

CATCH AND BYCATCH IN THE BELOW 90 CV SHRIMP TRAWLERS IN HA TIEN, KIEN GIANG - CASE STUDY IN 2010

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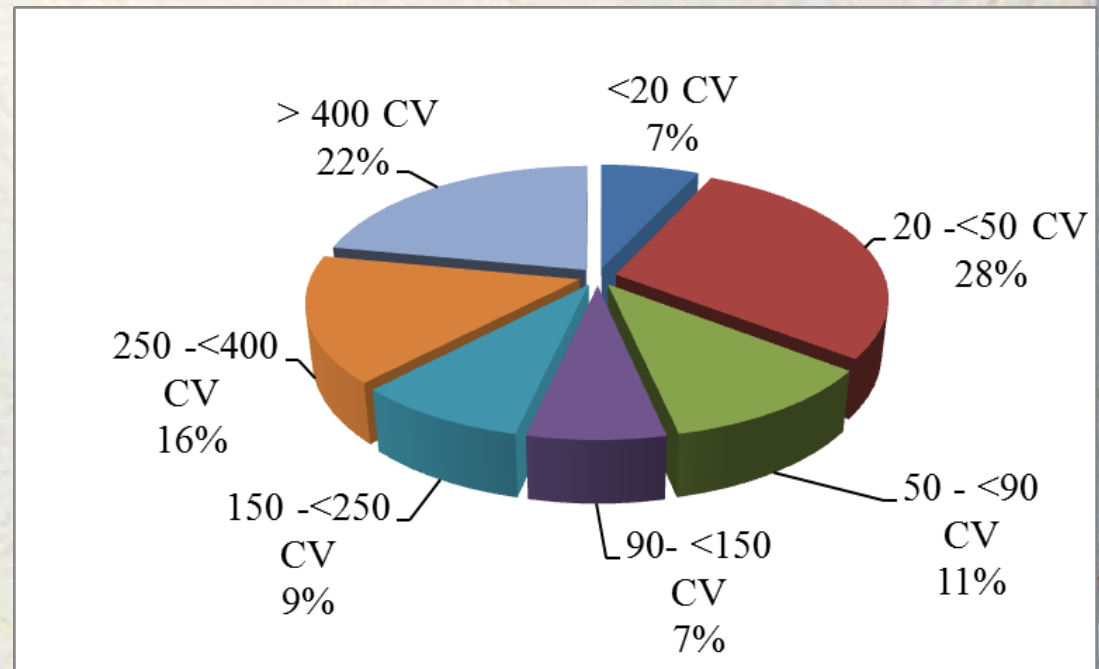
FICEN, Directorate of Fisheries (D-Fish)



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General introduction to VN trawl fisheries

- Total No of trawlers: 19,672 units, including pair trawlers and otter trawlers;
- Main provinces: Quang Ninh (1,257); Thanh Hoa (1,296); Binh Thuan (1,227); Ba Ria-Vung Tau (1,980), Ben Tre (2,878); Kien Giang (3,156);
- Most above 90CV catch fish and others;
- Less than 90CV catch shrimp, especially in the Gulf of Tonkin and Southwest waters.



General introduction to VN trawl fisheries

- **Management measures:**

Decree No 33/2010/NĐ-CP (dated March 21st 2010);

- + No trawlers fishing in coastal areas (6 nm from shore line), above 90 CV trawlers operate in offshore waters;

- + No more newly small shrimp trawlers (below 30CV) and fish trawler (below 90CV);

- + < 20 CV, fishing in coastal water only;

- + fishing license applied to all fishing units;

Circular No 02/2006/TT-BTS (dated March 20th 2006);

Gear restriction ("2a" meshsize – codend meshsize of fish trawlers (28 – 40 mm), shrimp trawlers (20-30 mm)),

MPA, closed season and closed area, prohibited/protected species...

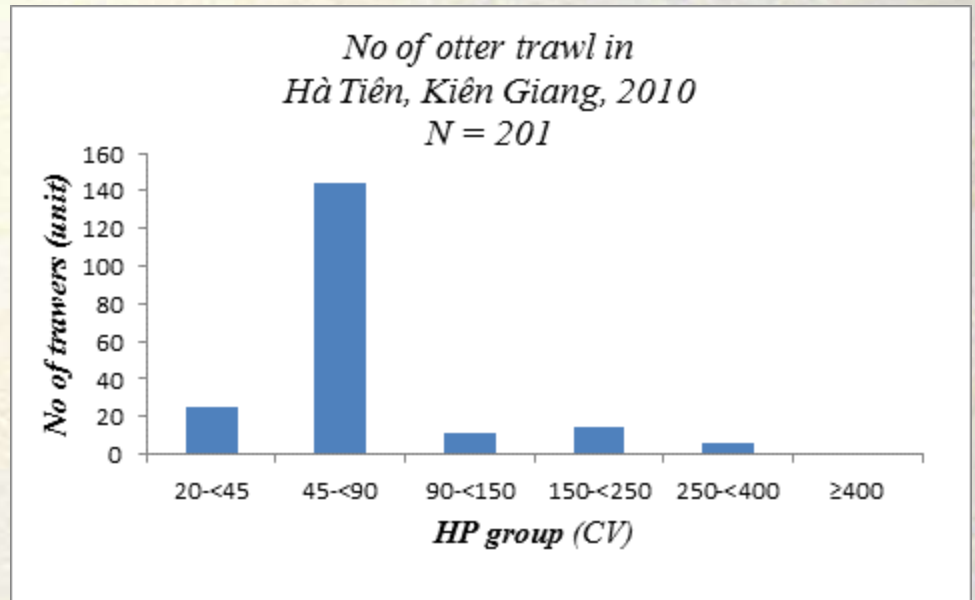
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Ha Tien district, Kien Giang province



Fishing vessel

- Structure of trawlers in the pilot study area, Ha Tien, Kien Giang, in 2010.



