Vietnam swordfish handline
Three-Year Audit Report

Jo Gascoigne
16 May 2022

FIP Information

Target species / stock	Swordfish, *Xiphias gladius* (stock North Pacific)
Fishery location	Eastern Sea / South China Sea, North Pacific Ocean
Gear type(s)	Handline
Estimated FIP Landings (weight in tons)	2018 catch estimate from VTFACE10 for swordfish handline catch: 634 t (spreadsheet provided by FIP and by SPC). The FisheryProgress site gives a figure of 200 t from the start of the project, and could be updated at the next progress report.
Vessel type(s) and size(s)	
Number of vessels	Fleet size estimated at 2277 vessels in 2018; reportedly still of the order of 2000+
Management authority	National: Ministry of Agriculture and Rural Development, Directorate of Fisheries, Department of Capture Fisheries and Resource Protection RFMO: WCPFC (Northern Committee)
Auditor name(s)	Jo Gascoigne
Auditor Organization/Affiliation	-
Date of report completion	16/5/22

Stakeholder Consultation & Meetings

Name	Affiliation	Date and Subjects Discussed
Stephen Fisher	Sea Delight	1/4/22 Background of the fishery, history of the FIP, main participants, key actions and successes, impact of covid on FIP activities
Gabriela McLean	CeDePesca	
Tran Van Hao	VINATuna	25/4/22 Changes and improvements in fishery over the last decade, role of tuna and swordfish FIPs, various FIP/VINATuna projects, next steps and key remaining priorities
Peter Williams	SPC	24/4/22 (by email exchange) Cooperation SPC/WCPFC/Vietnam to improve data, VTFACE workshops, data improvements and gaps, role of FIP in supporting data collection
Vu Duyen Hai	Directorate of Fisheries	16/5/22 (by email exchange) Governmental objectives for the fishery, role of the FIP in making improvements and how they work with the FIP, importance of the FIP in some areas (engagement of stakeholders, raising awareness, bycatch monitoring and mitigation), priorities for the future

Summary of Findings and Recommendations

The FIP has made good progress, particularly around P2 which is more in the control of the stakeholders on the ground. The COPPA project is brilliant and I think has the potential to be useful to many other fisheries and FIPs (once modified for local language and species). Perhaps FisheryProgress could consider a role around bringing FIPs together so that we can all potentially benefit from the great tools developed by our colleagues in other fisheries. Work has also been done on traceability, which is crucial. (Note to FisheryProgress: Activities around traceability and other issues not directly tied to any MSC PI can be very important, and this information is not obvious on the website. It might be better to consider a separate tab, as for the social info.)

I would like to highlight the fact that since 2020 the FIP has been operating against a background of covid lockdowns in Vietnam, which has had some form of restrictions in place from March 2020 until just recently. This has hindered most or all of the FIP activities in some way (conducting training, observers, meetings, travel …). Regional deadlines (such as for the management procedure process) have also been pushed back, and this the FIP has no control over at all. The progress of the FIP over the last three years should be seen in that context (i.e. it is a miracle that they have made any progress at all).

It is not obvious that the Vietnam handline swordfish FIP and the Vietnam handline tuna FIP need to be two separate projects, since they are basically applying a similar workplan to the same fleet. However, in a combined project I guess that swordfish would have less prominance, and it is great that there is a project which is pushing swordfish management specifically, so in those terms it makes sense that the swordfish project is separate. In any case, the two FIPs appear to work well together, so there is no practical problem.

I would say that the main issues are all covered by the FIP workplan. Below are some recommendations received from stakeholders, which the FIP could consider.

