

(Country: Cambodia)



Presented by Cambodia Participant

Thach Phanara

Hok Seiha



Contents

1. Overview on National Fishery and Aquaculture Statistics
2. National Statistics on Marine Capture Fisheries
3. National Statistics on Inland Capture Fisheries
4. National Statistics on Aquaculture
5. National Statistics on Fish and Fish Farmers
6. National Statistics on Producer Price

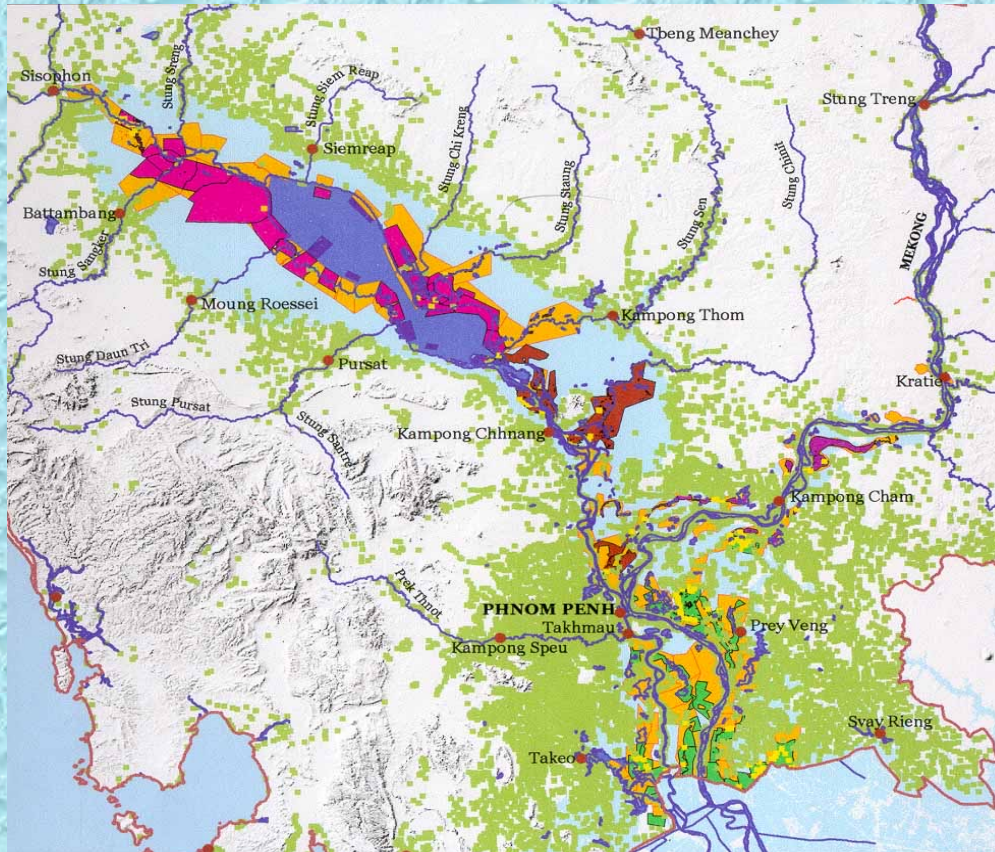


- The Cambodian Fisheries sector is considerable importance to the national development objectives, especially to food and nutrition security; poverty reduction; employment; equity and economic efficiency; foreign exchange balance and the protection of natural heritage.
- The total value of fisheries across the country, both freshwater and marine water contributes about 7-8% of GDP.
- The Mekong, Tonle Sap, Bassac Rivers and many of tributaries, lakes and a vast area of floodplains are a rich source of freshwater fish.
- Marine Fisheries Resources are available in 4 coastal provinces of Kep, Kampot, Preah Sihanoukville and Koh Kong with 435 Km coast line of 435 Km

