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COMPARISON REPORT

THE 2009/10, 2014/15 AND 2019/20 SURVEYS ON SHARK CONSUMPTION HABITS AND ATTITUDES IN HONG KONG



BLOOM ASSOCIATION HONG KONG JANUARY 2021

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Executive Summary

In 2009, BLOOM Association Hong Kong (BLOOM HK) commissioned the Social Sciences Research Centre of The University of Hong Kong to conduct the first comprehensive sociological study, surveying over 1,000 Hong Kong residents to find out the Hong Kong people's attitudes and behaviours when it came to the consumption of shark fin-related products. This piece of researched marked the first chapter in a decade-long study to observe and monitor the trends and changes in how shark fin is consumed in Hong Kong.

The 2009/10 study was proposed to add a dimension to the understanding for local consumption, allowing insight from the consumers' perspective to be revealed. The objective was to set a baseline that would allow for comparison with future research, and to inform conservation action and efforts. The study was repeated in 2014/15, and then again in 2019/20. Comparisons between the findings across the three survey years show largely positive changes across time that leaned towards a more conservation-oriented tendency among Hong Kong's citizens. They showed, for instance, a decrease in self-proclaimed consumption of shark fin, increasing acceptability of removing shark fin soup from banquet menus where the dish was conventionally seen as essential, a decreasing willingness to consume species threatened with extinction, and consistently high support for government action for shark and wildlife protection.

The 2019/20 survey had furthermore sought to understand respondents' feelings towards two additional topics: sustainable seafood and increasing Hong Kong's marine protected area coverage. On both topics, responses once again indicated a tendency towards conservation-oriented outcomes. These encouraging findings show a preliminary support from Hong Kong's public, and demonstrate the potential for conservation achievements for Hong Kong in the coming years – for example, to popularize sustainable seafood in the market or to establish greater protection for the local marine wildlife.

Congruent with findings in the previous surveys, education about marine life, conservation, ecosystems, or nature in general stood out once again as an area for potential improvement. Such education will be important in helping the public to understand why conservation effort is significant, how they can move towards more environmentally conscious behaviour, and inform future conservation strategy formulations. For instance, for many respondents of the 2019/20 survey claimed they would not feel comfortable with knowingly eating a fish species that was endangered, however it is not clear that respondents are equipped with the knowledge on what species are actually endangered, and how often they may come across these species in their daily consumption patterns.

Overall, despite encouraging findings, it may be difficult at this stage or based solely on this research initiative to tell whether or not Hong Kong has truly established a new norm or trend that will last. It is hoped that the effort put into understanding the shark fin and related consumption and trade in Hong Kong, as well as shark conservation and education work, will continue into the future.

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摘要

BLOOM 香港分部於 2009 年首次委託香港大學社會科學研究中心,就香港市民進食鯊 魚產品的態度及行為訪問了逾一千人,調查為日後觀察和監測本地魚翅產品過往十年 消耗趨勢和變化的工作揭開序幕。

2009/10 年的研究加入了關於消費者層面的考量,以加強對鯊魚產品本地消耗的認識。研究目的是設定一個基準,以便與日後的研究進行比較,為保育行動及工作提供資料。這項研究分別於 2014/15 年以及 2019/20 年再度進行,比較三年的調查結果,情況大致上有正面轉變,市民愈來愈傾向保護大自然的取態。例子包括:市民報稱的魚翅消耗減低、更接受在宴會菜單中剔除向來被視為缺一不可的魚翅羹、對進食瀕危物種意願的減低,以及維持對政府有關保護鯊魚和野生生態的行動的高度支持。

2019/20年的研究亦新增了有關「環保海鮮」及「增加香港海洋保護區覆蓋率」這兩個議題的問題,調查結果再次顯示受訪者對這兩個議題都表達了傾向保育行動的支持。這些結果令人鼓舞,顯示議題得到市民大眾的初步支持,並展示了未來幾年香港有潛力在保育工作取得成果,例如在市場上推廣環保海鮮,或是為本地的海洋生態建立更好的保護。

有待改進的領域與之前的調查結果一致,就是要改善有關海洋生物、自然保護、生態系統、以及大自然的教育工作。這些教育工作非常關鍵,可讓市民理解保育工作的重要性,以及如何在行為上作出更符合環保意識的舉動,從而為日後保育策略的制定提供依據。舉一個 2019/20 年調查的例子,很多受訪者表示若然知道進食的魚類是瀕危物種,他們是會感到不安的;然而,我們並不清楚受訪者是否懂得甚麼品種屬於瀕危物種,以及這些物種在日常消費活動中有多常見。

總體而言,儘管調查結果令人鼓舞,但在現階段或僅憑這項研究,相信難以判斷香港 是否真的已建立新規範、或是得以持續的新趨勢。我們希望,這些對香港魚翅產品的 消耗和貿易的情況、以及鯊魚的保育及教育工作的努力,得以持續進行下去。

REPORT HIGHLIGHTS

I. New consumption practices

Percentage of respondents who consumed shark fin soup in the 12 months leading up to the survey has fallen from 72.9% in 2009/10 to 33.1% in 2019/20. As much as 53.9% of respondents have reportedly **decreased consumption** since 2014/15, and a further 15.2% have **stopped consumption entirely**, mostly for environmental reasons.

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II. Time and place matter

Consistent with 2009/10 and 2014/15's findings, shark fin soup is rarely eaten at home, and **weddings** are still by far the most commonly named occasion for eating shark fin soup in restaurants. When consumed, shark fin soup most commonly appears as part of a set menu rather than ordered separately, however in 2019/20 52.9% of respondents stated that they would "never order" the dish.

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III. The next lesson is sustainability

Acceptability for excluding shark fin soup from weddings is consistently high when compared to 2014/15. While respondents were happy to suggest a variety of alternative dishes to shark fin soup in banquet menus, several suggestions also included foods involving species with sustainability concerns.

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IV. Education is key

Respondents are persistently holding **false beliefs** about sharks, such as overestimating fatalities caused by sharks each year, and underestimating the number of sharks killed for human use. These beliefs indicate the need for continued education of the general public.

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V. Ready for more

Consistent with findings in 2014/15, results suggest that a high percentage of respondents are **unwilling to consume threatened species**, and a portion of respondents are aware that some other marine resources such as sea cucumber or fish maw were also problematic. In line with these beliefs, over 90% of respondents find providing only **sustainable seafood** at government functions, wedding banquets and corporate banquets acceptable. Furthermore, as many as 64.9% of respondents are willing to pay some premium for sustainable seafood.

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VI. Support for HK Government action

The Hong Kong government consistently received the highest votes as the most important stakeholder for shark protection. Not restricted to sharks, the majority of respondents also showed support for the government in tackling the broader **illegal** wildlife trade, as well as increasing the size of Marine Protected Areas (MPAs) on the local level.

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INTRODUCTION

The 2019/20 survey marks the 10th year for the study on shark consumption habits and attitudes in Hong Kong. Since 2009/10, surveys have been conducted at 5-year intervals (2009/10, 2014/15, and 2019/20), providing regular updates on the shark fin consumption status in Hong Kong.

Within the decade between 2009/10 and 2019/20, Hong Kong has made considerable progress in addressing the city's demand for shark fin-related products. For instance, as many as 47 major hotels have established policies to remove shark fin from their restaurants' menus, either completely or only served upon a customer's specific request (Shea, 2019). In 2013, the Hong Kong government took the lead in publicly announcing that shark fin will no longer be served in official events, for sustainability reasons (Government of Hong Kong SAR, 2013). Even in addressing illegal shark fin-related imports, local authorities have stepped up enforcement, and seizures of 40+ metric tons of illegally traded shark fin have been made since the official implementation of international trade regulations on commercial shark species (under CITES - the Convention on International Trade in Endangered Species of Wild Fauna and Flora) in November 2014 (Government of Hong Kong SAR, 2020; Alberts, 2020).

Even with this progress, however, shark fin-related products remain

easily available in the local market. This is not too surprising, as Hong Kong is nonetheless conventionally one of the key consumption markets and trade hubs for shark fin-related products, with the significance of consumption practices rooted as a symbol of wealth and growth from poverty. As the city's affluence soared through the 1970s, eating shark fin soup - a luxury seafood dish previously available only to the rich quickly became popularized (Phipps, 1996). The dish was especially essential in celebration banquets particularly, in weddings. With such auspicious customary roots, it is no surprise that the market has survived demand reduction campaigns in the past decade. Preliminary results of a study on the species composition of sharks sold as shark fin in one of Hong Kong's major dried seafood markets spread over two districts in Hong Kong (including Sheung Wan and Sai Ying Pun), revealed more than 70 shark and ray species (Fields et al., 2018). Shark fin imports, while showing signs of decline, averaged at 6,316 metric tons per year from 2010 to 2019 (CSD, 2020). Although official trade data shows that a large proportion of the imported products are then reexported, it is difficult to understand based only on such data the local appetite for shark fin.

This is one of the key reasons why the shark consumption habits and attitudes surveys were launched in 2009/10. Through the sociological

surveys, it is possible to gain insight from the perspective of consumers, adding a new dimension from which to understand the nature and extent of local consumption.

In each survey year, questions are specifically designed to understand two key areas for shark fin-related consumption in Hong Kong: habits and attitudes. Habits refer to consumption practices, such as how often survey respondents are having shark finrelated products, which products are most popular, and in what occasions are they most likely to consume shark fin soup. Attitudes refer to respondents' perceptions and values associated with the practice of shark fin consumption, such as whether they feel discomfort with consuming endangered species, how acceptable they find the removal of shark finrelated products from occasions where shark fin is conventionally consumed (such as from weddings), and respondents' level of support for government action towards sustainability goals. The questions are repeated for each survey year, in order to allow for direct comparison to reveal changes and trends across time. The findings provide a snapshot of Hong Kong for the study year, and a reference for informing future conservation efforts as well as offering a comparison between survey years to monitor changes and trends.