- The stock assessment covers a large area (NW Pacific) and the stock assessment report (ISC 2018) does not summarise any evidence that this is appropriate. In fact, the NC17 report (2021) notes that ISC are proposing to postpone the next swordfish stock assessment (planned for 2022) because of uncertainties around stock structure. If the ISC scientists need additional sampling or data (otoliths, scales, growth information, parasites …) it may be possible for the FIP to assist.
- As data collection continues to improve, it might be possible to start to evaluate trends in biomass in Vietnamese waters; this would provide a check on sustainability for the Vietnamese fisheries, and an important additional input to the stock assessment (which currently relies on data from Japan, Taiwan and the US). If the analysis of stock structure concludes that there are sub-stocks on a smaller scale than previously thought, it may be crucial to the future management of the fishery.
- Peter Williams (SPC) noted that it is important to them that the VTFACE process continue, but the project supporting it (WPEA) will be finishing next year, and he is not clear what will happen then. It might be worth trying to establish whether any sustainable funding source has been identified, and if not working with the tuna FIP, VINATuna, the Ministry, SPC, WCPFC and/or other stakeholders as relevant to try and support this process.

Summary of MSC Performance Indicator Scores

Prin-ciple	Component		Performance Indicator	Previous Score 2021	Current Score 2022	Rationale or Key Points
1	Outcome	1.1.1	Stock status	>=80	>=80	Most recent stock assessment (ISC 2018) estimates that $F/F_{msy}=\sim0.45$ and $B/B_{msy} = \sim1.9$. Even though this is now quite old, it is not likely that the stock has declined below the MSY level since then. A new stock assessment was planned for 2022 but might be postponed while ISC work on a better evaluation of stock structure (NC17 2021).
		1.1.2	Stock rebuilding	-	-	-
	Management	1.2.1	Harvest Strategy	60-79	80	The Northern Committee has put in place an interim harvest strategy (WCPFC16, 2019, Attachment K). The strategy sets an interim objective consistent with MSY, and sets Fmsy as Flim. It states that action should be taken if F>Flim, but does not specify what actions. I reviewed 1.2.1 SG80a in relation to this harvest strategy. This SG requires that the harvest strategy is responsive to the state of the stock, which should be met by the requirement that F is kept below Flim. It also requires that the elements of the harvest strategy work together to achieve stock objectives. These elements (as defined by MSC) include management tools, which are not specified either in the harvest strategy, or in CMM 2009-03 (which only requires fleets to 'exercise

						restraint'). Nevertheless, according to the stock assessment management objectives (a level consistent with MSC) are being achieved. Re-scoring of this PI is to some extent a judgement call, but the situation is similar to that of North Pacific albacore, where a score of 80 was agreed in a harmonisation process. It is reasonable, given that good stock status, that countries may not wish to take decisions on hypothetical management measures which are not yet required. Therefore, overall it is reasonable to increase this score to 80.
		1.2.2	Harvest control rules and tools	60-79	60-79	The interim harvest strategy would not change the score for 1.2.2 because it does not meet the requirements of SG80 in full (a 'well-defined' HCR), because it is not stipulated what action would be taken in the event that F>Flim. Work is ongoing on a harvest strategy with TRP and HCR, consistent with WCPFC CMM 2014-06, with a draft CMM due in 2023.
		1.2.3	Information and monitoring	>=80	>=80	See stock assessment ISC (2018)
		1.2.4	Assessment of stock status	>=80	>=80	See stock assessment ISC (2018)
2	Primary species	2.1.1	Outcome	>=80	>=80	Yellowfin and bigeye tuna were considered as main bycatch species in the pre-assessment. Reportedly, bigeye catch may not be significant, although provisional 2020 catch estimates provided by SPC suggest that they are. Reportedly, marlin catch (black and blue) may be more significant than thought. The above data still estimates marlin catch at ~1-2%, but the FIP could keep an eye on these figures, since additional species making up >5% of the catch will impact on the scoring.
		2.1.2	Management strategy	<60	>=80	In the pre-assessment, this was scored at <60 because of the risk of shark finning; although no sharks were identified as primary species, MRAG concluded that data gaps meant that the risk was there. The data collected by the COPPA project so far has identified big-eyed thresher as a bycatch, but this would be an ETP species (based on Decree #26 – list of protected species provided by the FIP team). In any case, WCPFC CMM 2019-04 (Sharks) does not set management measures based on reference points for any shark stock, meaning that even shark species which are not protected would be secondary rather than primary species under MSC definitions. It is probably therefore reasonable to assume that the shark finning SI does not apply to primary species.