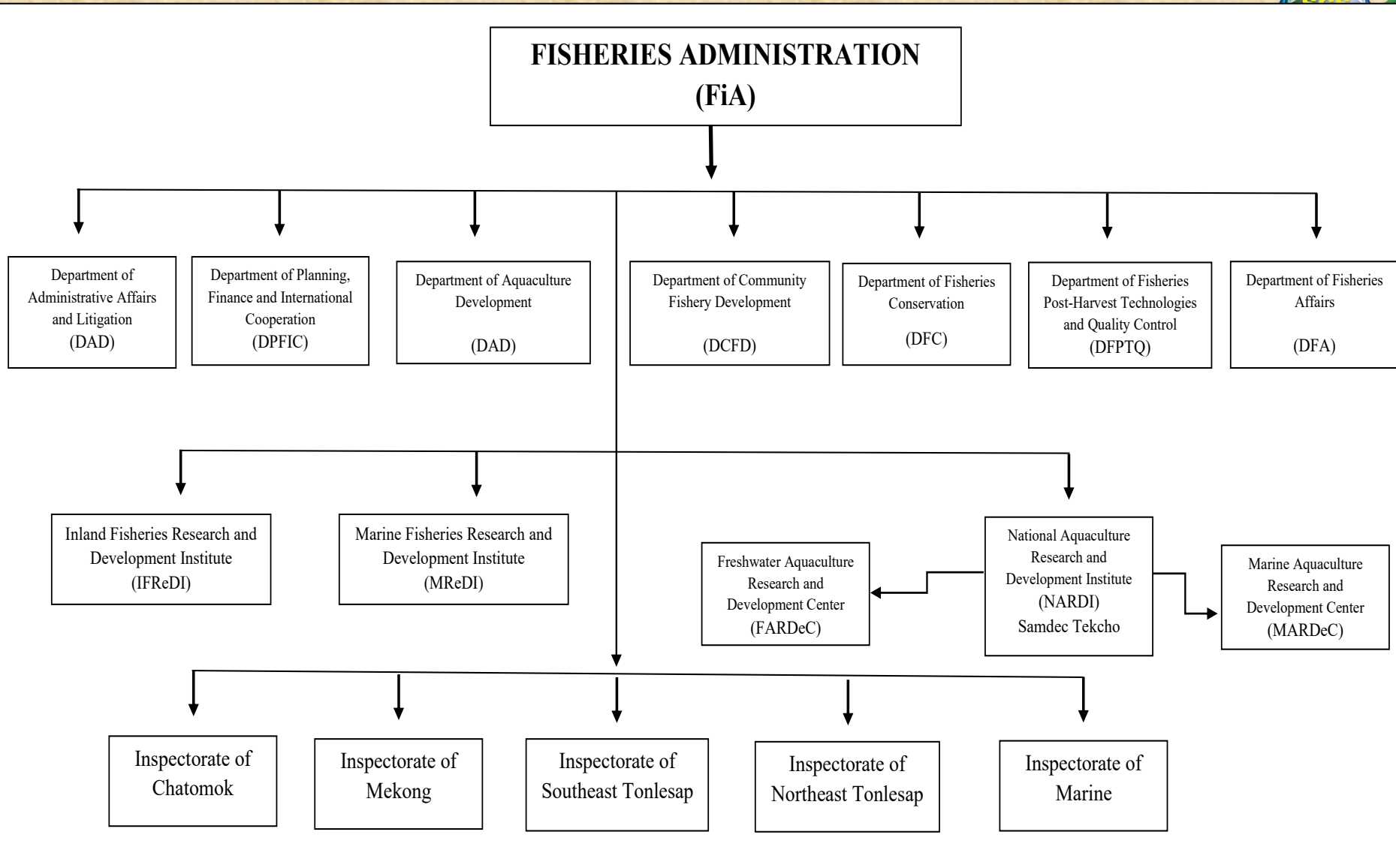


1. Overview on National Fishery and Aquaculture Statistics

The Water and Fisheries Resources

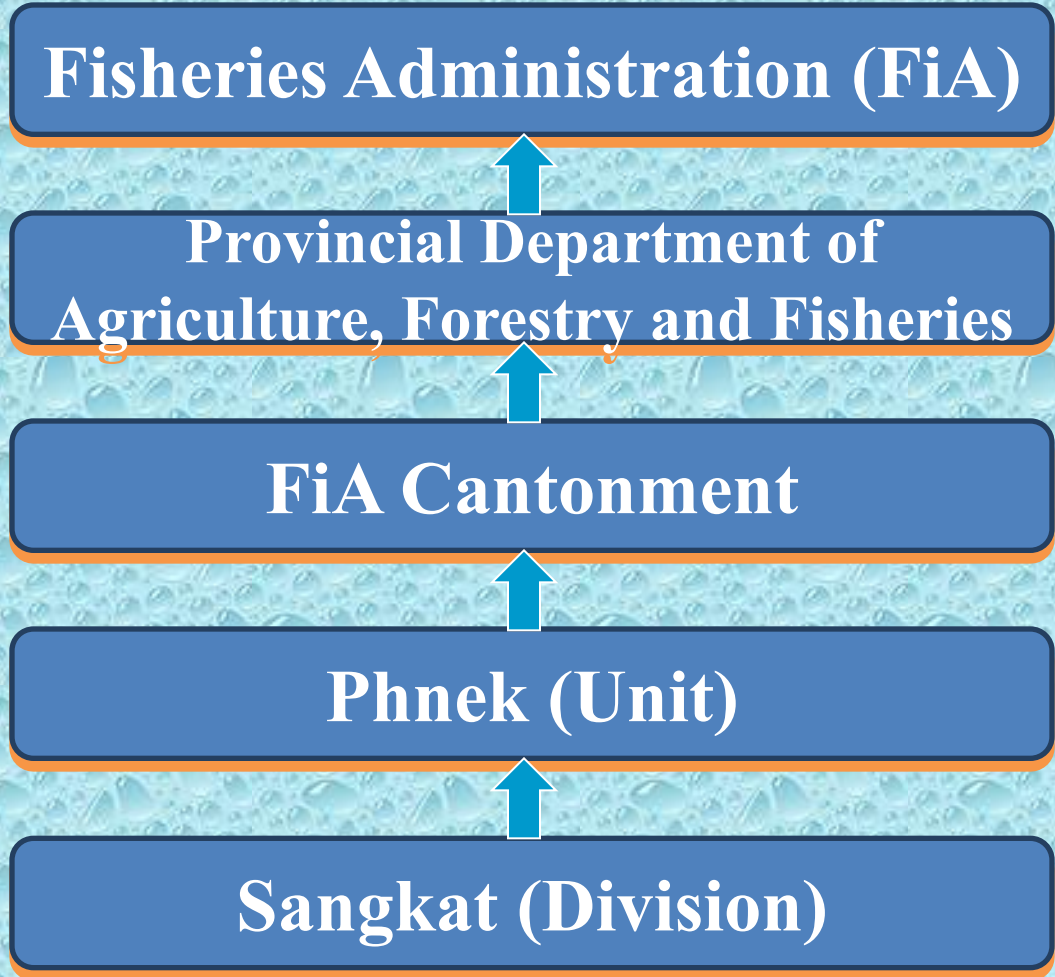


FISHERIES ADMINISTRATION STRUCTURE



Sub-national Level for Fisheries Management are under the 25 Fisheries Administration Cantonments of 25 Provinces-Municipality and are under Provincial/Municipal Departments of Agriculture Forestry and Fisheries