Additional questions were also included in the 2014/15 and 2019/20 surveys that focused on related marine resources or conservation issues relevant to the time, to give further

insight on feelings about marinerelated conservation issues. The 2014/15 survey included a series of questions looking at the respondents' consumption of humphead wrasse (Cheilinus undulatus) - an IUCN-Endangered fish species consumed in Hong Kong's live reef food fish market – and support for government decisions to eliminate shark fin (among other foods with associated sustainability issues) from official banquets. In 2019/20, additional questions sought to provide some insight on the areas of bêche-de-mer (or sea cucumber) consumption/awareness for conservation needs, openness to sustainable seafood, support for government effort to combat wildlife crimes in Hong Kong, and support for the establishment of greater marine protected areas in Hong Kong.

Overall, findings of the 2019/20 survey indicated that respondents leaned towards reducing shark fin soup consumption, and attitudes favoured the protection of species threatened with extinction. These trends were already observed in the 2014/15 survey, and the 2019/20 survey indicated that such trends were maintained. Notably, the findings also suggested that many respondents held beliefs about marine resources that were incorrect. For example, some respondents believed that sharks' fins could grow back after being cut off. These findings demonstrate that, while awareness raising is important and can be effective, there is also a need for continued education about the facts behind awareness raising campaigns.

METHODOLOGY

Both 2014/15 and 2019/20's surveys are a repetition of the survey conducted in 2009/10. For this reason, the methodology of the 2009/10 survey will be explained here, followed by updates made in 2014/15 and 2019/20.

Please contact the authors of this report to access the original questionnaires for all years.

The 2009/10 Survey

Over 1,000 telephone interviews with Hong Kong residents were successfully completed by the HKUSSRC between December 2009 and January 2010. The interviews were carried out in Cantonese, English, or Putonghua. Interview questions were standardized by a pre-designed questionnaire.

Questionnaire design

To initiate the process of survey design, four focus groups were set up for consultation and to help explore observable habits in the consumption of shark fin and other shark-related products in Hong Kong. Each group represented specific segments of the public, including elders, wedding planners and restaurant managers, housewives, and secretaries (with experience of organizing corporate events).

Based on the outcomes from the discussions of the 4 focus groups, a questionnaire of 69 multiple choice, close ended, and open-ended questions was put together in a combined effort by BLOOM and the HKUSSRC. Apart from 5 questions relating to the personal information of

interviewees, all remaining questions were designed around four distinct categories: habits, knowledge, perception and attitudes.

These translated into questions that surrounded the topics of:

- a. Frequency of and occasions for consuming shark fin and other shark-related products,
- Feelings towards eating shark fin soup,
- Willingness to limit personal shark fin consumption and acceptability of reduced consumption in social contexts,
- d. Understanding of conservation issues surrounding shark consumption,
- e. Perception of existing shark conservation efforts (e.g. by Hong Kong government, NGOs, etc), and
- Support for increased government effort on issues of shark and marine conservation.

The questions were designed in both English and Chinese. Options of 'don't know', 'can't remember', and 'no opinion' were made available to respondents who may feel uncomfortable with answering the listed questions, or if they did not

understand what was asked (Converse and Presser 1986, De Vaus 2002). The option of 'others (please specify)' was also offered for unprecedented answers and to specify a set of substantive choices (De Vaus 2002, Krosnick and Presser 2010).

Questions with an assigned five-point rating scale (i.e. strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, and strongly disagree) were used to evaluate the level of importance and interviewees' agreement according to the statements made (Likert 1932, Clason and Dormody 1994, Gliem and Gliem 2003). Statements with both positive and negative dimensions were also used in the questionnaire to detect a respondent's tendency to acquiesce, or providing affirmative responses to the statements regardless of the question content (Winkler et al. 1982, Ross et al. 1995).

Survey sampling

The entire survey process, from sampling through to results analysis, was conducted and overseen by the HKUSSRC.

Random sampling of interviewees was drawn and generated from the latest English residential directory at the time. Each number was tried, and if unanswered, was tried at least 3 times before being classified as a 'noncontact' case. This method yielded a total of 1,029 successful, computerassisted telephone interviews.

Respondents were all Hong Kong citizens, who were adults of age 18 or above. There were representatives of various ages, levels of education and occupations.

In view of the demographic distribution differences between the current survey and the actual Hong Kong population, weighting was applied to gender and age group in order to make the results more representative of the general population according to the C&SD (2014) demographic data.

The 2014/15 Survey

When the study was repeated in 2014/15, the HKUSSRC utilized the same methodology as described for the 2009/10 survey. Between 17th September and 7th November 2014, over 1,000 telephone interviews were successfully completed. Weighting for gender and age group was also applied, according to the C&SD (2014)

Quality Control

"All SSRC interviewers were well trained in a standardized approach prior to the commencement of the survey. All interviews were conducted by experienced interviewers fluent in Cantonese, Putonghua and English.

The SSRC engaged in quality assurance for each stage of the survey to ensure satisfactory standards of performance. At least 5% of the questionnaires completed by each interviewer were checked by the SSRC supervisors independently."

(HKUSSRC, 2020)

demographic data.

Some questions from the original questionnaire were updated based on 2009/10 results, so that irrelevant questions may be removed and topics that became relevant in the five years since the first survey may be included. For example, one section enquiring respondents' opinions on the Hong Kong government's decision to remove shark fin, bluefin tuna and black moss dishes for all official banquets in 2013 was added to the 2014/15 questionnaire.

In the interest of yielding statistically comparable results, however, changes to the original questionnaire were kept to a minimal.

The 2019/20 Survey

The 2019/20 survey replicated the methodology applied in 2009/10 and 2014/15. Telephone interviews were conducted from 3rd November 2019 to 6th March 2020. Over 1000 successful interviews were conducted over both mobile phones and landlines.

Similar to what was done in the 2014/15 survey, the questions were updated in 2019/20 to ensure that the survey remained relevant to 2019/20, and take into account any events that had taken place in the 5 years since the 2014/15 questionnaire. For instance, some of the new questions addresses the growing awareness and focus on other marine resources in Hong Kong that were related to shark fin consumption, such as sea cucumbers and sustainable seafood, which also gave insight into changing

consumer attitudes and behaviours towards marine-related foods in Hong Kong.

By expert advice, some questions in the 2019/20 survey were rephrased, and the order of questions were rearranged. The varying phrasing of questions are clearly reflected in this report of findings.

Sampling error

In each survey year, overall sampling error should also be taken into account. In all survey years, the maximum sampling error was ± 3.1% at a confidence level of 95%, for the sample sizes of 1,029 in the 2009/10 survey, 1,030 for the 2014/15 survey, and 1,010 in the 2019/20 survey.

Additional details are shown in the following table, which serves as a guide to understand the sampling error for respective sampling sizes, before proportion differences are statistically significant (HKUSSRC, 2010; HKUSSRC, 2015; HKUSSRC, 2020):

Percentage response

		10%/ 90%	20%/ 80%	30%/ 70%	40%/ 60%	50%/ 50%
Sampling error	2019/20 (1,010)	±1.9%	±2.5%	±2.8%	±3.0%	±3.1%
	2014/15 (1,030)	±1.8%	±2.4%	±2.8%	±3.0%	±3.1%
	2009/10 (1,029)	±1.8%	±2.4%	±2.8%	±3.0%	±3.1%

Table i – Maximum sampling error by range of percentage response at 95% Confidence level for the 2009/10, 2014/15 and 2019/20 surveys and showing the respective sample sizes

KEY FINDINGS

I. NEW CONSUMPTION PRACTICES

1 Shark fin soup remains, in both years, by far the most common way that shark is consumed in Hong Kong compared to other shark-related products.

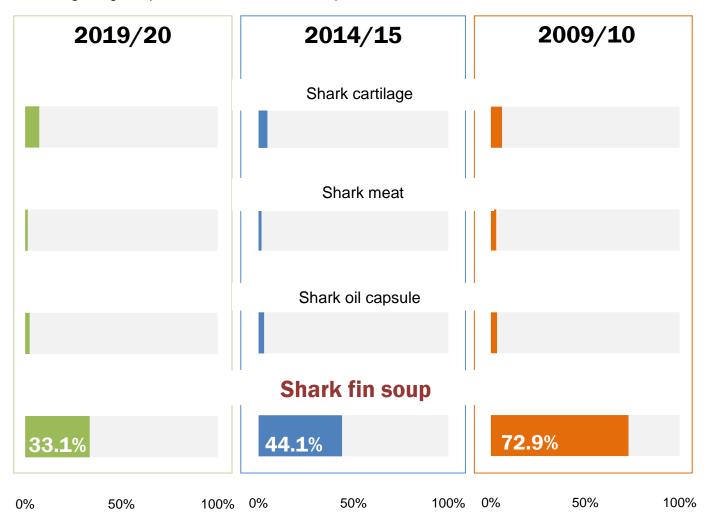


Figure 1.1 – 2009/10, 2014/15 and 2019/20: consumption of different shark-related products at least once in the <u>12-month</u> period leading up to the survey

In all 3 survey years, shark fin soup remains the most common shark product consumed by respondents when compared to shark cartilage, shark meat and shark oil capsules.

Despite the popularity of shark fin soup, however, the percentage of respondents who had consumed shark fin soup at least once in the past 12 months had further decreased since the 2014/15 survey. Reportedly, in 2019/20, 66.9% of respondents **had not consumed shark fin soup even once** in the 12 months leading up to the survey, increasing from 55.9% in 2014/15 and 27.1% in 2009/10.

