings	Mean	SD	CL	ε
Kampot	Kampong Kandal	5	194.40	355.35	418.13	215.1%
Preah Sihanouk	Steung Hav	27	1,512.29	2,357.33	789.69	52.2%
Preah Sihanouk	Tonum Rolok	27	702.33	816.77	273.61	39.0%
	Overall	59	1,029.95	1737.04	381.36	43.2%

SD is Standard Deviation; CL is Confidence Limits; ε is Standard Error

Table 3. Mean reported landed catch (kg) by gear and vessel class, with standard deviation, confidence limits and standard error.

Small-scale vessels

Gear name	Landings	Mean	SD	CL	ε
Boat seine net ¹	23	34.20	16.92	6.2	18.2%
Others	1	93.00			

Middle-scale vessels²

Gear name	Landings	Mean	SD	CL	ε
Boat seine net ¹	4	35.50	6.03	10.2	28.6%
Crab gillnet	1	21.00			
Fish gillnet	1	830.00			
Others	9	1,115.11	1,035.62	693.7	62.2%
Trawl	38	1,298.87	2,033.19	564.3	43.4%

 $[\]overline{\ }^1$ The CPUE for Beach seine nets is the mean catch, vessels operating this gear only go on single day fishing trips

Table 4. Reported catch in sampled landings (kg) by gear and province.

Gear type	Kampot	Sihanouk
Boat seine net	928.5	
Crab gillnet		21
Fish gillnet	830	
Others		10,129
Trawl		49,357

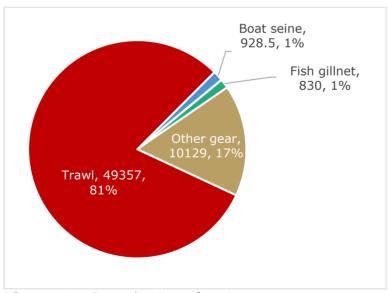


Figure 1. Contribution of main gear types to reported catch in sampled landings.

² The CPUE (catch per fishing gear day) cannot be accurately calculated for middle-scale trawlers as the number of fishing days is not recorded

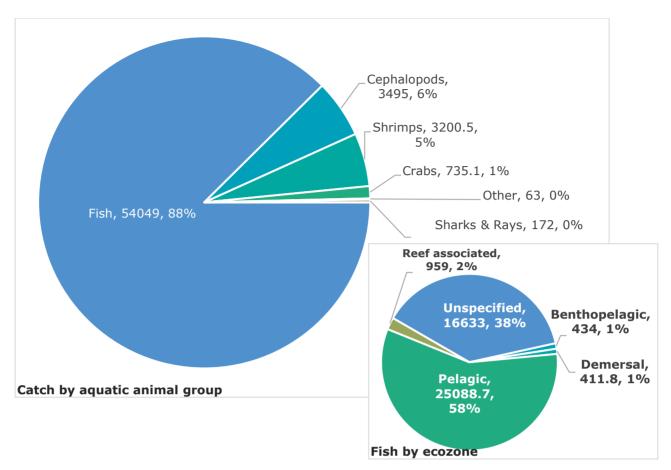


Figure 2. Contribution of main aquatic animal groups and for fish contribution of **fish ecotypes** to reported catch in sampled landings (not based on gear used to target species).

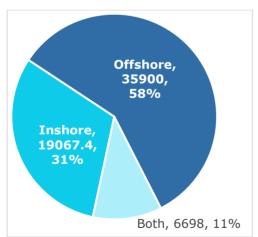


Figure 3. Contribution of main fishing zones to reported catch in sampled landings¹.

¹ Not all catch is attributed to a grid location or fishing zone, total included is less than total reported catch in landings sampled.

Table 5. Top 20 reported species and species groups **by weight** in reported catch in sampled landings, with reported weight and proportion of catch by individual species and species groups.