Fisheries Statistic and Information Data Collection System and Reporting

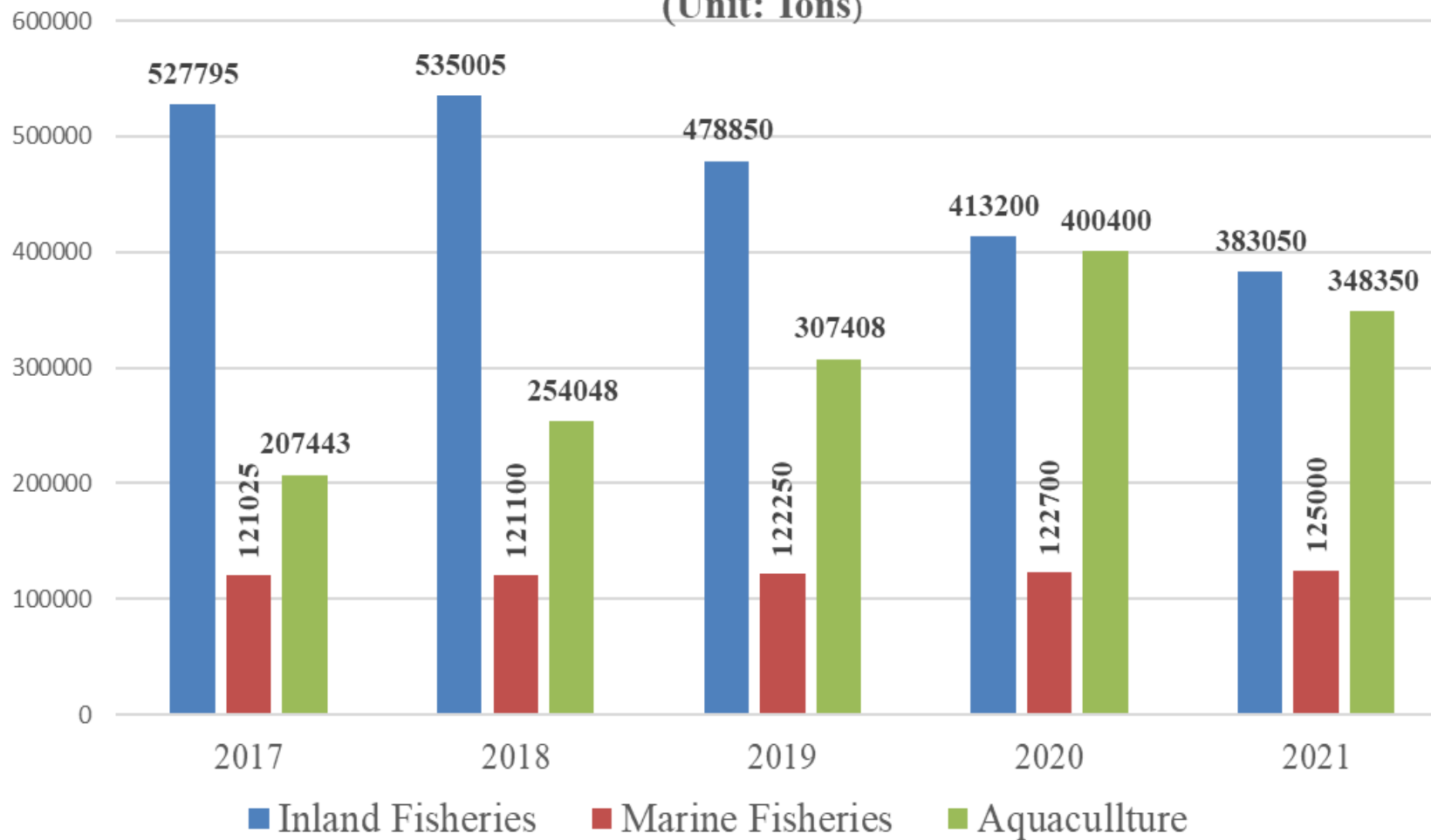




Statistics of Fisheries Production from 2017 to 2021 (Units: Tons)

Type of Fisheries Production	2017	2018	2019	2020	2021
Inland Fisheries Capture	527,795	535,005	478,850	413,200	383,050
Marine Fisheries Capture	121,025	121,100	122,250	122,700	125,000
Aquaculture	207,443	254,048	307,408	400,400	348,350
Total Fisheries Production	856,263	910,153	908,508	936,300	856,400