2. Taste, social status and tradition are becoming less and less important as reasons for consuming shark fin soup.

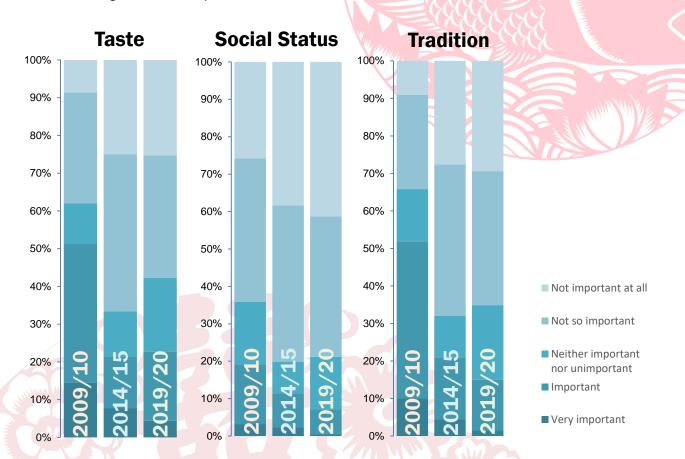
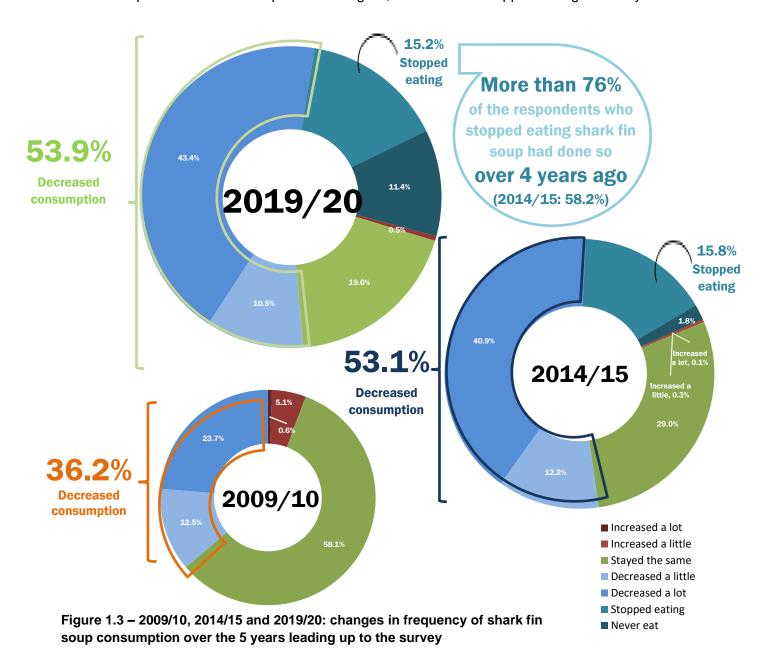


Figure 1.2 – 2009/10, 2014/15 & 2019/20: importance of "taste", "social status" and "tradition" as reasons for consuming shark fin soup

The 2019/20 survey showed fewer people stating that "taste" was "very important", and that "social status" and "tradition of being a dish in a big occasion" ("tradition" here for short) were "very important" or "important".

The percentage of respondents stating that "taste" was an "important" reason increased slightly from 13.7% in 2014/15 to 18.3% in 2019/20. Contrary to conventional beliefs about social status and tradition playing significant roles in the consumption of shark fin soup, "social status" and "tradition" remained relatively unimportant reasons for consuming shark fin soup, with 37.6% and 41.3% of respondents stating "not so important" and "not important at all" respectively for "social status", and 35.7% and 29.4% of respondents stating "not so important" and "not important at all" respectively for "tradition".

3. Despite continued consumption, the majority of respondents have either decreased their consumption of shark fin soup to some degree, or have even stopped eating it entirely.



By 2019/20, only 0.5% of respondents had increased consumption of shark fin soup "a little", and none of the respondents included in the study had increased consumption by "a lot". Respondents whose consumption "stayed the same" fell from 29% in 2014/15 to 19.0% in 2019/20. The percentage of respondents whose consumption "decreased a lot" remained relatively constant, from 40.9% in 2014/15 to 43.4% in 2019/20.

In 2014/15 and 2019/20, respondents were further given the options of "never eat" and "stopped eating" to this question. Respondents who "stopped eating" shark fin soup entirely remained at around 15% for both years, and of these respondents, those who had stopped eating shark fin soup for over 4 years increased from 58.2% in 2014/15 to 76.7% in 2019/20. In 2019/20, the percentage of respondents who "never eat" shark fin soup increased to 11.4% from 1.8% in 2014/15.

4 Many respondents who stated that they have "stopped eating" shark fin soup had done so for "environmental concerns".

2014/15 2019/20 Reasons for having stopped **Reasons for having stopped** eating shark fin soup eating shark fin soup **Environmental 52.7**% 43.7% Concerns Cost 24.6% 6.2% 11.3% Not tasty **8.2**% 2019/20 2014/15 Other reasons: 9.0% Killed by cruel means **Cruel to catch** 7.5% No chance to eat 8.9% No need to eat 7.0% Don't want to eat / no Vegetarian 5.5% 7.9% need to eat / vegetarian Personal preference/health / health related issues 3.8% related issue Protect shark / 2.9% **Protect shark** 2.5% endangered species Not suitable for eat 0.2% 1.1% No specific reason No specific reason **18.7**%

Figure 1.4 – 2014/15 and 2019/20: Reasons stated for why respondents have "stopped eating" shark fin soup

Out of the respondents who stated that they have "stopped eating" shark fin soup, "environmental concerns" remained the most popular reason. Other related reasons suggested by respondents in 2019/20 included "killed by cruel means" (9.0%) and

"protect shark / endangered species" (2.9%).

Fewer respondents stated "cost" as a reason for having stopped eating shark fin soup in 2019/20 (6.2%) than 2014/15 (24.6%).



5 Among respondents who have **decreased** consumption of shark fin soup, "environmental concerns" is persistently the most important reason for doing so

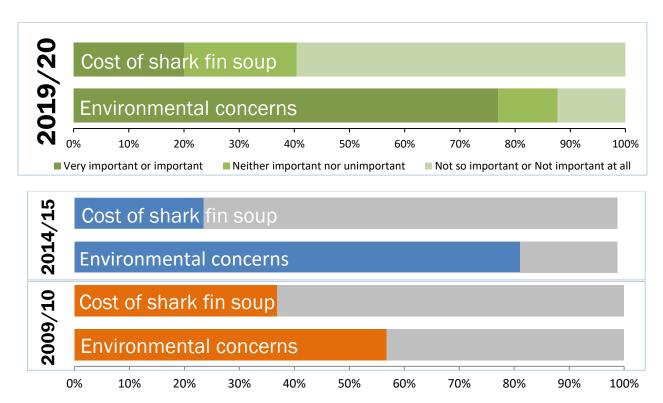


Figure 1.5 – 2009/10, 2014/15 and 2019/20: "Cost of shark fin soup" and "environmental concerns" as reasons for decreased consumption

In both 2009/10 and 2014/15, more respondents answered "yes" for "environmental concerns" as a reason for decreasing consumption (56.8% and 81.1% respectively) than those who answered "yes" for "cost of shark fin soup" (36.9% and 23.5% respectively).

In 2019/20, the question was rephrased to allow respondents to rate the degree of importance for both reasons. "Environmental concerns" remained far more important than "cost of shark fin soup", deemed "very important" by 36.3% of respondents and "important" by 40.6% of respondents. "Cost of shark fin soup" was deemed "very important" by 5.4% of respondents, and "important" by 14.6% of respondents.

AN ISSUE OF COST?

While "cost" was not considered an important factor for both respondents who have decreased consumption and stopped eating shark fin soup, it was found that an increasing proportion of respondents were spending more money per shark fin soup dish. In 2009/10, 33.4% of respondents were spending on average per shark fin dish HKD\$1 - \$100 and only 17.1% spent more than HKD\$300. By 2019/20, only 9.7% of respondents were spending HKD\$1 - \$100, and 32.3%% were spending more than HKD\$300.

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II. TIME AND PLACE MATTER

1 Very few people consumed shark fin soup at home and overall consumption in the 12 months leading up to the study appears to have decreased

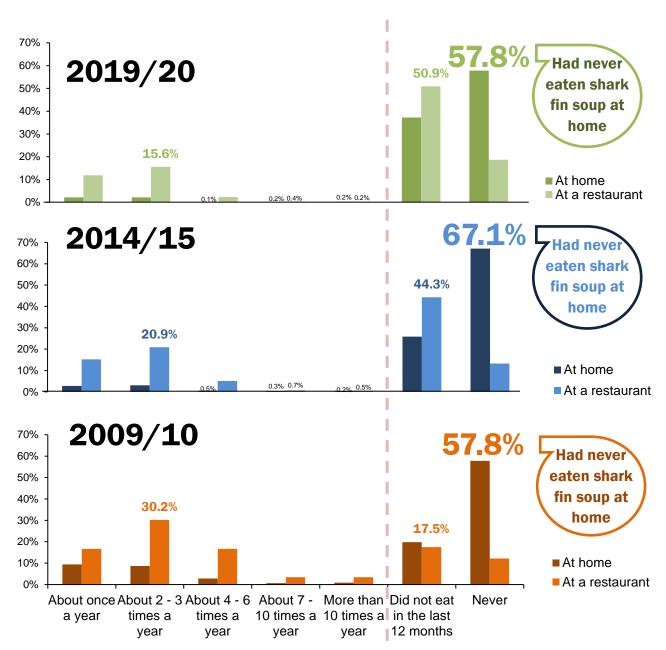


Figure 2.1 – 2009/10, 2014/15 and 2019/20: Frequency of consuming shark fin soup at home versus at a restaurant

Shark fin soup is clearly consumed far more often at restaurants than at home. In total, respondents who have consumed shark fin soup at least once a year at restaurants versus at home was 70.4% (restaurant) and 22.5% (home) in 2009/10, 42.4 (restaurant) and 6.9% (home) in 2014/15, and 30.4% (restaurant) and 4.9% (home) in 2019/20. Notably, the percentage of respondents who did not eat shark fin soup in the 12 months leading up to the survey is also increasing.

In all years, more than half of all respondents had never consumed shark fin soup at home, highlighting the impact that restaurants can have on how shark fin soup is consumed.

WAS IT A CONCIOUS CHOICE?