						Leaving the shark-finning SI aside, the main primary species identified at the pre-assessment are yellowfin and bigeye tuna. These are scored 60-79 because the pre-assessment notes that it is not clear whether the provisions of WCPFC CMMs for the management of tropical tunas are applied to this fishery. However, a review of the most recent CMM (currently in force – CMM 2021-01) suggests that the provisions requiring management action all apply either to the purse seine fleet or to the longline fleet (i.e. not to handline operations). The only provision that might be a problem is the requirement to provide good catch data, but catch estimates in the pre-assessment as well as in the Part 1 report to WCPFC (Vietnam 2019) are sufficient to be confident that this fleet is not the issue as far as bigeye and yellowfin stocks are concerned. Therefore, my view would be that the score for this PI can be increased to >=80 at this point. This makes no difference to the actions of the FIP since the activities around data collection and shark finning still apply elsewhere.
		2.1.3	Information	60-79	60-79	This score can be increased to 80 when a quantitative estimate can be made of the catch of main primary species by the UoA. Main primary species are identified in the pre-assessment as bigeye and yellowfin. SPC provided some summary information from VTFACE11 (Vietnam Tuna Fishery Annual Catch Estimate workshop) which shows that logbook catch reporting from the handline fishery in 2019-20 was 74% yellowfin, 9% 'other fish', 4% swordfish, 2% mahimahi, 1% wahoo and all other species <1%. Reported landings were similar: i.e. 63% yellowfin, 11% other, 10% skipjack, 5% swordfish, 4% bullet tuna, 2% mahimahi, 1% bigeye. (It is therefore unclear that bigeye is in fact a 'main' species but including it is precautionary and has no impact on scoring.) The concern is the proportion of 'other fish' but it does not seem likely that this would include another species making up >5% of the catch (otherwise presumably it would be identified and listed separately), so I would judge that main primary species can be identified from these data with reasonable confidence. However, it is only one year of data; an analysis of all the available data would be more reliable. I suggest the FIP could conduct such an analysis at the next scoring update, and re-score accordingly.

		2.2.1	Outcome	60-79	60-79	RBF analysis of secondary species identified by COPPA (bigeye thresher, mobulid rays) confirms pre-assessment score.
	Secondary species	2.2.2	Management strategy	<60	<60 (but due for review soon)	This PI scores <60 because of shark finning. CMM 2019-04 requires WCPFC members and cooperating non-members (Vietnam) to implement a ban on shark finning or measures to ensure that the whole animal is landed. The majority of shark species are listed as ETP species under Decree #26 (list provided by the FIP team). The expert from VINATuna noted that Circular #24 (2019) covers landing of the whole shark fins attached, but reportedly this applies to protected species, and blue shark has up till now been left off this list. Reportedly, the Directorate of Fisheries has now agreed to add blue shark to the prohibited species list and to amend fishing regulations to require a provision for 'fins naturally attached' for any legally-retained shark. Once this process is completed, the scoring here can be revised upwards (noting that Vietnam will then also be compliant with CMM 2019-04, which might also improve scoring elsewhere).
		2.2.3	Information	<60	60-79	This score is low because the pre-assessment team were not confident that they could identify all main secondary species. My judgement based on the information provided by SPC, and their view (still work to do but progress on bycatch reporting is encouraging) is that there are unlikely to be any main secondary species not already identified, and therefore the score could be increased to 60-79, and perhaps to 80; but since I only have one year of data I cannot judge this with confidence.
	ETP species	2.3.1	Outcome	<60	60-79?	The pre-assessment identifies the risk of turtle bycatch, and indeed the COPPA data shows that this was correct, although reportedly the turtle was taken in a seine used to catch bait rather than directly hooked. The FIP has conducted a pre-assessment on the species so far identified (olive ridley, score 60-79), but I guess there is the possibility of other turtle species also turning up in the data as rare events. The COPPA data also identified two other taxa which are on the ETP list (decree #26): bigeye thresher and mobulid rays, and a PSA likewise gave a risk estimate as medium. A RBF could be conducted for other possible ETPs (green turtles? other shark species?) and if they score the same, the score could be increased accordingly. But the FIP team may choose to be risk averse and keep the score as it is until they have more concrete data.

