WEBINAR PRE-READ:

Final draft results of UBC/FERU's analysis of the scale, form, and impacts of distant water fishing fleets on national fisheries and fisherfolk for Asia and the Pacific Islands

The University of British Columbia's Fisheries Economic Resource Unit (UBC/FERU) was commissioned to help implement USAID's Distant Water Fleet (DWF) Research Agenda. Through analysis of the Sea Around Us database, a literature review, and expert interviews, UBC/FERU researchers have characterized interactions between DWF and domestic fishing activities in selected geographies. We will discuss these results further in our upcoming webinar on July 5, 2022 from 8-9:30PM EDT and participants will be invited to share their input to refine the final results.

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REGIONAL DEVELOPMENT MISSION FOR ASIA SUMMARY

1. Overall threat to domestic fisheries from distant water fleets	Threat Ranking	Confidence in Threat Ranking
The *Sea Around Us* data suggests an annual average total catch (2014-2018) in this region of 20.3 million tonnes with 4% caught by DWF, 16% by regional and 80% by domestic fleets. The 0.77 million tonnes caught by DWF are of taxa also harvested by domestic and regional fleets. Unreported catches by all fleets make up 30% of this total catch (i.e., 31 thousand tons by DWF, 3 million tons by regional and 16.3 million tons by the domestic fleets). The volume of unreported catch by the DWF and regional fleets suggests a high incidence of IUU fishing, which is reflective of the prevalence of IUU fishing in Asian countries, notably China, Taiwan and Cambodia suggested by the IISD.[1] China's role in IUU via beneficial ownership worldwide demonstrated for the period 2000-2011, amounts to an average annual catch of 1 million tons.[2] The expansion of the Chinese DWF in recent years[3] suggests that this IUU catch might have increased, thus posing considerable threat to domestic fisheries if left unchecked. Multilateral programs between ASEAN states established to deal with fisheries-based security issues have limited impact because these are operating only as technical support bodies.[4] Basically, there is still a need for the region to establish a true management organization to deal with IUU because the existing body, SEAFDEC, is not an enforcement body.[5] A growing percentage of fishery resources is believed to be overexploited.[6] Only 9%, i.e., harvested by industrial fisheries, of the about 1,700 species harvested for food are assessed, and those targeted by artisanal, subsistence and recreational fisheries (i.e., over half of global fishing effort, with a high percentage in Asia) lack data to even make assessments possible.[7] This overexploitation and the lack of assessments exacerbated by IUU in the ASEAN region points to an even higher threat posed by DWF.	**High**	**High**

[1] IISD. 2019. IUU Index finds world off track on SDG targets 14.4 and 14.6. https://sdg.iisd.org/news/iuu-index-finds-world-off-track-on-sdg-targets-14-4-and-14-6/, accessed 22 June 2022.
[2] Pauly D., Belhabib D., Blomeyer R., Cheung WWL, Cisneros-Montemayor A., Copeland D., Harper S., Lam V.W.Y., Mai Y., Le Manach F., Österblom H., Mok K.M., van der Meer L., Sanz A., Shon S., Sumaila U.R., Swartz W., Watson R., Zhai Y. Zeller D. 2014. China's distant-water fisheries in the 21st century. Fish and Fisheries 15: 474-488.
[3] Pedroso P. 2022. China's IUU Fishing Fleet: Pariah of the World's Oceans. International Law Studies 99: 319-353.
[4] Williams M.J. 2013. Will new multilateral agreements help Southeast Asian states solve illegal fishing? Contemporary Southeast Asia 35(2): 258-283. DOI:10.1355/cs35-2f.
[5] George M. 2012. Fisheries protections in the context of the geo-political tensions in the South China Sea. J. Maritime Law and Commerce 43(1): 85-128.
[6] FAO. 2020. The state of the world fisheries and aquaculture. Sustainability in Action. FAO, Rome. 206 p.
[7] Blasco G.D., Ferraro D.M., Cottrell R.S., Halpern B.S., Froehlich H.E. 2020. Substantial gaps in the current fisheries data landscape. Frontiers in Marine Science 7: Article 612831. doi: 10.3389/fmars.2020.612831.