2. Shark fin soup continues to be most often consumed at wedding banquets, and as a part of a set menu rather than ordered separately

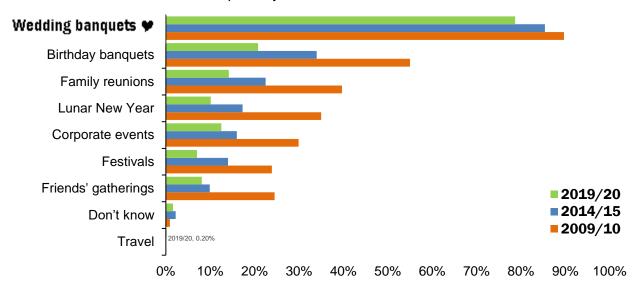


Figure 2.2 – 2009/10, 2014/15 and 2019/20: Most popular occasions for consuming shark fin soup in a restaurant <u>normally</u>

Percentages exclude respondents who had "never eaten shark fin at a restaurant" in figure 2.1.

By far, the most popular occasion for consuming shark fin soup at a restaurant in is "wedding banquets". Overall, consumption appears to be decreasing in all occasions, suggesting that respondents may be consuming shark fin at fewer different occasions. Notably, when this same question was asked for consumption "in the past 12 months", consumption in "wedding banquets" (although still the most common occasion for consumption) fell from 72.6% in 2014/15 to 58.7% in 2019/20.

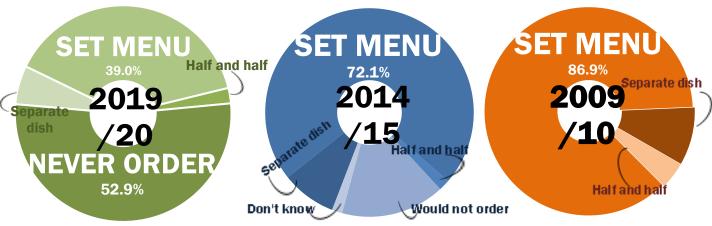


Figure 2.3 – 2009/10, 2014/15 and 2019/20: Consumption frequency of shark fin ordered as part of a set menu versus as a separate dish

In all three years of the study, far more respondents consumed shark fin soup as a part of the set menu than as a separate order. This is consistent with the finding that "wedding banquets" is the most popular occasion for consuming shark fin soup (in traditional Chinese wedding banquets in Hong Kong, the menu is decided by the host families, and typically includes shark fin soup as one of the multi-coursed set menu).

One notable finding was that in 2019/20, more than half of the respondents stated that they would "never order" shark fin soup. This perhaps reflects the decreasing popularity of shark fin soup consumption, even at wedding banquets, and possibly of host families participating in the "fin-free" wedding trend.

III. THE NEXT LESSON IS SUSTAINABILITY

1 Consistently, most people find it acceptable to remove shark fin soup from set menus of weddings and corporate events

Is it acceptable to remove shark fin soup from banquet menus?

2019/20 2014/15 2009/10 **WEDDING BANQUETS** Find it either "Acceptable" or 94.8% 92.0% 78.4% "Very Acceptable" to not include shark fin soup at a wedding banquet Said it was "Not so **5.2**% 4.3% **16.5**% acceptable" Said it was "Not 0.9% 2.7% 5.1% acceptable at all" CORPORATE EVENTS Find it either "Acceptable" or 92.7% 94.2% "Very Acceptable" to not include shark fin soup at a corporate event 4.0% Said it was "Not so 6.0% acceptable" Said it was "Not 1.3% 1.7% acceptable at all"

Figure 3.1 – 2009/10, 2014/15 and 2019/20: Acceptability of not including shark fin soup in wedding banquets and corporate events.

Corporate events were chosen for comparison with wedding banquets. Corporate banquets are an integral part of Hong Kong's working culture, and like wedding banquets, these events often take the form of traditional Chinese banquets and menus are typically designed by the host company, therefore attendees do not have any choice over what food is provided.

In all three years, the majority of respondents found it either "very acceptable" or "acceptable" to not include shark fin soup at wedding banquets. Notably, only 19.6% of respondents in 2009/10 found this "very acceptable", and by 2014/15 and 2019/20 this proportion had risen to 48.7% and 49.7% respectively.

Acceptability for not including shark fin soup in corporate events remains high.

2 A wide range of substitutes to shark fin soup in banquets were suggested by respondents

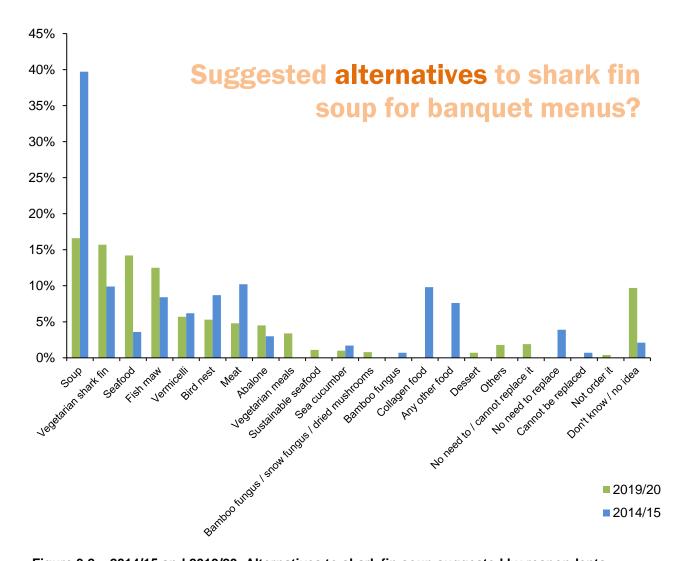


Figure 3.2 - 2014/15 and 2019/20: Alternatives to shark fin soup suggested by respondents

When asked what respondents would substitute shark fin soup with in banquets, "soup", "vegetarian shark fin", and "fish maw" remained popular options in both 2014/15 and 2019/20. Popular choices for substitutes were related to seafood or luxury foods, or foods that resemble shark fin (i.e. vegetarian shark fin, fish maw and vermicelli). Only a small percentage of respondents insisted that there was "no need to / cannot replace it" in 2019/20 (1.9%).

Notably, in 2019/20, "sustainable seafood" was suggested by respondents for the first time in the survey as a substitute to shark fin soup in banquets.

SUSTAI NABIL **SHARK FIN SUBS**

HUMPHEAD WRASSE

The humphead wrasse (Cheilinus undulatus) has long been favoured by Hong Kong people. Like shark fin, they are considered "luxury seafood". Despite relatively high retail prices and up to 65.6% of respondents in 2019/20 believing that humphead wrasse has a high risk of extinction within the next 100 years, the fish is commonly found swimming around tanks of local seafood restaurants, waiting to be eaten. In 2014/15's survey, 12.6% of respondents reportedly had eaten humphead wrasse at least once in the past year.

IUCN Status: Endangered CITES Appendix II

Due to their dwindling wild populations, the sale of humphead wrasse is regulated under CITES. In Hong Kong, restaurants selling live humphead wrasse must carry possession licenses by law. However, it is suspected that many humphead wrasse individuals retailed in Hong Kong are obtained illegally (Wu & Sadovy de Mitcheson, 2016).

Want to help?

www.facebook.com/hhwwatch

ABALONE

Some species of abalone are known to be involved in illegal fishing activities. In particular, abalone fisheries in South Africa are poorly managed and severely poached, leading to those species' continued depletion (WWF-HK, 2017).

FRIENDLY SUBS:

Shark fin-like:

- √ Vegetarian shark fin
- Vermicelli

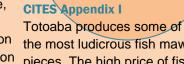
Other foods:

- **Soups and broths**
- **Dishes made with Sustainable Seafood**

FISH MAW

Extraction of the fish bladder to produce fish maw has led to fish species becoming threatened, such as the Chinese bahaba (Bahaba taipingensis) and totoaba (Totoaba macdonaldi).

The Chinese bahaba, once popular in the fish maw trade, is believed to be the first commercial marine species on record driven to near extinction due to overharvesting (Sadovy & Cheung, 2003). One reported catch in the past decade was sold for around HKD 4.9 million per single fish (≈USD 643,000 at the time of news reporting) (AppleDaily, 2015).



Endangered

IUCN Status: Critically

the most ludicrous fish maw pieces. The high price of fish maw infamously drove the totoaba onto Appendix I of CITES as early as 1977 (UNEP, 2021). Methods used in capturing totoaba has led to its neighbour, the vaquita (Phocoena sinus), also becoming critically endangered (Rojas-Bracho & Taylor, 2017).

Some foods currently used to substitute shark fin soup

at weddings are also tied with various conservation concerns. Consumers should

take care in selecting their substitutes to avoid putting

FISH MAN.

other species at risk.



Over 50% of global trades of sea cucumbers (also known as bêche-de-mer), come through Hong Kong's ports (based on most recent available data, from 2000 to 2009) (To & Shea, 2012). Some fisheries are already declining, threatening the resource's sustainability and livelihoods of fishers at source communities. Despite these known threats, conservation actions and related research on sea cucumbers are limited and found wanting. Awareness is also low, and in the 2019/20 survey only 13.8% of respondents believed that one or more species of sea

cucumbers were endangered.

In 2019/20, species of sea cucumbers popular in the commercial trade were listed onto CITES App II, meaning that their international trades must be regulated. These species are Holothuria nobilis, H. whitmaei and H. fuscogilva, also referred to as "teatfish" as a group (or "豬婆參" in Hong Kong's retail market). In coming years, greater conservation effort will be needed to ensure the sustainability of this resource and that consumers do not unknowingly break the law through consumption.