Statistics of Inland, Marine Fisheries and Aquaculture (Unit: Tons)





Other Aquaculture Statistic Data for 2021

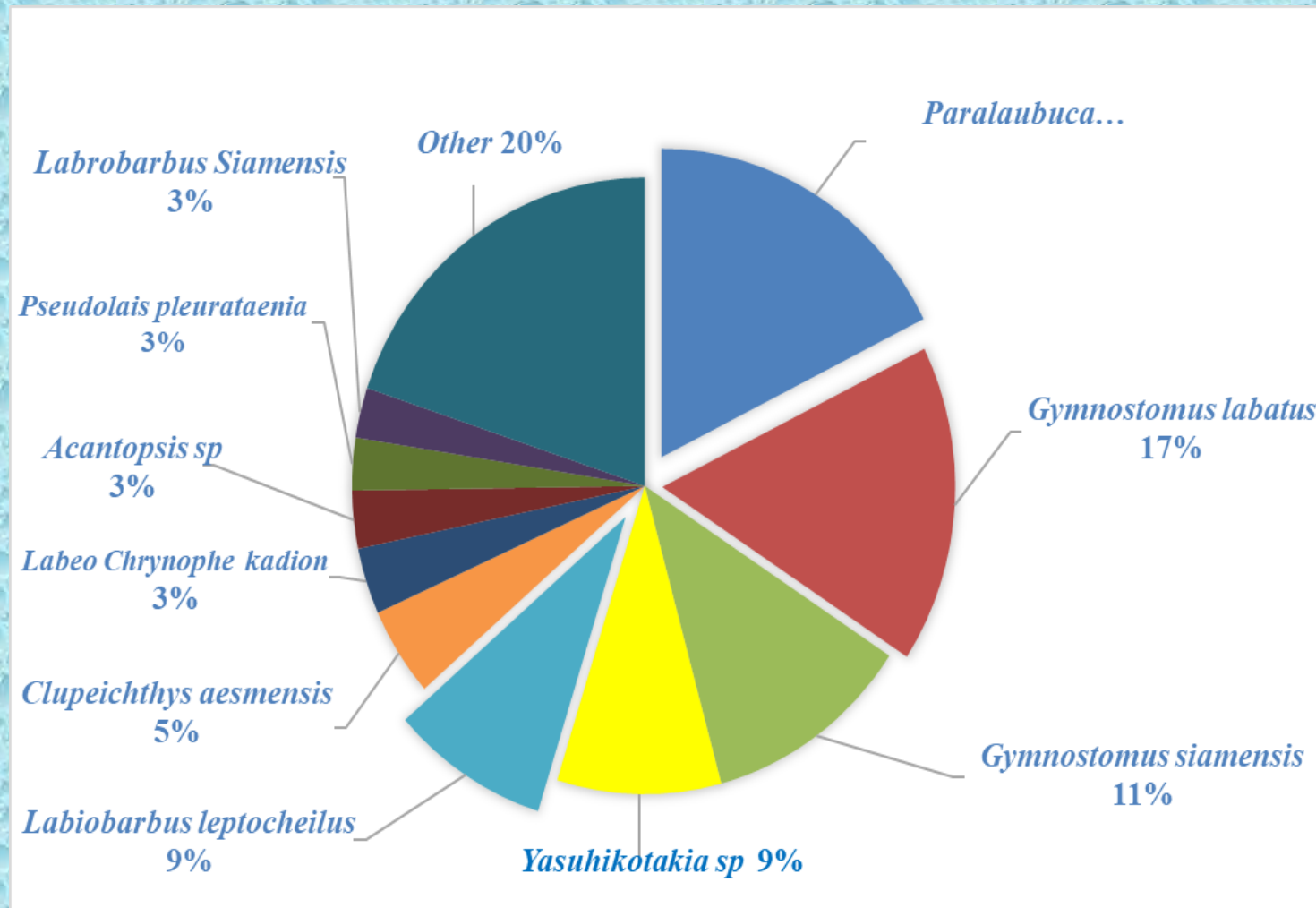
- Fish seed production in 2021 accounted for **324,106,000** heads equal to 120.04% of target 270,000,000heads and compared with the last year it increased 89,106,000 heads.
- Crocodiles in 2021 accounted for 292,100 heads equal to 88.52% of the plan 330,000 heads and compared with the last year it decreased 21,000 heads.