2. Competition for focal/key species	Threat Ranking	Confidence in Threat Ranking
The *Sea Around Us* data suggests 18 species targeted by domestic, regional and DWF. The most notable of these (making up 41-86% domestic catches) are: 1) threadfin breams (*Nemipterus* spp) with 0.28 million tons (86% domestic, 13% DWF; 1% regional); 2) skipjack tuna (*Katsuwonus pelamis*) with 0.21 million tons (76% domestic, 17% DWF, 7% regional); 3) yellowfin tuna (*Thunnus albacares*) with 0.14 million tons (72% domestic, 12% DWF, 15% regional); 4) Spanish mackerels (*Scomberomorus* spp) with 0.14 million tons (57% domestic, 22% DWF, 21% regional); 5) crevalles (*Alepes* spp) with 0.13 million tons (41% domestic, 59% DWF), and largehead hairtail (*Trichiurus lepturus*, 45% domestic, 53% DWF, 2% regional); 6) largehead hairtail (*Trichiurus lepturus*) with 85 thousand tons (45% domestic, 53% DWF, 2% regional); 7) akiami paste shrimp (*Acetes japonicus*) with 68 thousand tons (17% domestic, 83% DWF); 8) bigeye tuna (*Thunnus obesus*) with 15 thousand tons (70% domestic, 26% DWF, 4% regional); 9) daggertooth pike conger (*Muraenesox cinereus*) with 27 thousand tons (31% domestic, 67% DWF, 2% regional); 10) elongate ilisha (*Ilisha elongata*) with 11 thousand tons (57% domestic, 43% DWF). Other important DWF target species are: filefishes (Family Monacanthidae, 89% DWF, 11% domestic),), squids (Order Teuthida, 80% DWF, 20% domestic), Pacific chub mackerel (*Scomber japonicus*, 72% DWF, 28% domestic),). The regional fleets also target bullet and frigate tunas (*Auxis* spp) with 24 thousand tons (71% regional, 18% domestic, 11% DWF). This list suggests a considerable overlap between domestic, regional and DWF target species and thus supports a high threat ranking.	**High**	**High**
3. Competition within geographic areas	**Threat Ranking**	**Confidence in Threat Ranking**
The Sea Around Us data suggest that the DWF average annual catch (2014-2018) in the ASEAN countries was highest in Vietnam (569 thousand tons) and in the Philippines (104 thousand tons). This is followed by Indonesia (76 thousand tons) and Myanmar (26 thousand tons). DWF catches are the least in Thailand (1.7 thousand tons), Malaysia (212 tons) and Timor Leste (1 ton). It is surprising that the Sea Around Us data did not suggest DWF activity in Cambodia for the time period considered. The Sea Around Us data also suggest that the Philippines suffers the most competition from DWF (China, Japan, Kiribati, Korea (South), Marshall Isl., Micronesia, Papua New Guinea, Spain, Taiwan and Vanuatu). Indonesia is next (Australia, China, South Korea and Taiwan)	**High**	**High**

while the rest of the ASEAN countries have one or two DWF flagged vessels operating in their waters. IIU index scores in ASEAN countries ranged from 2.55 for Indonesia and Philippines (the worst) to 2.23 for Timor Leste (the best).[8] Indonesia and the Philippines have the highest scores (5) in terms of the index category distant water vessels on RFMO RAVs. Most of the other ASEAN countries scored worst in terms of the index category, port visits by foreign fishing or carrier vessels in 2021, except Cambodia, Timor Leste and Viet Nam with the score of 1. On the other hand, the scores for distant water vessels on RFMO and port visits by foreign fishing vessels were the same for Philippines, Indonesia and Myanmar remained same during the year 2019 to 2021. Thus, these 3 countries are considered to be the highly competitive for DWF in the ASEAN region.		
4. Impacts of regional and DWF activities on domestic fisheries and fisherfolk		**Confidence in Impacts**
Illegal, unreported and unregulated (IUU) fishing remains a problem in Southeast Asia. In 2018, the FAO estimated that approximately 33% of global fish stocks were overfished.[6] Cambodia and the Philippines are among the most adversely affected by overfishing.[9] Furthermore, in May 2022 China was reported to be the world's biggest offender in IUU, and is believed to be responsible for 80% to 95% of the illegal fishing in the Indo-Pacific.[10] Socio-politically, IUU fishing has contributed to the impoverishment of coastal communities,[11] compelling artisanal fishermen who can no longer afford to make a living honestly to adopt unlawful tactics.[12][13]		**High**
5. Priority management or policy needs		**Confidence in Policy or Management Needs**
• Strengthen the regulation on Automatic Identification System (AIS); • Increase the public accessibility of Fisheries and Landing Data; • Mandate seafood traceability systems as a requirement for market access; • Eliminate fishing subsidies that boost vessel capacity; • Substantial initiative aimed at reducing the IUU index score.		**High**