	Caiontifia nama	Fuglish Common	Catch	Catch contribution		
	Scientific name	English Common	(kg)	Proportion	Cumulative	
1	Encrasicholina heteroloba	Shorthead anchovy	28,788.2	46.6%	46.6%	
2		trash fish	12,582	20.4%	67.0%	
3	Thunnus tonggol	Longtail Tuna	3,010	4.9%	71.9%	
4		Tuna	2,300	3.7%	75.6%	
5	Penaeus sp.	Prawns nei	2,204.7	3.6%	79.2%	
6		Squids nei	2,147	3.5%	82.7%	
7	Euthynnus affinis	Mackerel tuna	2,005	3.2%	85.9%	
8	Sarda orientalis	Striped bonito	810	1.3%	87.3%	
9	Portunus pelagicus	Swimming crab	735.1	1.2%	88.4%	
10	Suborder Sepiina	Cuttlefish	690	1.1%	89.6%	
11		Octopus	658	1.1%	90.6%	
12	Scomberomorus	Narrowbarred Spanish				
12	commerson	mackerel	625	1.0%	91.6%	
13	Amblygaster leiogaster	Smoothbelly sardine	600	1.0%	92.6%	
14	Rastrelliger brachysoma	Short mackerel	591	1.0%	93.6%	
15		Other fish nei	574	0.9%	94.5%	
16	Anodontostoma chacunda	Chacunda gizzard shad	424	0.7%	95.2%	
17	Metapenaeus spp.		407	0.7%	95.8%	
18		Small mixed shrimp nei	286	0.5%	96.3%	
19		Lizardfish	265	0.4%	96.7%	
20		Other species	2,012.6	3.3%		
		Individual species	40,144	65.0%	52 species	
		Species groups	21570.2	35.0%	16 groups	
		Total reported catch	61,714.2			

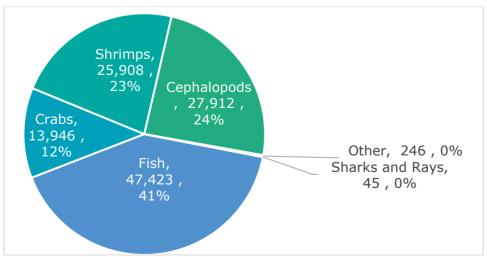


Figure 4. Total reported value (1000 Riel) in reported catch in sampled landings, by main aquatic animal group (Total value: 115,480,600 Riel).

Table 6. Top 20 reported species by value (1000 Riel) in reported catch in sampled landings, with reported value, proportion of catch by individual species and species groups and average price/kg.

	Scientific name	English Common	Value (1000 Riel)	Value proportion	Average Price (Riel)
1	Encrasicholina heteroloba	Shorthead anchovy	24,290	21.0%	1,110
2		Squids nei	23,160	20.1%	19,361
3	Penaeus sp.	Prawns nei	18,889	16.4%	13,520
4	Portunus pelagicus	Swimming crab	13,946	12.1%	22,564
5		trash fish	13,286	11.5%	1,088
6		Mantis shrimp	3,264	2.8%	118,333
7	Penaeus monodon	Giant tiger prawn	3,097	2.7%	24,069
8	Rastrelliger brachysoma	Short mackerel	2,996	2.6%	7,000
9	Suborder Sepiina	Cuttlefish	2,510	2.2%	12,120
10		Octopus	2,242	1.9%	12,173
11	Anodontostoma chacunda	Chacunda gizzard shad	1,854	1.6%	4,050
12		Other fish nei	1,421	1.2%	4,717
13	Tylosurus acus melanotus	Aguion needlefish	1,332	1.2%	74,000
14	Metapenaeus spp.		658	0.6%	23,718
15	Siganus canaliculatus	Whitespotted Spinefoot	364	0.3%	3,167
16	Pampus argenteus	Silver pomfret	267	0.2%	15,750
17	Anampses geographicus	Geographic wrasse	250	0.2%	5,000
18		Other catch nei	246	0.2%	5,333
19	Thryssa hamiltonii	Hamilton's thryssa	236	0.2%	4,000
20		Other species	1,172	1.0%	
	Total reported value by s	115,480			

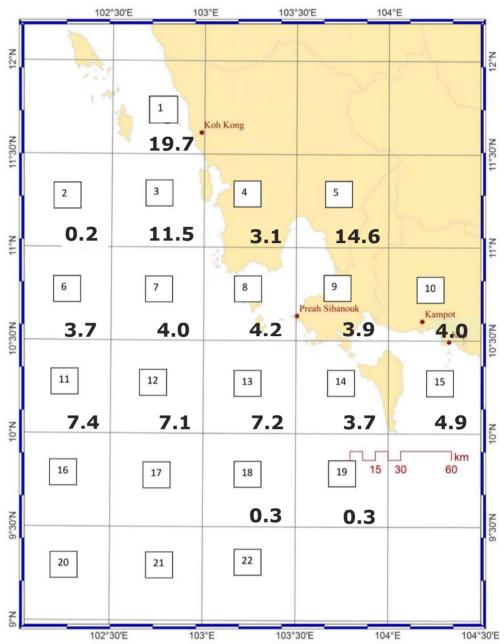


Figure 5. Contribution of fishing grid (%) to reported catch in sampled landings.