		2.3.2	Management strategy	60-79	60-79 (but due for review soon)	This PI is scored mainly on the basis that the fishery is a handline fishery, and therefore an inherently low risk for ETP species. The score <80 relates to the need for full implementation of CMM 2019-04 for sharks. As noted above in relation to shark finning, the process of full implementation of CMM 2019-04 is now underway.
		2.3.3	Information	60-79	60-79	As for 2.1.3 and 2.2.3, the FIP team are best placed to decide when data are sufficient for the score to be increased. I suggest that SIa is most likely now met at SG80 ('some quantitative data'), but data may not yet be sufficient to identify all species involved in what are after all rare events, or to measure trends.
	Habitats	2.4.1	Outcome	>=80	>=80	Handline fishery
		2.4.2	Management strategy	>=80	>=80	Handline fishery
		2.4.3	Information	>=80	>=80	Handline fishery
	Ecosystem	2.5.1	Outcome	>=80	>=80	No change since pre-assessment
		2.5.2	Management strategy	60-79	>=80?	The scoring of this PI is based around the National Tuna Management Plan and its implementation (or lack thereof). However, I note that at SG80, a strategy/plan is not required – only a 'partial strategy' which under MSC's definition can be a series of measures which are not directly targeted at the component in question (i.e. the ecosystem) – so for example WCPFC CMMs around management of swordfish, tropical tunas and sharks could all be part of this 'partial strategy'. Given that the main ecosystem impact of the fishery is likely to be the removal of swordfish biomass, but that the catch of the fishery is a small percentage of the total catch from the stock, which is evaluated as healthy, I suggest that this 'partial strategy' is likely to be sufficient to ensure that the UoA ecosystem impact is negligible. So in my opinion, the score could be increased to 80 here.
		2.5.3	Information	60-79	>=80	In my opinion, the scoring of this PI in the pre-assessment is likewise a bit over-precautionary. The rationale notes that there is not an ecosystem model for the Eastern / South China Sea (as far as they know, presumably) – but given that this is a low impact handline fishery, I am not convinced that this is a requirement for a score of 80. The structure and function of an ecosystem can be broadly understood without models. A more reasonable point is made that not all the main bycatch and ETP species are identified, but the COPPA project now gives confidence that they can be identified, except where interactions are rare – and in this case, the ecosystem-level impact of these interactions is negligible. Therefore I would suggest that SG80 could be scored as met.

3	Governance and Policy	3.1.1	Legal and customary framework	>=80	>=80	This PI was scored <60 at the pre-assessment, but the score was increased to 80 at Year 1, because the new Fisheries Law was ratified and implemented. This seems reasonable.
		3.1.2	Consultation, roles and responsibilities	>=80	>=80	At the pre-assessment, evidence of consultation was lacking, but the score was increased at FIP Year 1 when evidence was provided (stakeholder input into Fisheries Law and associated decrees).
		3.1.3	Long term objectives	>=80	>=80	Again, gaps identified at the pre-assessment are covered by the new Fisheries Law.
	Fishery specific management system	3.2.1	Fishery-specific objectives	<60	60-79 at least	This scores <60 based on lack of evidence of national-level objectives for the fishery, but the national situation has changed a lot since the pre-assessment. Vietnam is committed to full cooperation with WCPFC, and hence (implicitly) accepts the objectives in the harvest strategy, as well as in relevant CMMs (e.g. for P2 objectives, CMM 2019-04 in relation to sharks, and others). The Directorate of Fisheries representative put forward a set of fishery-specific objectives to me, as follows: • Maintain stock to ensure sustainable development of fishery • Monitor and reduce bycatch, particularly ETP species • Achieve MSC certification
		3.2.2	Decision making processes	<60	60-79 at least	Again scored <60 due to lack of evidence at national level, without being specific about what is the problem. The FIP team are more familiar with the decision-making process in Vietnam than I am, but it certainly seems that a good many decision have been taken in the last few years to improve the fishery: e.g. logbooks, VMS, protection of sharks, relationship with WCPFC… To me this provides evidence that the Vietnamese decision-making framework is working to achieve the requirements of P1 and P2, and it seems likely that a score increase at least to 60-79 is warranted.
		3.2.3	Compliance and enforcement	<60	60-79?	Reportedly there have been a range of improvements: better reporting and monitoring of the fleet, and a commitment to implementation of WCPFC CMMs, with a range of improvements in this regard (e.g. VTFACE, protection of sharks, and most recently the fins-naturally-attached requirements). Without being an expert on Vietnam, I would guess the score can be increased at least to 60-79.
		3.2.4	Management performance evaluation	<60	<60 (to review)	I am not aware of the specific procedures in place within the administration to evaluate the management system. On a practical level, it is clear that there have been a range of improvements, suggesting an awareness of problems and an effort to address them. I don't have enough information to suggest a change in the scoring, but I suggest the FIP team look at this carefully at the next benchmarking.