[8] Macfadyen G., Hosch G. 2021. The IUU Fishing Index, 2021. Poseidon Aquatic Resource Management Limited and the Global Initiative Against Transnational Organized Crime. 126 p. https://globalinitiative.net/analysis/iuu-fishing-index-2021/, accessed 24 June 2022.
[9] Bliss S. 2021. Oceans surrounding Asian countries at crisis point. *Geography Bulletin* 53(3): 53-59.
[10] Kapoor S. 2022. Explained: Quad's plan to rein in massive illegal fishing by China in Indo-Pacific, *The Indian Express*, May 24, 2022. Accessed 24 June 2022.
[11] Palma M.-A., Tsamenyi M. 2008. Case study on the impacts of illegal, unreported and unregulated (IUU) fishing in the Sulawesi Sea. APEC#208-FS-01.1. Asia-Pacific Economic Cooperation. 61 p.
[12] Chalk P. 2017. Illegal fishing in Southeast Asia: a multibillion-dollar trade with catastrophic consequences. The Strategist, 17 July 2017. Australian Strategic Policy Institute. https://www.aspistrategist.org.au/illegal-fishing-southeast-asia-multibillion-dollar-trade-catastrophic-consequences/. Accessed 24 June 2022.
[13] Fabinyi M., Belton B., Dressler W.H., Knudsen M., Adhuri D.S., Aziz A.A., Akber M.A., Kittitornkool J., Kongkaew C., Marschke M., Pido M., Stacey N., Steenbergen D.J., Vandergeest P. 2022. Coastal transitions: Small-scale fisheries, livelihoods, and maritime zone developments in Southeast Asia. *J. Rural Studies* 91: 184-194.

PHILIPPINES

1. Overall threat to domestic fisheries from distant water fleets	Threat Ranking	Confidence in Threat Ranking
The Sea Around Us data suggest that Distant Water Fleets (DWF) operate within specific areas of the Philippine Exclusive Economic Zone (EEZ), i.e., about 40% of the West Philippine Sea (along the South China Sea border), about 50% of the Sulu Sea, about 90% of the Celebes Sea and about 10% of the Southeastern Philippine Sea. Note that DWF catch is only 5% of the 9.7 million metric tons average annual total catch (2014-2018) in this EEZ. Hence, the overall threat posed by DWF to domestic fleets was thought to be low. However, the following suggest otherwise, viz: • Chinese fishing vessels have been illegally operating in the western Philippine waters observed at least since 2012, i.e., when Beijing constructed military structures on artificial islands in the South China Sea.[14] The effects are exacerbated by coronavirus-related lockdowns preventing operators from accessing larger markets. • In spite of the Port States Measures,[15] foreign fishing vessels do not register and continue to poach within the Philippine EEZ. It is thus reasonable to assume that DWFs pose a high threat to the domestic fisheries. Lack of quantitative catch data by these illegal foreign fishing vessels, however, does not permit concrete conclusions.	**High**	**Medium**
2. Overall threat to domestic fisheries from other fleets in the same region	**Threat Ranking**	**Confidence in Threat Ranking**
Consultations with local stakeholders suggest transgressions by DWF and regional fleets, e.g., from Viet Nam, a fishing country not recorded in the Sea Around Us data. Moreover, according to a report by the United States Agency for International Development (USAID) and the Philippines' Bureau of Fisheries and Aquatic Resources (BFAR), the country was losing $1.2 billion annually to IUU fishing.[16] As a consequence, IUU fishing is impacting the country's economic stability.	**High**	**High**
3. Focal species for competition	**Threat Ranking**	**Confidence in Threat Ranking**

[14] Forum. 2021. China's IUU fishing threatens more than livelihoods, economic stability. Forum: https://pdefenseforum.com/2021/06/chinas-iuu-fishing-threatens-more-than-livelihoods-economic-stability/, accessed June 16 2022.
[15] Republic Act No. 106541. An act to prevent, deter and eliminate illegal, unreported and unregulated fishing, amending Republic Act No. 8550, otherwise known as "the Philippine Fisheries Code of 1998". 28 July 2014.
[16] Bello R (2021) In numbers: illegal, unreported, and unregulated fishing in the Philippines. Rappler: https://www.rappler.com/environment/numbers-illegal-unreported-unregulated-fishing-philippines/, accessed June 16 2022.