Aquaculture statistics from 2017-2021

Aquaculture Product/Year	2017	2018	2019	2020	2021
Aquaculture (Tone)	207,443	254,048	307,408	400,400	348,350
Fingerlings (Thousand Heads)	205,000	210,000	222,000	235,000	324,106
Crocodile (Heads)	392,777	410,000	412,811	313,100	292,100

10 Species Caught by Dai Fishery in 2020-2021 (%)





16 major group of fishing gears

No.	English Name	Khmer Name
1	Capture by hand	NesatDoydai Torte
2	Scoop devices	ObpakorDorng/ Dos
3	Wounding gear	ObpakorTveroyRobous
4	Hook & Line	Santouch
5	Traps	Antakh
6	Gillnets/Entangle nets	Mong
7	Surrounding/Seine nets	Oun
8	Dragged gears	ObpakorKavOs
9	Pushed nets	ObpakorChukRunh
10	Lift nets/Dip nets	Obpakor Leak
11	Covering devices	ObpakorKrongKrub
12	Bagnets	ObpakorThnokThnang
13	Anaesthetic methods	VitisaTverOySanlop
14	Fishing by pumping	NesatDoyBom Bach
15	Attracting devices	ObpakorTverOy Trey Kom
16	Fish scaring methods	ObpakorTverOy Trey Phahal



Number of Inland Fishing Gear from 2017 to 2021

No.	Year/Gear	Family Fishing Gear																			
		Mong	Thnang	Tom	Lob	Samnanh	Tru	Sayearn	Chneang	Chan	Leur	Chnuok	Sang	Snor	Changkrob	Lean	Ley	Choch	Angrot	Anhchung	Santouch
		meter	number	number	number	set	number	number	number	number	number	number	number	number	number	number	number	number	number	number	number
1	2017	10,072,532	4,550	10,110	234,644	56,706	65,394	153,909	26,767	11,960	189,018	1,210	29,480	9,285	1,930	455,313	2,570	1,146	6,807	3,160	16,978,148
2	2018	10,800,751	9,087	14,568	218,872	150,306	133,904	202,704	38,712	11,552	190,773	1,811	40,155	14,390	4,930	577,757	2,210	1,623	7,048	3,165	42,957,593
3	2019	13,615,223	21,567	22,692	246,852	147,214	137,836	423,765	38,698	16,632	190,425	1,302	41,415	13,850	4,935	558,074	2,485	1,210	16,541	3,098	31,038,868
4	2020	11,852,096	17,557	10,846	245,035	57,221	70,591	423,745	26,334	13,745	192,615	1,087	34,050	5,370	3,095	413,364	2,380	1,630	18,795	256,914	26,866,589
5	2021	11,851,528	17,557	10,846	245,035	57,221	70,591	423,745	26,334	13,745	192,615	1,087	34,050	5,370	3,095	413,364	2,380	1,630	18,795	256,914	26,866,589