Fishing grounds



Fishing operation

Indicators/item	Unit	Quantity	Remark
No of crew	Person	2-4	
Fishing time		Day and night	
Trip duration	Day	2 - 5	
No of gears on boat	Set	3	
No of hauls per day	Set	2 - 4	
Towing duration	Hr	3 - 6	
Towing speed	knot	1.8 – 2.5	

Catch and catch rate

- Average catch rate of the fleet of below 90 CV shrimp trawlers

Rank	Commercial groups	(CPUE(kg/boat/day))
1	Trash fish	39.5
2	Mixed fish	10.9
3	Crabs	2.5
4	Squid and cuttlefish	5.6
5	others	7.1
6	Shrimp (Penaeidae)	38.5
7	Small shrimp	2.3
	Total	106.5

Fishing products



Catch composition

Rank	Commercial groups	Sampled Catch (kg)	Proportion (%)
1	Trash fish	572	37
2	Mixed fish	155	10
3	Crab	36	2
4	Squid and cuttlefish	81	5
5	Shrimp used for peeling	573	37
6	Other shrimp	35	2
7	Others	100	6
	Total:	1.551	100

Catch composition in “trash fish” group

Rank	Family name	Sampled catch (kg)	Proportion (%)
1	Apogonidae	24.7	5.2
2	Atherinidae	2.9	0.6
3	Bothidae	31.9	6.7
4	Callionymidae	40.9	8.6
5	Cynoglossidae	32.0	6.7
6	Engraulidae	2.5	0.5
7	Engyprosopon	3.2	0.7
8	Ephippidae	0.2	0.0
9	Gastropoda	2.8	0.6
10	Gobiidae	152.4	32.1
11	Hemirhamphus	0.4	0.1
12	Hoplichthyidae	1.5	0.3
13	Leiognathidae	13.4	2.8
14	Loliginidae	0.0	0.0
15	Lutjanidae	1.6	0.3

Rank	Family name	Sampled catch (kg)	Proportion (%)
16	Monacanthidae	11.4	2.4
17	Mullidae	26.7	5.6
18	Nemipteridae	17.5	3.7
19	Penaeidae	4.9	1.0
20	Pinguipedidae	9.7	2.0
21	Platycephalidae	19.8	4.2
22	Plotosidae	2.6	0.6
23	Portunidae	0.6	0.1
24	Sepiidae	3.3	0.7
25	Sepiolidae	27.1	5.7
26	Siganidae	24.0	5.1
27	Soleidae	0.7	0.1
28	Squillidae	1.7	0.3
29	Synodontidae	3.8	0.8
30	Tetraodontidae	8.7	1.8
31	Aploactinidae	2.0	0.4
	Total	475	100

Catch revenue composition

- Revenue

Commercial groups	Catch (kg)	Price (1000đ/kg)	Revenue (1000 đ)	Catch prop. (%)	Revenue prop. (%)
Trash fish	3,493	3	11,283	36.6	8.4
Mixed fish	978	5	5,183	10.3	3.9
Crabs	8	21	154	0.1	0.1
Swimming crab	17	100	1,720	0.2	1.3
Squid, cuttlefish	902	28	25,312	9.5	18.9
Peeling shrimp	3,804	16	60,761	39.9	45.5
Shrimp	331	88	29,225	3.5	21.9
Total	9,532		133,638	100	100

Current trawl fisheries management issues

- Over fishing capacity;
- Recently, serious conflicts among and within fisheries (gillnet and other gears vs trawl) significantly increased;
- Big trawlers fishing in coastal and near-shore waters;
- Destroying critical habitats (seagrass, coral reef...);
- Trawling more small and juvenile fish;
- Catch all, no “by catch” context, IUU fishing increased;
- Unclear, unavailable specifically legal framework for management of trawler fisheries;

Current trawl fisheries management issues

- Neglectful role of fisher associations (FAs) in management;
- Overfishing, depleting offshore resources lead to increase inshore fishing pressure;
- Insufficient information (catch, species composition, licenses...);
- Weakness of enforcement;
- Poor complement of fisheries management measures;
- No studies implemented on impacts of trawlers on ecosystems, resources, sustainability of the sector...

Current trawl fisheries management issues

- Increasing in livelihood pressure in the coastal communities;
- Existing a “vicious cycle” in management policy “expanse offshore fishing fleets...”;
- Existing a “Trade off” between increasing demands on trashfish for fish meal production, mariculture – “demand” and sustainable fishery resources – “protection”;



Thank you very much!