Environmental Workplan Results

Result	Related Action on FisheryProgress	Related MSC PI	Explanation	References provided
Improved information available on catch for target and bycatch species, including ETP interactions	Action 2: Promoting data collection in the fishery and assessment of secondary and ETP species Action 4: Raising fisher awareness on management tools and monitoring programmes	1.2.3, 2.3.3, 2.3.2, 2.1.3, 2.2.3, 2.5.3	The opportunity to put observers on board the vessels is very limited (cost, availability, suitability, covid), so the FIP has developed a method for the fishers themselves to collect catch data. This takes the form of an App (Crew Observer Photographic Protocol Application; COPPA) which allows crew to record the catch by taking photographs, with time/date and location data being uploaded and stored automatically. The app was developed and tested in 2019, including three sets of sea trials using both swordfish and tuna vessels – these allowed technical issues to be sorted out. Some fishermen were trained (reportedly commenting that it was easy to use). However, training and roll-out of COPPA in the swordfish fleet was significantly impacted by covid from 2020 onwards. Currently there are reportedly 4 experienced users and 6 learners in the fleet. Because the FIP has been unable to continue the roll-out in the swordfish fleet as foreseen, they have now embarked on a new project which is the COPPA Sea Champion Video Contest (CSCVC). The aim of this is to encourage more use of COPPA via social media, by setting up a contest with a prize for the best video based on COPPA. Reportedly there has been significant interest with 25 fishers stating an interest, with 11 confirming participation (COPPA Progress Report, Feb. 2022). In terms of the data collected to date, it has permitted the FIP to identify three vulnerable taxa interacting with the fishery (see below). Its use in the tuna handline fishery (with an associated 'sister' FIP) has also identified that swordfish are a 'main' bycatch species in this fishery; something on which the two FIPs are working together. The FIP has contributed data to the catch assessment process for Vietnam (the Vietnam Tuna Fishery Annual Catch Estimates workshop – VTFACE); a joint initiative of the government, WCPFC and SPC. The FIP notes that COPPA has some issues which remain to be solved; notably around hardware (phones and salt water ….), and the data continues to have errors, since training has been difficult. However, there is interest from other parties, such as IPNLF, in using a version of COPPA in other fisheries. The expert from	Instructions and manual for COPPA; press releases with information about development, testing and sea trials; outline of CSCVC; COPPA Progress Report Feb. 2022 Discussion with Peter Williams, SPC Data Manager (by email) Discussion with Tran Van Hao, VINATuna.