Number of Marine Fishing Gear from 2017 to 2021

Sl. No.	Year/Gear	Marine Fishing Gear																	
		Trawl/Moving Khav	Anchovy seine	Beach seine	Encircling seine shallow water	Spanish mackerel gillnet	Shrimp gillnet	Crab gillnet	Halfbeakish gillnet	Whitefish gillnet/seine	Mullet gillnet	Fish gillnet	Mackerel gillnet	Volute shell trap (for octopus)	Hand Pushnet	Hand pushnet (man power)	Hook	Small winged set bag/Fake stake trap	Trap crab squid
		Set	Set	Set	Set	Meter	Meter	Meter	Meter	Meter	Meter	Meter	Meter	Number	Number	Mouth	Hook	Mouth	Number
1	2017	1988	98000	16	22	455500	500570	547500	73000	135600	51900	325000	693000	230590	33	1200	53900	72	445993
2	2018	2,029	30	20	12	488,500	506,570	644,500	210,800	150,600	73,500	327,000	1,830,500	518,590	33	1,260	59,400	40	437,315
3	2019	2,037	30	19	12	487,000	509,570	523,500	75,000	140,700	73,500	327,000	480,500	353,590	33	1,360	59,600	40	438,190
4	2020	2,115	30	16	12	487,000	289,500	527,500	76,000	168,100	83,500	332,000	480,000	358,500	33	15,060	57,400	25	365,260
5	2021	2,115	30	16	12	487,000	289,500	527,500	76,000	168,100	83,500	332,000	480,000	358,500	33	15,060	57,400	25	365,260



Number of Fishing Vessels from 2017 to 2021

Year/Type	Vessels without engine	Vessels with engine				
		Length <6m	Length from 6m-<12m	Length from 12m-<18m	Length from 18m-<24m	Length >24m
2017	897	3,917	2,033	92	440	
2018	697	5,634	1,064	729	115	10
2019	358	924	3,115	3,388	115	10
2020	358	924	3,367	3,136	115	10
2021	340	924	3,639	2,577	123	10



Number of Fishermen from 2017 to 2021

No.	Year/Fishermen	Full time			Part Time			Occasional			Total			Other
		Family	Labors		Family	Labors		Family	Labors		Family	Labors		
			M	F		M	F		M	F		M	F	
1	2017	75,619	137,751	38,563	267,350	361,286	158,996	294,695	363,240	125,191	637,664	862,277	322,750	
2	2018	92,158	156,269	82,842	270,941	386,947	170,903	316,007	381,750	134,251	679,106	924,966	387,996	
3	2019	80,420	139,526	65,746	266,997	374,548	159,309	324,834	370,739	136,329	672,251	884,813	361,384	
4	2020	73,841	169,413	59,302	254,168	359,485	151,646	288,354	333,999	129,550	616,363	862,897	340,498	
5	2021	73,841	169,413	59,302	254,168	359,485	151,646	288,354	333,999	129,550	616,363	862,897	340,498	



Number of Labor from 2017 to 2021

No.	Year/Labor	Domain and Paddy		Larg Scall		Fish Processing		Aquaculture		Total	
		Family	Labor	Family	Labor	Family	Labor	Family	Labor	Family	Labor
1	2017	630,386	2,159,675	40,483	149,045	9,030	21,827	40,772	79,272	720,671	2,409,819
2	2018	723,827	2,256,499	6,249	20,347	9,324	28,118	115,580	80,579	854,980	2,385,543
3	2019	566,224	1,932,840	10,084	14,917	13,094	47,172	45,597	93,003	634,999	2,087,932
4	2020	535,607	1,870,128	10,010	14,622	11,908	46,289	48,247	122,180	605,772	2,053,219
5	2021	535,607	1,870,128	10,010	14,622	11,908	46,289	48,247	122,180	605,772	2,053,219



2. National Statistics on Marine Capture Fisheries



- National statistics data collection on marine capture fishery: logbooks is used for fishers/skippers as record/registration method, and some enumeration method done by MaFReDI in collaboration with development partners. The national statistical data on marine capture fishery is broken down by species via enumerator at port of landing sites by estimation.
- The availability of data based on the current statistics frameworks and questionnaires submitted to SEAFDEC and FAO:
 - *Production by species with quantity is available via estimation, but by fishing area/sub-fishing area and value of caught species are not available. Size distribution of caught species with amount each size is not available too.*
 - *Number of fishing vessels by length and engine were available by from 2017 and 2021 while in 2018 a vessel census has been done in marine area of four coastal provinces, but no gross tonnage included (total fishing vessels were 7552 vessels in 2018 ??*
 - *Number of fishing unit by size of boat (no data available).*
 - *Capture production by type of fishing gear and by species (quantity) This part is also not available.*
- The data collection form did not response to the format of SEAFDEC and FAO demand fully and if developed to fulfill that need we are lacking of capacity & resources to do so as well as implementation too. E.g no gross tonnage record in Cambodia fishing vessel statistics.