The Sea Around Us data suggest four species and two species groups caught by both DWF and domestic fleets and where competition might arise. The catch of groups not identified to the species level are: 1) Sharks, rays and skates (average annual total catch of 4,000 metric tons, i.e., 45% by DWF and 55% by domestic fleets); and 2) Clams, seasnails, squids, octopuses (average annual total catch of 6,700 metric tons, i.e., 20% by DWF and 80% by domestic fleets). The catch identified to the species level with average annual catches over 1,000 metric tons and that represent 10-90% of the DWF catch are: 3) The Pacific chub mackerel (*Scomber japonicus*): With an average annual catch of 8,000 metric tons, 72% by DWF and 28% by domestic fleets. This catch is 100% reported, i.e., by the industrial fishing sector. No MSY data is available for the Philippines. 4) The skipjack tuna (*Katsuwonus pelamis*) has an average annual catch of 29,400 metric tons, 31% by DWF (100% reported) and 69% by domestic fleets (85% unreported, 15% reported). MSY analysis suggests that this species is overexploited. 5) The yellowfin tuna (*Thunnus albacares*) has an average annual catch of 29,000 metric tons, 15% by DWF (100% reported) and 85% by the domestic fleets (84% unreported, 16% reported). No MSY data is available for the Philippines. 6) The largehead hairtail (*Trichiurus lepturus*) has an average annual catch of 12,100 metric tons, 11% by DWF (1% unreported, 99% reported) and 89% by domestic fleets (58% unreported, 42% reported). MSY analyses suggest that this species is overexploited. ● Given that of these 4 species, only 1 is subject to strong DWF fishing pressure, the first evaluation is of low threat. However, the fact that 2 groups targeted by the DWF are only reported to the higher taxonomic level, that 2 species are overexploited and the other 2 lack data for MSY evaluation, it is reasonable to assume that threat is at least medium, if not high.	**Medium**	**High**
4. Geographic areas of competition	**Threat Ranking**	**Confidence in Threat Ranking**
● The Sea Around Us data suggest that DWF and regional fleets operate in at least 30% of the Philippine EEZ, including in the very productive archipelagic waters of the Sulu and Celebes Seas. Reports of foreign vessels, i.e., Chinese and Vietnamese fleets, encroaching in the EEZ of the Philippines particularly in the disputed areas of the West Philippine Sea[17] are confirmed by local experts. These intrusions compete with small-scale fishers from several coastal communities of the West Philippine Sea,[18] whose daily catch ceiling have	**High**	**High**

[17] Philippines to impose law amid china's regulation on fishing in disputed sea. (2014, Jan 09). BBC Monitoring Asia Pacific Retrieved from https://www.proquest.com/wire-feeds/philippines-impose-law-amid-chinas-regulation-on/docview/1475400716/se-2?accountid=14656

[18] Muallil R.N., Cabral R., Mamauag S., Aliño P.M. 2012. Status, trend and sustainability of small-scale fisheries in the Philippines. *Proceedings of the 12th International Coral Reef Symposium*, Cairns, Australia, 9–13 July 2012, 13E Fisheries: General Section.

already been reduced to 1 kg per fisher for 15 days per month of fishing, which can hardly provide for daily needs.[19] The threat to both domestic fisheries and the integrity of marine ecosystems, notably in the West Philippine Sea, is high.[20]		
5. Impacts of regional and DWF activities on domestic fisheries and fisherfolk		**Confidence in Impacts**
The Philippine Government established the Fisheries Management Areas (FMA)[21] dividing the Philippine EEZ into 12 areas in 2020, i.e., supposedly based on ecosystem categorizations towards assessing the status of exploited stocks. This is expected to help, viz.: 1) determine harvest control rules; 2) set reference points of exploited species from stock assessments; 3) establish marine protected areas; and 4) establish closed fishing seasons to ensure the long-term conservation and sustainable use of marine resources. However, inadequate capacity to enforce regulations to mitigate IUU fishing, e.g., foreign fishing for tuna in the archipelagic waters of the (Sulu and Celebes Seas) Southern Philippines,[22] result in poor implementation of sanctions. This effectively provides illegal foreign fleets "free access" to occupy and illegally fish in Philippine waters[23] and compete with domestic fleets for the already overexploited marine resources.[24]		**High**
6. Priority management or policy needs		**Confidence in Policy or Management Needs**
In view of the high threat of DWF, coupled with the consistent lack of data necessary to sustainably manage Philippine resources, and the consistent intrusions of both DWF and regional fleets into the Philippine EEZs, the following priority management/policy needs can be considered: 1) Vessel monitoring capacity: a) Increase technical capacity to track vessels via VMS and to review tracked vessel behavior; and b) Map sea resources. 2) Governance structures: a) Provide clear guidance on reporting and tracking of catch to facilitate IUU prosecution; b) Prevent IUU fishing products from entering the market to reduce the revenue earned from IUU fishing;		**High**