			VINATuna applauded the COPPA project and noted that they changed their plans to integrate COPPA into the data collection system rather than working in parallel. He considered in particular that the use of pictures is helpful. The FIP has also provided support as regards training in species identification (particularly sharks), to port authority staff and fishers. A poster has been produced to help identification of bycatch species (see picture below). He identified species identification as a barrier to implementing regulations and protections around sharks (noting that Vietnamese waters have a high biodiversity of sharks) and regarding this training as critical. Subsequent to the interview, VINATuna confirmed by email that the posters have been delivered to the Port Authorities in Tam Quan Bac / Binh Dinh, Quy Nhon/Binh Dinh, Tuy Hoa/Phu Yen and Nha Trang/Khanh Hoa provinces. This work has reportedly raised awareness of the issue of bycatch within the Directorate of Fisheries, alongside discussion of the issue at VTFACE10 (see below). In addition to COPPA, there is the roll-out of logbooks (and now e-logbooks) in the fleet, where for the swordfish FIP a focus has been to improve data on swordfish catch (as a target species, rather than a bycatch where reporting might be seen as more 'optional'). Peter Williams (SPC, by email), noted that although the situation is not yet ideal, improvements in reporting of non-tuna species over the last few years is very encouraging. (The realisation that swordfish has the potential to be a 'main' bycatch species in the tuna fishery may continue to focus minds on the importance of improving data and management for this stock.)	
Risk-assessment of vulnerable species identified by COPPA	Action 2: Promoting data collection in the fishery and assessment of secondary and ETP species Action 3: Encourage the protection of sharks and turtles in the fishery	2.2.1, 2.3.1	The COPPA data identified three vulnerable taxa which interact with the fishery: big-eye thresher, olive ridley turtle and mobulid rays. They have conducted PSA risk assessments which suggest medium risk from the fishery.	PSA spreadsheet

Progress towards swordfish regional harvest strategy	Action 1: Promoting the improvement of fishery management policies and practices	1.2.1, 1.2.2, 3.1.1, 3.1.2, 3.1.3, 3.2.1, 3.2.4	The CMM for WCPFC swordfish is now quite out-of-date (2009-03) and needs revision. CMM 2014-06 requires WCPFC to establish a formal management procedure for key stocks, and for north Pacific swordfish this is part of the workstream of the Northern Committee. The Northern Committee have agreed an interim harvest strategy for the stock (validated by WCPFC16) which sets Fmsy as Flim and agrees that management measures will be put in place if F>Flim. FIP actions towards this outcome were to attend WCPFC as an observer, contribute to letters of support and put forward comments on CPC proposals. This harvest strategy is not sufficient to meet MSC requirements in full (hence no change to scoring of 1.2.1 and 1.2.2) but the Northern Committee workplan includes further actions for 2022 and 2023 (pushed back a year due to covid) to work towards a TRP, HCR and new CMM. In terms of FIP activities in relation to this, the FIP has participated in lobbying activities both independently and as part of larger groupings (SFP, NGO Tuna Forum) – see Press Release by Sea Delight, June 2020. Sea Delight also attended the WCPFC plenary in 2018 as an observer. The work described above on improving catch data is also relevant here, in as much as it has changed perception of the importance of swordfish to the handline/longline fleet in Vietnam, and therefore also the importance of the harvest strategy process for this stock.	CMM 2009-03 NC15 report, 2019 (Attachment I) NC17 report, 2021 (Attachment F, work programme)
Improving gear to reduce bycatch	Action 3: Encourage the protection of sharks and turtles in the fishery	2.2.2, 2.3.2	A project to introduce larger C-hooks was started (as I understand) by VINATuna and the tuna FIP (with support from WWF), with the swordfish FIP becoming a participant when they started (later). Note, however, that Sea Delight is also a partner in the tuna FIP, so in reality this is all one programme which has been ongoing for several years. According to VINATuna, the fleet is mainly using 'local' C-hooks – a locally-designed variant developed from hooks originally purchased by the project from Korea, with data suggesting that they work well. The VINATuna expert also made the point that mainly the hooks they are using are now larger than previously, giving an improvement in selectivity. In March 2022, the FIP commissioned the design and manufacturing of simple dehooking and line-cutter tools, which can be made by local blacksmiths who normally make cutlery and farming tools. They will be tested by COPPA fishers in Nha Trang in June.	Discussion with VINATuna