- The marine fisheries sector has contributed to the total fish catch production and has been increasing every year since 2001 to 2021.
- The data collection FiA use logbook but the data collector face difficulty in collecting data due to the fishers did not have clear assigned ports to land their catches.
- The data of fish species caught done by estimation due to fishermen did not have much time to wait for long time or did not cooperate.
- Fishing gears we can interview but face difficulties in separating by species of caught fish .



Fishing vessels management in Cambodian marine waters are divided into three types:

1. Small-scale fishing: Manage small-scale fishing through management in fishery domains and co-management of community fisheries management areas.
2. Medium-scale and large-scale fishing: Limit medium-scale and large-scale fishing vessels at current levels (2018) through a system of registration, licensing and may be considered to decline size and structure of the fishing vessels in the future in accordance with the decrease of natural resources.
3. Management of foreign fishing vessels: there will be no authorization of foreign fishing vessels to fish in Cambodian non-disputed marine waters.



- Fishing boat divided by engine horse power and fishing vessel census divided the vessels by length (total fishing vessels in 2018 were 7552 vessels).
- There is no data of fish catch by fishing gears, except squid/octopus traps, crab traps and mackerel gillnets.
- Record on fisheries capture face difficulty and to solve the issues need budget support to data collectors and to manage fishing port according to law on fishing port management. Those difficulties are skills of data collection officers, wages, and data input and analyses offices do need support too.

Number of Marine Species from 2017 to 2021



ល.រ	ប្រភេទត្រី	Year				
		2017	2018	2019	2020	2021
1	ត្រីតុកកែ	284	309	270	252	257
2	ត្រីបេកា	1,506	1,543	1,567	1,628	1,658
3	ត្រីឆ្កែ	304	354	275	336	342
4	ត្រីកាវ៉ាវ	645	665	572	614	625
5	ត្រីសំប៉ាត	656	626	295	369	376
6	ត្រីចាប	509	578	515	519	529
7	ត្រីកាម៉ុង	2,521	2,984	2,255	2,485	2,531
8	ត្រីឆ្កាម	408	466	407	408	416
9	ត្រីអណ្តាតឆ្កែ	1,001	1,113	1,123	1,137	1,158
10	ត្រីប្រម៉ា	615	656	727	775	789
11	ត្រីត្រាស់ក	988	1,140	1,070	1,056	1,076
12	ត្រីត្រាប់ខ្នុរ	1,159	1,317	1,269	1,244	1,267
13	ត្រីសេក	758	842	771	744	758
14	ត្រីដងដាវ	997	1,084	1,177	1,268	1,292
15	ត្រីក្រហម	4,424	4,586	4,316	4,568	4,653
16	ត្រីអរ្ស៊ែ	1,138	1,337	1,444	1,524	1,552
17	ត្រីកាតាំង	1,606	1,694	1,711	1,790	1,823
18	ត្រីជី	51,235	48,347	49,840	51,690	52,660
19	បង្កា	9,822	9,901	9,266	8,332	8,488