IV. EDUCATION IS KEY

1 A small percentage of people still hold mistaken beliefs about the sources of shark fins and the ability of sharks to survive after finning

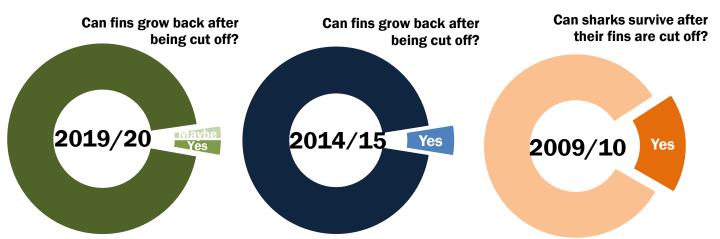


Figure 4.1b – 2019/20 and 2014/15: Perceived ability of a shark's fins to grow back after being cut off

Figure 4.1c – 2009/10: Perceived ability of sharks to survive after fins are cut off

In all years, respondents were asked about their beliefs regarding basic shark facts, including whether or not sharks can survive without their fins, or if the fins could "grow back" after being cut off. Consistently, a small proportion of respondents believed that by removing the fins of sharks, the shark still had a chance to survive. In 2009/10, 16.7% of respondents believed that sharks could survive after the shark fins are cut off. In 2014/15, 5% of respondents believed that a shark could grow back its fins after the fins are cut off. While this proportion fell to 2.8% in 2019/20, 2.3% answered "maybe".

In 2014/15, respondents were also asked if they believed the shark fins available for sale in Hong Kong are harvested from "wild-caught" or "farmed" sources of sharks. While the majority (88.6%) believed that the sharks are "wild-caught", 6.4% believed that the sharks were "farmed", and 5.0% believed that some were "wild-caught" and some were "farmed".

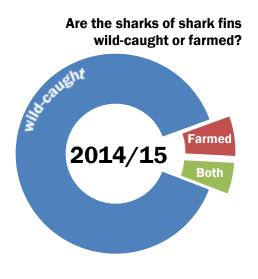


Figure 4.1a – 2014/15: Perceived sources of shark fin

Sustainable Fins? Shark Farms?

In the quest to balance human demand and shark conservation, some have explored the feasibility of a "sustainable" shark fin market as a solution. However, there are currently no known shark fin products – at least in the Hong Kong market – with credible third-party certification of sustainable source.

Similarly, although farmed sharks are often mistaken as synonymous with sustainable shark products, shark fins from farmed sources and with credible third-party certification of sustainability are absent from the local retail market. In reality, like many other farmed fisheries, shark farms do not necessarily ensure sustainability.

Having said this, sustainable consumption of shark-related products in the future could be possible, if stakeholders came together to manage the market from source to consumption. This includes at the very least, investing efforts into identifying sustainable consumption levels, monitoring demand and supply, regulating the shark-related trade to combat illegality and unsustainable practices, and developing sustainable shark fisheries with third-party sustainability assessments and certifications.

2 Number of people killed by sharks each year is often overestimated, but more people are understanding the scale of sharks killed for human consumption

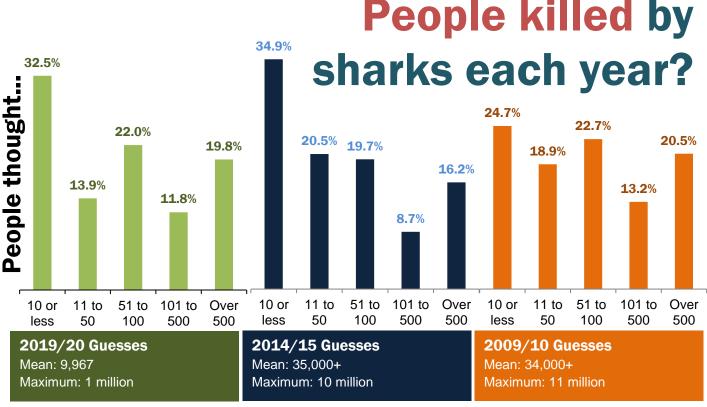


Figure 4.2a – 2009/10, 2014/15 and 2019/20: Perceived number of people killed by sharks on average each year.

(ISAF, 2021)

Actual number of unprovoked fatal shark attack cases each year between 2000 - 2019 averaged at

Often overestimated, but in both 2014/15 and 2019/20, more than 30% of respondents understood that there are "10 or less" people killed by sharks in the previous year, hinting at a growing awareness on the topic. In addition, mean and maximum guesses, while still far overestimated, are far lower than estimates in 2014/15.

Notably, most answers appear to lack unity in responses, suggesting that there is no unified understanding on the issue.

Sharks killed by people each year?

ln 2019/20. People thought... people guessed: Mean: 9.8 million+ Maximum: 1 billion

ln 2014/15, people guessed: Mean: 2.6 million+

Maximum: 100 million In 2009/10 people guessed: Mean: 2.1 million+ Maximum:

300 million

Latest research estimated that up to 100 million sharks are killed for human use each year.

(Worm et al., 2013)

Figure 4.2b - 2009/10, 2014/15 and 2019/20: Perceived number of sharks killed by people each year

Growing understanding,

as demonstrated by 92.5% of respondents answering that more than 500 sharks are killed each year for human consumption in 2019/20. While the 2019/20 mean estimate is still under scientific estimates, the number falls far higher than in 2014/15 and 2009/10.

V. READY FOR MORE

1 Awareness for human impact on shark survival is high, and continued education is needed

2019/20

Belief about severity of threats posed on shark survival by human activities

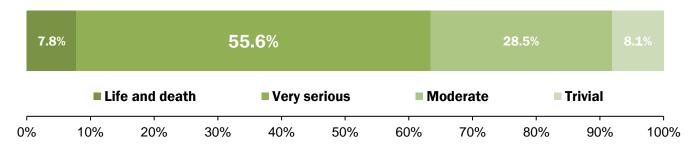


Figure 5.1a - 2019/20: Perceived severity of threats posed on shark survival by human activities

2014/15

Belief that the survival of sharks is threatened by human activities

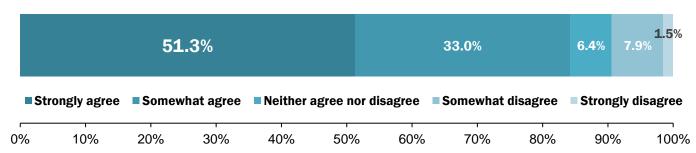


Figure 5.1b - 2014/15: Agreement that shark survival is threatened by human activities

In 2014/15, more than half (51.3%) of the respondents "strongly agreed" that the survival of sharks is threatened by human activities, and only a relatively low proportion of respondents "somewhat disagreed" (7.9%) or "strongly disagreed" (1.5%).

In 2019/20, the question was edited to find out more about the respondents' perception on the severity of these threats. More than half (55.6%) of the respondents believed that human activities posed "very serious" threats to the survival of sharks, and 7.8% even considered these threats "life and death" for the survival of the species. However, a there is still a proportion of respondents who believed that the threats human

activities pose on shark survival are only "moderate" (28.5%) or even "trivial" (8.1%). These findings suggest perhaps a need for continued education and awareness raising among the general public, especially on the threats to survival sharks around the world are currently facing, and how human activities – especially in a consumption market like Hong Kong – can impact the survival of sharks.

Vr.

2 The majority increasingly feel discomfort in knowingly eating endangered fish and threatened species

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Figure 5.2a – 2014/15 and 2019/20: Percentage of respondents who would not knowingly eat a species threatened with risk of extinction



Figure 5.2b – 2009/10, 2014/15 and 2019/20: Percentage of respondents either "not so comfortable" or "not comfortable at all" with knowingly eating an endangered fish

In 2014/15 and 2019/20, the vast majority of respondents expressed that they would not knowingly consume a species threatened with extinction.

In all three years, respondents were also asked if they would be comfortable with eating endangered **species of fish**. The percentage of respondents answering "not so comfortable" or "not comfortable at all" increased throughout the years, to 74.3% in 2019/20. Notably, in 2019/20 only 1% and 1% of respondents felt "very comfortable" or "a little comfortable" with eating endangered fish. The remaining 23.6% felt "neither comfortable nor uncomfortable".

It may be reasonable to speculate that respondents who felt "neither comfortable nor uncomfortable" with eating endangered fish had never considered this issue before, therefore did not have a clear answer. The survival of terrestrial animals, such as giant pandas or tigers, have been far more widely campaigned in Hong Kong than fish species, such as humphead wrasse. It is therefore not surprising if respondents found it difficult to contemplate fish species as endangered.

Overall, the results of both these questions indicate that the respondents do care about how their consumption habits are impacting the continuation of species which are already struggling to survive, and increasingly so. However, there are currently few existing tools, such as mandatory seafood labelling, that can help consumers accurately identify what species are used in their foods, and whether or not these species might be to some degree threatened with extinction.

3 Almost everyone agrees that some of the shark fin sold in Hong Kong belong to shark species threatened with extinction, but few people are aware about which species are threatened

Threatened Sharks for Sale? In 2019/20, 93.1% agree that some shark fins sold in HK belong to threatened species (2014/15: 92.4%)

Figure 5.3 – 2014/15 and 2019/20: Agreement that some shark fins sold in Hong Kong belong to sharks that are threatened with extinction

The majority of the respondents showed awareness that some of the shark fins sold in Hong Kong were associated with species that are threatened with extinction.

Nonetheless, 7.6% of the respondents in 2014/15 and 6.9% of respondents in 2019/20 still did not believe that shark fins sold in Hong Kong belonged to shark species threatened with extinction at all.

Despite the high awareness among respondents for the presence of threatened species among shark fins, few of these respondents were able to suggest names or types of sharks used as shark fins that they believed were threatened species.

The most commonly suggested shark (2019/20) was tiger shark, suggested by 5.7% of respondents. This was followed by great white shark (3.0%), whale shark (2.0%), and hammerhead shark / scalloped hammerhead (1.5%). All other suggested species were suggested by fewer than 0.5% of respondents, including: blue shark (0.4%), reef shark (0.4%), nurse shark (0.2%), bull shark (0.1%) and basking shark (0.1%). The vast majority (88.5%) answered that they did not know which species were threatened. Less than 0.1% answered that "all species" were threatened.

4. It's not just food – many people would not purchase beauty products containing sharks

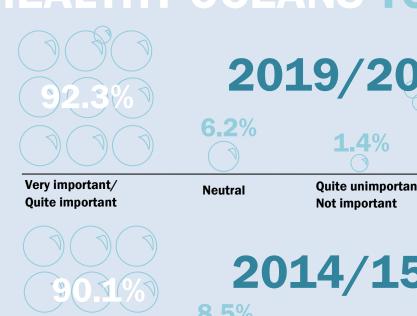
If your beauty products had sharks?