[19] Muallil R.N., Geronimo R., Cleland D., Cabral R., Doctor M., Cruz-Trinidad A., Aliño P.M. 2011. Willingness to exit the artisanal fishery as a response to scenarios of declining catch or increasing monetary incentives. *Fish. Res.* 111: 74-81.
[20] Muallil R.N., Cleland D., Aliño P.M. 2013. Socioeconomic factors associated with fishing pressure in small-scale fisheries along the West Philippine Sea biogeographic region. *Ocean Coast. Mangmnt.* 82: 27-33.
[21] BFAR, NFRDI, USAID. 2020. Tool kit on rolling-out fisheries management area implementing FAO No. 263 S. 2019. BFAR, Quezon City, Philippines. 74 p.
[22] Philippines: GenSan tuna handline fishers seek concrete gov't actions vs IUU fishing. (2015, Sep 02). Asia News Monitor Retrieved from https://www.proquest.com/newspapers/philippines-gensan-tuna-handline-fishers-seek/docview/1708615526/se-2?accountid=14656
[23] Palma, M.A. 2006. Analysis of the adequacy of the Philippine legal, policy, and institutional framework to combat illegal, unreported, and unregulated fishing, PhD thesis, Centre for Maritime Policy, University of Wollongong, 2006. http://ro.uow.edu.au/theses/589.
[24] Bateman S. 2016. The East Asian Seas: Competing national spheres of influence. In: Smith H.D., Luis Suarez de Vivero J., Agardy T.S. (eds.) *Routledge Handbook of Ocean Resources and Management*, p. 524-537. Routledge, Oxford, 612 p.

c) Improve process for registration and licensing of fishing vessels; d) Invest in fisheries law enforcement, e.g., commissioning more vessels for the Coast Guard;[25] and e) Establish ad hoc fisheries courts. 3) Fisheries co-management structures that can mitigate corruption within local government units that hinder proper implementation of existing rules and regulations.	

[25] Philippines: Govt builds new floating assets to fight illegal fishing. (2016, Jan 30). MENA Report Retrieved from https://www.proquest.com/wire-feeds/philippines-govt-builds-new-floating-assets-fight/docview/1762542167/se-2?accountid=14656

PACIFIC ISLANDS REGIONAL SUMMARY

1. Overall threat to domestic fisheries from distant water fleets	Threat Ranking	Confidence in Threat Ranking
Sea Around Us data suggest an average annual catch (2014-2018) of 1.5 million tonnes in this region, 41% caught by regional fleets (87% reported) and 59% by DWFs (100% reported). The high proportion of DWF catches suggests high threat to domestic fleets, notably since Pacific Island Nations expanded their own fleets to partake in the fishing of the highly valued fisheries being tapped by DWFs.[26] Coastal and tuna fisheries are important sectors for Pacific large ocean island states[27] whose governments encourage the development of their tuna industries and maximize returns (by selling fishing licenses)[28] from DWFs in order to capture more wealth from their marine resources.[29] This is driven by their unique geography, i.e., large EEZs surrounded by a wide expanse of high seas,[30] which combined with the lack of capacity to monitor and regulate fisheries operations, notably of licensed DWFs, create sustainability risks[31] and may lead to IUU fishing.[2] Though these fisheries are managed through a number of regional and sub regional cooperative approaches facilitated by regional institutions (FFA, PNA, SPC and WCPFC), the threat from continued yet opaque agreements (e.g., licenses and transshipment agreements) for national gain remains high.[32]	**High**	**High**
2. Competition for focal/key species	**Threat Ranking**	**Confidence in Threat Ranking**
Sea Around Us data suggest that 18 of the 85 species caught in the region are targeted by both regional and DWFs. The most caught species in the region are, *viz*.: albacore (*Thunnus alalunga*) with an average annual catch of 1,164 tonnes of which 62% are taken by DWFs; skipjack tuna (*Katsuwonus pelamis*) at 704 tonnes (11% DWFs); and yellowfin tuna (*Thunnus albacares*) at 600 tonnes (47% DWFs). Note that catch identified only to "not elsewhere identified" taxa amount to 2,044 tonnes (5 taxa of which 3 are targeted by both regional and DWFs). The DWFs also take (likely as bycatch) 19% (silky shark) to 100% (blue shark) of large pelagics including bluefin tuna, striped marlin, swordfish and other sharks including mako, thresher, hammerhead, silky, and oceanic whitetip.	**High**	**High**