20	បំបែល	1,319	1,420	1,307	1,336	1,361
21	មីក	6,006	6,455	6,278	5,752	5,860
22	បង្កងកណ្តុប	707	826	1,396	1,276	1,300
23	ក្តាមថ្ម	886	969	986	912	929
24	ក្តាមសេះ	4,946	4,661	4,686	4,912	5,004
25	ក្តាមដីរ	781	744	1,018	948	966
26	ខ្យង និងគ្រុក្សាហ្គុល	1,286	1,032	1,317	975	993
27	រ៉ុក្តងឈាម	2,396	2,188	2,076	1,777	1,810
28	ងារចៀរ	3,982	4,316	4,121	4,052	4,128
29	គី	1,239	1,357	1,307	1,203	1,225
30	ត្រីឈាម	974	1,011	1,202	1,200	1,222
31	ត្រីរាំងភឹយ	287	300	444	468	477
32	ត្រីផ្លោង	1,295	1,376	1,384	1,326	1,351
33	ត្រីកាំក្នុង	490	528	643	715	728
34	ត្រីក្បក	939	1,015	1,006	895	912
35	ត្រីកន្ទុយរឹង	963	959	1,112	1,219	1,242
36	ត្រីតូនកុំ	437	496	535	602	613
37	ត្រីបោះត្រា	595	597	591	609	620
38	ត្រីកាឡាំង	427	464	657	715	728
39	ត្រីកាភឹម	4,591	4,737	5,016	5,036	5,130
40	ត្រីក្តូចិន	1,156	1,247	1,156	1,412	1,438
41	ត្រីកាជី	228	225	244	190	194
42	ត្រីព្រលួស	891	974	921	833	849
43	ត្រីដូកសមុទ្រ	284	281	281	285	290
44	អន្ទង់សមុទ្រ	559	568	213	210	214
45	ត្រីស	291	271	428	418	426
46	រ៉ុក្តងឈាមមានពេម	639	644	1,130	1,137	1,158
47	ប្រភេទត្រីចៀរ	724	661	465	370	379
48	ក្តាមផ្សេងៗ	265	265	127	137	140
49	ខ្យងចៀរ	614	693	982	790	805
50	សារាយសមុទ្រ	251	270	350	250	255
51	ពពុះទឹក	1	8	1	1	1
សរុប		121,025	121,100	122,250	122,700	125,000



3. National Statistics on Inland Capture Fisheries



- National statistics data collection on inland capture fishery, e.g. available data items, at what details the data is broken down, data collection methodology for different data items (e.g. by sampling, enumeration, traceability system, record/registration, etc.).

Not available by species; but available fishing category e.g family fishing at fisheries domain, family fishing at rice fields, Day fishing

- The availability of data based on the current statistics frameworks and questionnaires submitted to SEAFDEC and FAO:

- *Production by type of water bodies available only for rice field and other fishing grounds which are not rice fields*

- Difficulties in reporting, and suggestions to be considered accommodating in the framework, explanatory notes, etc., e.g. different reporting timeline, different definition of terminologies/classification, etc. Data are not conform with the two institution needs since they are more detail than the Cambodia data.



- Fish catch from
 - Day Fisheries
 - Family fishing in fisheries domains.
 - Family fishing at rice fields

- Filling figure to FAO and SEAFDEC are by estimation and did not separate by fish species, fishing areas and fishing domain (fishing grounds) that the fishing ground is depended on fisherman want to do fishing.

- Record on fisheries capture face difficulty and to solve the issues need budge support to data collectors and to manage fishing port according to law on fishing port management. Those difficulties are skills of data collection officers, wages, and data input and analyses offices do need support too.



4. National Statistics on Aquaculture



- Aquaculture data collection divided by Pond, Cages, Pen and Plastic tent ponds and by some economic value species and do not divided by area for data collection. However there is a division between marine and freshwater aquaculture data collection.
- Record on fisheries capture face difficulty and to solve the issues need budge support to data collectors and to manage fishing port according to law on fishing port management. Those difficulties are skills of data collection officers, wages, and data input and analyses offices do need support too.



5. National Statistics on Fish and Fish Farmers



- National statistics data collection on fish and fish farmers, available data items, at what details the data is broken down, data collection methodology for different data items (e.g. by record/registration, census, etc.).??? កសិករចិញ្ចឹមត្រី

- The availability of data based on the current statistics frameworks and questionnaires submitted to SEAFDEC and FAO:

 - *Number of fisher and fish farmers*

- Difficulties in reporting, and suggestions to be considered accommodating in the framework, explanatory notes, etc., e.g. different reporting timeline, different definition of terminologies/classification (e.g. working status), etc.

-Data are not conform with the two institution needs since they are more detail than the Cambodia data



- Agriculture census do not consist of complete figure due to main objectives focused on agriculture works, husbandry, while fisheries focuses on few parameters such as fishing and aquaculture but no figure of aquaculturist/ fish farmers or labor force. But the Census took figure of labor force or aquaculturist/ fish farmers took from FiA.
- Excel Windows



- FiA in collaboration with FAO has developed Database System using FiA existing questionnaires. The system may finish at the end of this year or early next year.
- Number of Fishermen and Labor force FiA updates those data annually.



6. National Statistics on Producer Price



- Data collection is done by using FiA developed questionnaires.
- No data on fish price by species only general estimation as 2\$/Kg
- However, some high value species such as crab, squid, mackerel about 5\$/kg for producer price; while snake head is about 5\$/kg for wild catch and if culture is about 2\$ to 3\$/kg



Thanks