Figure 5.4 – 2019/20: Effect on respondents' purchasing decision of beauty products if products contained shark

Apart from in foods, in 2019/20 respondents were also asked if their decision on purchasing "beauty products" would be affected if the product contained "shark products". Although 26.6% of respondents said that there would be "no effect at all", the majority (65.8%) of respondents said that they would not purchase beauty products containing shark. The remainder (7.6%) said that it would have "little effect" on their decisions.

HOW IMPORTANT ARE HEALTHY OCEANS TO YOU?



of all respondents

believed that the ocean has an unlimited supply of marine life! (2019/20)

2014/15

Quite unimportant/

Not important

of all respondents believed that the ocean has an unlimited supply of marine life! (2014/15)

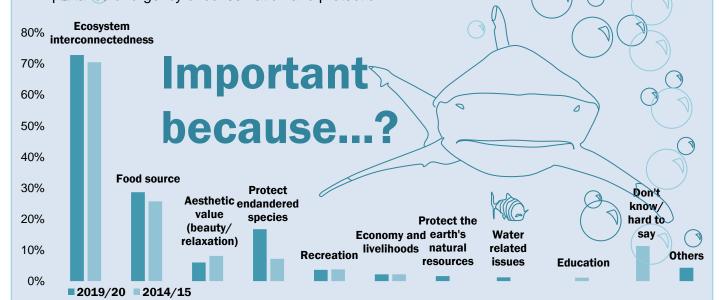
Very important/ **Quite important**

Neutral

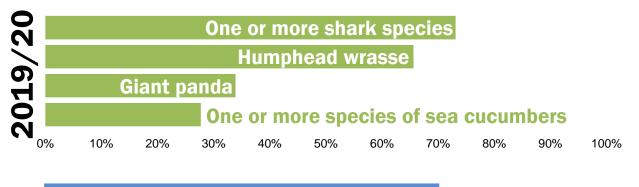
Not so important/ Not important at all

In 2014/15 and 2019/20, respondents were asked how much "healthy oceans" held a personal importance to them. In both years, over 90% of the respondents expressed that it was either "very important" or "quite important" to them. Respondents answering "very important" increased from 65.8% in 2014/15 to 70.4% in 2019/20. When these respondents were asked for the reasons why, more than 70% of respondents in both years expressed that "ecosystem interconnectedness" was a reason. The option of "food Source" came second by a wide margin, at 25.7% in 2014/15 and 28.6% in 2019/20. Notably, respondents giving the reason "protect endangered species" more than doubled, from 7.2% in 2014/15 to 16.7% in 2019/20.

The 2014/15 survey found that 25% of respondents believed the ocean provided an unlimited supply of resources. Although this proportion fell slightly to 19.3% in 2019/20, this may still be considered quite notable, given that such a misconception can carry strong implications about the perceived importance or urgency of conservation and protection.



5. Most respondents were aware that **at least one species of shark** faced a high risk of extinction within 100 years



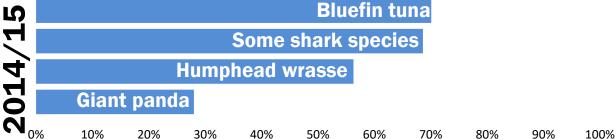


Figure 5.5a – 2014/15 and 2019/20: Comparison of which animal(s) respondents felt faced a "high" risk of extinction within 100 years

In 2014/15, 68.6% of respondents believed that "some shark species" were at high risk of extinction within the next 100 years. In 2019/20, 73.1% of respondents believed that "one or more shark species" were at high risk of extinction within the next 100 years, potentially indicating a consistently high, if not growing, awareness for the vulnerability of sharks among the general public.

Humphead wrasse was selected for comparison, as one of the marine resources long known or its risk to extinction. Respondents believing that humphead wrasse was at a high risk increased from 56.3% in 2014/15 to 65.6% in 2019/20.

Bluefin tuna was removed in the 2019/20 survey, and respondents were instead asked whether they thought one or more species of sea cucumbers were at high risk of extinction within the next 100 years. While only 27.7% of respondents believed the risk was "high", 45.8% believed the risk was

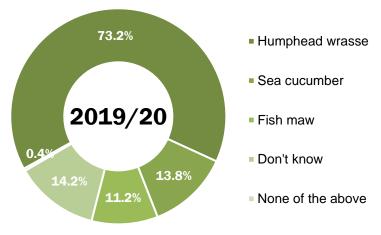


Figure 5.5b – 2019/20: Which out of humphead wrasse, sea cucumber and fish maw respondents thought were endangered

When asked in 2019/20 whether respondents believed that humphead wrasse, sea cucumber and fish maw were (or included) endangered species, only 13.8% believed that sea cucumbers were endangered.

"moderate".

14.2% expressed that they did not know.

6 Responses to "sustainable seafood" are, overall, very positive (2019/20 only).

Premium for Sustainable Seafood?

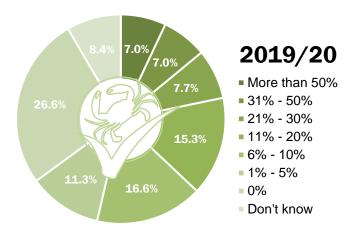


Figure 5.6a - 2019/20: Percentage of premium respondents are willing to pay for sustainable seafood

Up to 64.9% of respondents were willing to pay some premium for sustainable seafood, with the most popular amounts being 6 - 10% (16.6%) and 11 - 20% (15.3%). However, more than a quarter (26.6%) of respondents were not willing to pay any premium, and 8.4% expressed that they did not know how much they would be willing to pay.

When asked whether or not respondents had ordered sustainable seafood in the past 12 months, as many as 74.7% of respondents answered "yes". However, it is not clear whether or not respondents fully understood what is meant by "sustainable seafood".

The proportion of people who thought it was either "very acceptable" or "acceptable" for all seafood to be sustainable in Hong Kong government official functions, wedding banquets and corporate banquets reached over 90% for all three categories.

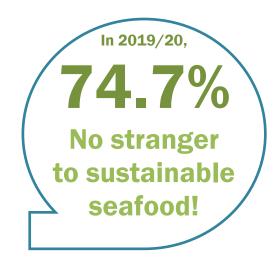


Figure 5.6b – 2019/20: Percentage respondents who had ordered or purchased sustainable seafood in a restaurant in the past 12 months

2019/20

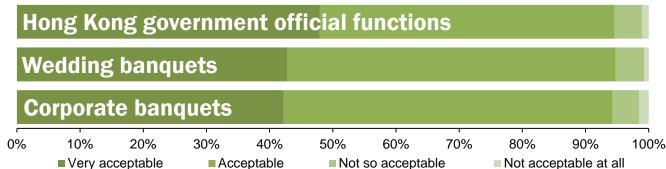


Figure 5.6c – 2019/20: Acceptability for serving only sustainable seafood at Hong Kong government official functions, wedding banquets and corporate banquets

VI. SUPPORT FOR HK GOVERNMENT ACTION

1 In addition to the acceptability for serving only sustainable seafood, over 90% show support for the HK government's decision to exclude certain dishes from official banquets or functions for sustainability reasons

In 2014/15, respondents were asked whether or not they supported the Hong Kong government's decision made in 2013 to remove all dishes using shark fin, bluefin tuna and black moss from their official banquets, for sustainability reasons (Government of Hong Kong, 2013). In 2019/20, the question was rephrased to ask whether or not respondents found it acceptable that the Hong Kong government did not consume certain marine species in official functions due to sustainability issue.

In both years, 92.7% of the respondents applauded the action as either "very acceptable" (2019/20: 52.3%, 2014/15: 53.4%) or "acceptable" (2019/20: 40.3%, 2014/15: 39.3%).

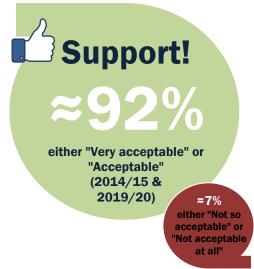


Figure 6.1 – 2014/15 and 2019/20: Acceptance for HK government excluding certain dishes from official functions for sustainability reasons

2. The Hong Kong government was voted the **most important stakeholder for shark protection** by respondents, with others following closely behind

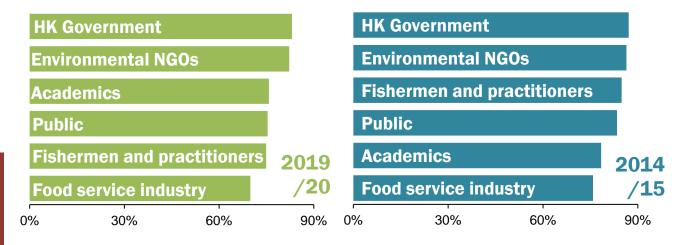


Figure 6.2 – 2014/15 and 2019/20: Stakeholders deemed as "very important" or "quite important" for shark protection by respondents

It is evident that respondents considered all of the suggested stakeholders as having a role to play in shark protection. Notably, the Hong Kong government received the highest vote in both years, with more than 80% of respondents considering them as "very important" or "quite important".

The message is clear. Each person, regardless of how one may be a stakeholder to shark conservation issues, has a responsibility to do their part for the protection of sharks. However, more importantly, the government's role as a leader to engage all stakeholders is irreplaceable.