[26] Fergusson C.E., Bennett N.J., Kostka W., Richmond R.H., Singeo A. 2022. The tragedy of the commodity is not inevitable: indigenous resistance prevents high-value fisheries collapse in the Pacific Islands. *Global Environmental Change* 73: 102477.
[27] Veitayaki J., Ledua E. 2016. Policy options for coastal and tuna fisheries in the Pacific Islands: sustaining resources on the same side of the same coin, p. 255-282. In: Pauwels S., Fache E. (eds.) *Fisheries in the Pacific*. Marseille: Pacific-Credo Publications. DOI : 10.4000/books.pacific.395.
[28] Gagern A., van den Bergh J. 2013. A critical review of fishing agreements with tropical developing countries. *Marine Policy* 38: 375-386.
[29] Barclay K., Cartright I. 2008. *Capturing Wealth from Tuna: Case Studies from the Pacific*. ANU Press, 268 p. Stable URL: https://www.jstor.org/stable/j.ctt24h95s.9, accessed June 28 2022.
[30] Karcher D.B., Fache E., Breckwoldt A., Goven H., Llosvay X.E.E., King J.K.K., Riera L., Sabinot C. 2020. Trends in South Pacific fisheries management. *Marine Policy* 118: 104021.
[31] Pilling G.M., Harley S.J., Nicol S., Williams P., Hampton J. 2014. Can the tropical Western and Central Pacific tuna purse seine fishery contribute to Pacific Island population food security. *Food Sec.* 7: 67-81.
[32] Sarte S. 2006. Managing tuna fisheries in the Pacific: a regional success story?, p. 89-99. In: Frazer I., Bryant-Tokalau J. (eds.) *Redefining the Pacific? Regionalism Past, Present and Future*. Routledge.

The large proportion of catch that is not identified to the species level and that are taken in large percentages (sometimes to 100%) by the DWFs points to a high competition for these valuable species. Moreover, the fact that after 25 years, the waning efficacy of established binding instruments established by the various regional management organizations indicate a turn towards unsustainably fished resources.[7]		
3. Geographic areas of competition	**Threat Ranking**	**Confidence in Threat Ranking**
Sea Around Us data suggest that DWFs operating in the region come from 13 flag states reporting their industrial catches to the WCPFC. South Korea, Japan, the USA, Taiwan and the Philippines have catches ranging from 180-129 thousand tonnes (20-14% of the DWF catch). China, Viet Nam and Spain take catches of 35-17 thousand tonnes (4-2%), while New Zealand, Ecuador, Australia, El Salvador and Portugal take catches of 7,644-68 tonnes (<1%). The DWF catch is highest in Kiribati (352 thousand tonnes; 64% of average annual catch), then in Papua New Guinea (147 thousand tonnes, 53%) and in Micronesia (99 thousand tonnes; 66%). DWF catches in the Solomon Is., Tuvalu, Nauru, Palau, and Marshall Islands range from 61 to 47 thousand tonnes (65-52%). DWF catches in Fiji, Vanuatu, Tonga and Samoa range from 9,610 to 920 tonnes (39-7%). The domestic catches are highest in Kiribati (193 thousand tonnes, 98% reported), then in Papua New Guinea (133 thousand tonnes, 71% reported). The rest of the Pacific Island Nations' domestic catches range from 57 thousand tonnes (Solomon Is.) to 7,440 tonnes (Tonga) with %reported catches ranging from 100 (Micronesia) to 27% (Tonga). Thus, the catch data suggest that there is a high overlap between DWF and regional fleet operations.	**High**	**High**
4. Priority management or policy needs		**Confidence in Policy or Management Needs**
• Improve national and regional fisheries policies and legislation; • Harmonize and enforce laws and codes of practice regarding DWF, illegal and illicit trade in fish and fish products across the region; • Enhance national, regional and international cooperation. The old news is that the Pacific region is used to collaborating. So, what the countries need to do is to strengthen existing collaborative arrangements among Pacific countries, not weaken it; • Pacific countries need to pull together resources at national and regional levels, to fix DWF challenges and tackle illegal and unreported fishing.		**Medium**