Raising awareness about sharks	Action 3: Encourage the protection of sharks and turtles in the fishery	2.2.2, 2.3.2	The work around training in shark identification is described above (training, poster, COPPA). VINATuna reported that work is currently underway in the Ministry to update Decree #26 (protected species) in relation to sharks.	See above
Requirement to land sharks fins naturally attached	Action 3: Encourage the protection of sharks and turtles in the fishery	2.2.2, 2.3.2	As noted above (see scoring of PIs 2.2.2 and 2.3.2), the process of requiring all sharks, including blue sharks, to be landed fins naturally attached is nearing completion, with a commitment from the Directorate of Fisheries to add blue shark to the protected list and put in place the necessary legislation. It seems that there has been a relatively long process of raising awareness with the authorities, through a range of activities in which the FIP has played a part – including raising awareness of bycatch within the fishery (as described above), as well as the VTFACE process and the EU IUU regulation.	Report of discussions at VTFACE11, email from WWF Vietnam to FIP coordinator
Improved conformity with WCPFC CMMs	Action 1: Promoting the improvement of fishery management policies and practices	1.2.1, 1.2.2, 3.1.1, 3.1.2, 3.1.3, 3.2.1, 3.2.2, 3.2.3, 3.2.4	According to Dr Hai (Directorate of Fisheries) the legal framework has been revised to conform with WCPFC CMMs, and Vietnam has committed formally to compliance, taking concrete action such as reducing the number of licences and introducing logbooks and VMS. In terms of specific CMMs, the VTFACE project is addressing reporting requirements, and the FIP has been helping with data in various ways described above. Vietnam has developed a National Tuna Management Plan and NPOAs for sharks and turtles, and the process of implementation of the requirements of the shark CMMis well underway, as described above.	Information from Dr Vu Duyen Hai, Directorate of Fisheries ; VTFACE documents

BIỂU ĐỒ NHẬN DẠNG CÁC LOÀI Ở TÂY VÀ TRUNG TÂM THÁI BÌNH DƯƠNG

THÔNG BÁO tới tất cả các tàu khai thác: Toàn bộ cá đánh bắt được trong mỗi chuyến biển phải được báo cáo cho BQL Cảng cá trước khi lên cá (Thông tư 01/2022/TT-BNNPTNT); bao gồm tất cả đánh bắt và thả hoặc vứt bỏ trên biển. Yêu cầu này áp dụng cho tất cả các loài cá ngừ cũng như các loài cá khác có trong Biểu đồ Nhận dạng này. Yêu cầu này phù hợp với Luật Thủy sản Việt Nam số 18/2017 / QH14, kêu gọi quản lý bền vững đánh bắt cá thương phẩm và hỗ trợ Kế hoạch quản lý quốc gia về cá ngừ. Lưu ý rằng nhiều loài cá trên biểu đồ này bị cấm sở hữu và phải được thả. Việt Nam cũng là Thành viên Hợp tác của Ủy ban Nghề cá Tây và Trung Thái Bình Dương (WCPFC). Việt Nam cam kết cung cấp dữ liệu khai thác này với sự hợp tác của WCPFC về quản lý cá ngừ cũng như hỗ trợ đánh giá trữ lượng và các Biện pháp Quản lý và Bảo tồn khác của WCPFC. Các biện pháp này bao gồm báo cáo dữ liệu đánh bắt về cá đuối, cá mập, cá maclin và cá kiếm có trong Biểu đồ Nhận dạng này.

NOTICE To all fishing vessel operators: All fish caught on each fishing trip are to be reported to Fishing Port Authorities before landing (Circular 01/2022/TT-BNNPTNT). This includes all fish caught and released or discarded at sea. This requirement applies to all tuna species as well as the other fish species included in this Identification Chart. Note many of the species on this chart are prohibited to possess and must be released. This requirement is in accordance with the Vietnam Law on Fisheries No. 18/2017/QH14, calling for the sustainable management of commercial fishing, and supports the National Management Plan for Tuna. Vietnam is also a Cooperating Non-Member of the Western and Central Pacific Fisheries Commission (WCPFC). Vietnam is committed to supplying this catch data in cooperation with WCPFC on tuna management as well as to support stock assessments and other WCPFC Conservation and Management Measures. These measures include reporting catch data on the mobula and manta rays, sharks, marlins and swordfish included in this Identification Chart.

Supporting References

ISC 2018. Stock Assessment for Swordfish (*Xiphias gladius*) in the Western and Central North Pacific Ocean through 2016. ISC/18/Annex/16.

NC15 2019. WCPFC Northern Committee, summary report, 15th regular session, 3-6 September 2019.

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