3. Given that only a handful out of more than 500 shark species are currently regulated in the international trade, over 90% of respondents are in support of the HK government doing more to help

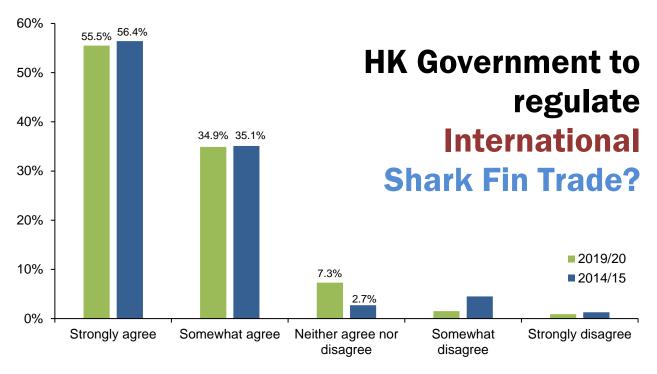


Figure 6.3 – 2014/15 and 2019/20: Support for HK government to spend more effort in regulating the international shark fin trade

In both 2014/15 and 2019/20, over 90% of respondents "strongly agree" (2019/20: 55.5%, 2014/15: 56.4%) or "somewhat agree" (2019/20: 34.9%, 2014/15: 35.1%) that the Hong Kong government should do more to regulate the international shark fin trade from the local trade. To provide context, respondents were told that only a few out of the over 500 species of sharks currently enjoy protection under international regulations. Disagreement to this has also decreased, with those who "somewhat disagree" falling from 4.5% in 2014/15 to 1.5% in 2019/20, and those who "strongly disagree" falling from 1.3% in 2014/15 to 0.9% in 2019/20.

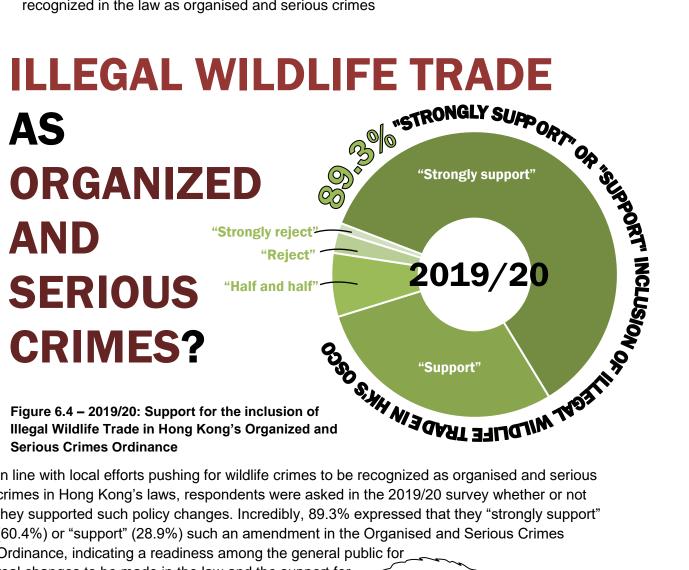
CITES: Regulating the international trade

Currently, Hong Kong's main standard for regulating the international trade of wildlife products, including shark fin, adheres to what is provide by CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora). As all commercially important shark species are listed under Appendix II of CITES, this means that all such species in the international trade must be accompanied by permits to ensure each shipment does not further endanger the survival of the species in the wild.

As an international trade hub and a tax-free port, Hong Kong is in a unique position to collect valuable data about how sharks are being traded as shark fins, and to do more by updating local regulations to give sharks more protection and hold to more stringent standards in the trade.

⚠ Concern is not only for sharks! Respondents hope to see illegal wildlife trade activities be recognized in the law as organised and serious crimes

ILLEGAL WILDLIFE TRADE



In line with local efforts pushing for wildlife crimes to be recognized as organised and serious crimes in Hong Kong's laws, respondents were asked in the 2019/20 survey whether or not they supported such policy changes. Incredibly, 89.3% expressed that they "strongly support" (60.4%) or "support" (28.9%) such an amendment in the Organised and Serious Crimes

Ordinance, indicating a readiness among the general public for real changes to be made in the law and the support for the work of the local government in combating wildlife crimes.

ALL ABOUT 0.S.C.O.

The illegal trade in wildlife is worth an estimated USD 20 billion annually (INTERPOL, 2018). Currently, wildlife crimes are not recognized as organised and serious crimes under Hong Kong's laws. This means that legally, authorities do not have an obligation to conduct in-depth investigations into the criminal activities behind wildlife products illegally traded through Hong Kong – even if the shipments are discovered and seized. As one of the world's major trade hubs for wildlife products, Hong Kong has a responsibility to step up in its capacity to combat wildlife crimes and take down criminal syndicates. By recognising wildlife crimes as organised and serious crimes under Cap. 455 Organised and Serious Crimes Ordinance (OSCO), such capacity is enabled.

5. Even in local marine conservation, there is strong support for increasing the size of Marine Protected Areas in Hong Kong

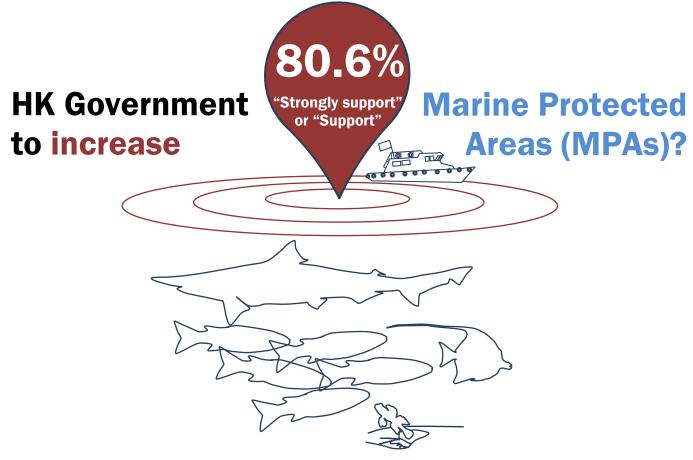


Figure 6.5 –2019/20: Support for HK government to increase the size of Marine Protected Areas (MPAs) in Hong Kong

In 2019/20, respondents were asked whether or not they supported increasing the size of Marine Protected Areas (MPAs) in Hong Kong by the Hong Kong government. Responses were extremely positive, with 47.9% expressing "strong support" and 32.7% expressing "support". Only 1.6% of responded with "reject" and 0.3% with "strongly reject", and 17.5% answered "half and half".

On Hong Kong's MPAs

Less than 10% of Hong Kong's waters are currently designated as MPAs under 6 Marine Parks and 1 Marine Reserve. The Hong Kong government has plans to increase the coverage of MPAs in Hong Kong as part of the commitment to the Convention on Biological Diversity (CBD) – an international convention for the conservation and sustainable use of biological diversity.

Apart from coverage, monitoring and management of Hong Kong's MPAs is also an area that can be reviewed to improve protection for the local marine life. For instance, fishing activities are currently prohibited in the Marine Reserve, but are commercial fishing is permitted in existing Marine Parks by holders of valid fishing permits (permits for 4 of the 6 Marine Parks will be phased out by March 2022) (AFCD, 2020). Spear-fishing activities are furthermore difficult to monitor. Effort to educate the public and recreational users of Hong Kong waters is also limited. To enhance Hong Kong's overall capacity to conserve and protect the local marine biodiversity, it may be worthwhile to invest additional effort on these areas by a stepwise approach in the future.

IMPLICATIONS

The 2019/20 survey is especially significant, as it enables a comparison of how shark-related consumption attitudes and patterns have changed among Hong Kong people in the 10 years since the first survey was conducted in 2009/10. Under comparison, it appears that consumption reduction trends, changes towards conservation-oriented attitudes and support for local government action to take the lead in regulating international trades from its unique position as a global trade hub were already observed in the 2014/15 survey. These findings are no doubt reinforced by the results of the 2019/20 survey. In addition, the 2019/20 survey has furthermore indicated a support for other areas of marine conservation and resource use, including for the provision and consumption of sustainable seafood, and the increase of marine protected areas in Hong Kong.

CONSUMPTION PATTERNS

Consumption patterns have remained relatively similar since 2014/15, with shark fin soup still being the most common way that shark is consumed in Hong Kong compared to other shark-related products. However, as proclaimed by respondents, consumption appears to be declining and in both 2014/15 and 2019/20 when compared to in 2009/10, and many respondents have either "decreased" or "stopped" consuming shark fin soup in the 5 years since the respective previous survey years (Figure 1.3). Notably, while "environmental concerns" remains the

most common reason for respondents having stopped eating or decreased their relative consumption of shark fin soup, the reasons that were found most important for continuing consumption in the 2009/10 survey, including "taste", "social status" and "tradition", appear to have become less important since 2014/15 (Figure 1.2). Interestingly, while the "cost of shark fin soup" was only named by 6.2% of respondents who had stopped consumption as the reason for doing so (decreasing from 24.6% in 2014/15) and considered either "very important" or "important" by 20% of respondents who have decreased consumption in 2019/20, respondents are evidently spending more on average per shark fin dish, with 32.3% spending over HKD\$300 per dish in 2019/20, increased from 17.1% in 2009/10 (Section 1.4 and 1.5). It may be worthwhile to investigate the trends in the cost of shark fin dishes and reasons behind such trends in future research.

A large proportion of respondents appear to be continuing consumption only in occasions where they did not order the shark fin soup, but the soup was served to them as part of a set menu (Figure 2.2 and 2.3). The most common occasion for consuming shark fin soup was also found to be in wedding banquets. These findings are in line with known local practices, as most often, menu items are decided by the hosts in wedding banquets and guests do not typically have a choice of what to order. Interestingly, the percentage for "wedding banquets" as the most common occasion for shark fin soup consumption

in the 12 months leading up to the respective surveys fell from 72.6% in 2014/15 to 58.7% in 2019/20. With the increasing percentage of respondents who expressed that they would "never order" shark fin soup on their own, and consistently high percentage who found it either "acceptable" or "very acceptable" to not include shark fin soup at wedding banquets, it may be insightful to ask respondents in future surveys about their past attendance or views about "fin-free" wedding banquets (banquets where hosts have decided not to serve shark fin dishes), which appears to be gaining popularity in Hong Kong.

BELIEFS AND ATTITUDES

There is an indication that, while respondents have strong beliefs about having environmentally conscious consumption, there is a lack of deeper knowledge or about how to convert behaviour to also reflect these beliefs. For example, the vast majority of respondents in both 2014/15 (93.9%) and 2019/20 (96.1%) expressed discomfort in eating a species that they know are threatened with risk of extinction (Figure 5.2a), however, when asked to name acceptable alternatives to shark fin soup in banquet menus, some suggested marine resources that often may involve threatened species or sustainability issues, such as fish maw, bêche-de-mer (or sea cucumbers) and abalone (Figure 3.2). Further questions about bêche-de-mer (or sea cucumbers) and fish maws (Figures 5.5a and 5.5b) revealed that awareness for their vulnerability was low compared to other relatively more iconic marine

species such as shark species and humphead wrasse. Furthermore, while over 90% (Figure 5.3) of respondents agree that some shark fins sold in Hong Kong belonged to threatened species, only a small percentage of respondents were able to correctly name at least one threatened shark species, and as many as 88.5% professed that they did not know which species were threatened (Section 5.3).

This observation may also be extended to the respondents' beliefs and behaviours about sustainable seafood consumption. Over 90% of respondents expressed that it was either "acceptable" or "very acceptable" to serve only sustainable seafood at Hong Kong government official functions, wedding banquets and corporate banquets (Figure 5.6c), and as many as 74.7% claimed to have ordered sustainable seafood in the past 12 months (Figure 5.6b). While these results are encouraging, it may be worthwhile to further ask respondents to name examples of sustainable seafood to gain a clearer picture for the understanding of what is meant by sustainable seafood among the general public. Nonetheless, these results show a readiness for sustainable seafood concepts and products to be more intensively promoted in Hong Kong. Up to 64.9% of respondents (Figure 5.6a) were willing to pay a premium for sustainable seafood, with the most acceptable proportions being 6-10% and 11-20%.

SUPPORT FOR HK
GOVERNMENT ACTION
on Marine conservation issue

There is an overwhelming support from respondents in 2019/20 and 2014/15 for the Hong Kong government to take the lead in marine conservation matters. For sharks, this is demonstrated in the results showing the Hong Kong government as consistently the most important stakeholder for shark protection (Figure 6.2), and the support for the Hong Kong government to do more to regulate the international shark fin trade (Figure 6.3). Support from respondents for the government decision to remove shark fin and certain other species from official functions due to sustainability issues has also remained high, at about 92% for both 2014/15 and 2019/20 (Figure 6.1).

The 2019/20 survey has found, in addition, that this support for action does not stop at sharks. As many as 89.3% of respondents either "strongly support" (60.4%) or "support" (28.9%) "illegal wildlife trade" to be recognized as organized and serious crimes under Hong Kong's Cap. 455 Organized and Serious Crimes Ordinance (OSCO) (Figure 6.4). Indeed, shark fins represent only a portion of wildlife products that were found to be illegally traded through Hong Kong in the past years, and many other products, including rhino horns, pangolins scales, ivory, agarwood, fish maw and others have been found illegally imported into Hong Kong through customs inspections.

Even in local marine conservation, respondents showed a high level of support as demonstrated by the 80.6% of respondents claiming "strong support" or "support" for increasing the size of Marine Protected Areas (MPAs) in Hong Kong (Figure 6.5).

Based on these results, this report offers the following updates to the recommendations for actions provided in the 2014/15 report.

Action #1: Support Hong Kong government conservation action

In the 2014/15 report, several recommendations for government action in handling the shark fin and wildlife trade were suggested. In these 5 years, some of these recommendations had been achieved, including the increase of maximum penalties for illegally traded wildlife products (including shark fins), and continued capacity building of customs officers to conduct effective inspections through systematic training.

In the coming years, it is recommended that efforts may focus on recognising illegal wildlife trades (including illegally traded shark fin and related products) as organized and serious crimes, namely through the Cap. 455 Organized and Serious Crimes Ordinance. Currently, investigation efforts for most cases of illegal wildlife trade are limited, leading to low prosecution rates and the inability for criminal syndicates behind the crimes to be prosecuted. By recognising wildlife crimes as organized and serious crimes, authorities will be compelled to conduct indepth investigations, and activate investigative powers that can better equip agencies in successfully identifying and prosecuting criminal organisations behind the crimes. In addition, it can potentially pave the way for achieving other recommendations from the 2014/15 report related to combating illegal trades, including to increase traceability for shark

fin-related products being imported into Hong Kong, and imposing declaration protocols to encourage shark fin retailers to properly document their stockpiles of shark fins, so that enforcement officers may more easily distinguish between preand post-CITES implementation products.

systems based on an accurate understanding of the human relationship with nature and natural resources, whether as policy-makers, businessmen or simply consumers.

Action #2: Ecology and Biodiversity Education for All

The 2019/20 survey has found a slight improvement among respondents' basic knowledge about available marine resources and sharks. For instance. estimations for the number of people being killed by sharks each year, versus the number of sharks killed by people each year have shifted closer to what is estimated through the latest research (Figure 4.2a and 4.2b). While there are still respondents who believed that a shark's fins can grow back after being cut off in 2019/20 (2.8% answering "yes" and 2.3% answering "maybe" (Figure 4.1b)), the proportion of respondents believing that the ocean has an unlimited supply of marine life has fallen from around 25% in 2014/15 to 19.3% in 2019/20 (page 24). This latter belief potentially governs how respondents may behave in their use and appreciation of marine and seafood resources in their everyday life, and is particularly worth further investigating or remedying.

Echoing the recommendations made in the 2014/15 report, there should be continued efforts in normalizing ecology and biodiversity education, to ensure that future generations may receive at least basic knowledge needed for making informed decisions and establish value

Action #3: Enabling Sustainable Consumption

Both the 2014/15 and 2019/20 surveys have revealed a readiness among the respondents to embrace (or at least begin to embrace) sustainable consumption practices. However, few respondents are in fact equipped with the knowledge to make such choices in day-to-day life. While education, as noted in the previous section, is important, other actions can also be taken by businesses and policymakers to more quickly enable consumers to make sustainable choices. The decrease in shark fin consumption, for instance may also be credited to the participation of many hotels and catering outlets (or restaurants) in Hong Kong in offering fin-free banquet options, or in removing shark fin from menus entirely, which effectively supported consumers in decreasing or even stopping shark fin consumption. For restaurants and hotels continuing to offer shark fin dishes. decision-makers may at least establish procurement policies to avoid procuring species that are already known to be threatened with extinction.

The same can be said for other marine resources that are often consumed and are also associated with vulnerable species, such as abalone, bêche-de-mer (or sea cucumbers), humphead wrasse and fish maw. The Hong Kong government may feed into the momentum

started by the awareness associated with shark protection by continuing efforts that promote and enable sustainable seafood consumption, such as by mandating clear labelling of seafood products in retail markets and restaurants, and encouraging practices that support traceability from source. Such actions, if taken, will no doubt bring Hong Kong a big step closer to being a leader in the region for sustainable and environmentally-conscious consumption.

On the provision of sustainable products, once again, businesses can step up to provide a clearly labelled sustainable options for consumers. Given that the 2019/20 survey has found a high willingness among respondents to pay a premium for sustainable seafood,

businesses may also see this as an opportunity to explore this market and increase their knowledge and provision on products certified with sustainability, and to make these available to consumers.

With the readiness of the general public in accepting sustainable consumption practices, the missing pieces now are the tools/platforms that can help inform consumers of where sustainable products can be found, whether on menus or in shops or markets, to help consumers make the leap from their sustainable beliefs to actual sustainable consumption behaviour. Whether initiated by businesses, NGOs or government efforts, it is hoped that more of such tools or platforms can be found in the near future in Hong Kong.

CONCLUSION

One of the most important findings of the 2019/20 survey is that the support for shark protection and the general willingness among Hong Kong people to reduce consumption of shark fin has remained high. Compared to the first survey in 2009/10, where results seemed to indicate that consumption was the norm, the 2014/15 and 2019/20 results suggest that there is a new pattern emerging, where shark fin consumption does not have to be essential (especially in celebration banquets), and environmental awareness leading to giving up consumption could be the future.

While this is encouraging, it does not mean that the work of awareness raising, trade regulation and demand reduction in Hong Kong should stop. Today, Hong Kong maintains its position as one of the world's most important trading hubs for shark finrelated products, and shark fin is still highly available in the local retail market. To know whether or not a new "fin-free" trend has taken hold of Hong Kong's consumer market or to any extent transformed Hong Kong's demand will require observations through studies like the current survey over several more decades, alongside other forms of research, such as market surveys of product availability in Hong Kong and neighbouring regions, and trade research into the movement of shark fins through Hong Kong. In other words, efforts to keep the momentum going for shark

conservation work in Hong Kong is no less important today.

In addition, whilst continuing the effort observing and regulating shark-related trade and consumption in Hong Kong, the positive impact that efforts have yielded in raising awareness for shark protection should be extended to other related marine resources. These may include fish maw and bêche-de-mer (or sea cucumbers), which are also easily found in Hong Kong's retail market and for which Hong Kong is also one of the world's most important trading hubs. While these products also often involve vulnerable species, awareness among the general public is relatively low.

In the bigger picture of the global wildlife trade, the support for efforts to combat the illegal wildlife trade overall will also be a key focus of local action in the coming years, and will require the support of the general public as well as decision-makers. The success of including wildlife crimes under OSCO will be one of the most significant milestones yet for Hong Kong in combating illegal trades, including for shark fins, and will no doubt be another great push for the momentum for the sustainable use of wildlife resources. The success of these efforts will also be exemplary for the region, demonstrating the ability of a trading port like Hong Kong to take a leading role in combating illegal wildlife trades.

Hong Kong is in a unique position, both as an important global hub for trade and consumption of shark fin-related products, and as a community with high awareness and readiness to embrace reduced shark fin consumption and sustainability concepts in resource use. The progress that Hong Kong has made in the past 10 years is encouraging as an example to show that even in one of the key shark fin-related markets in the world, change to move towards more conservation-oriented mindset and

practices is possible. Moving forward, effort must be invested into preserving this mindset throughout the community, and bringing it into other issues equally needing conservation attention, such as in the preservation of local biodiversity and in establishing sustainable consumption practices. It is hoped that the example Hong Kong has set for changing shark-fin related consumption behaviours can continue to encourage positive change both locally and regionally for the use of marine resources.

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