Traceability

The backbone of sustainable and legal trade in shark and ray products

By Glenn Sant[1]

The importance of traceability in supporting trade in CITES Appendix II-listed species

Parties attending CoP17 are encouraged to accept the recommendations contained in Agenda Documents 45 and 56.1 to prevent unsustainable and illegal trade in shark and ray products.

Traceability systems for the trade in seafood products are used to ensure the quality and safety of fish and associated products, and as a tool to demonstrate their legality and origin from a sustainably managed fishery (FAO, 2012). These systems provide a mechanism to store and exchange information between actors throughout a supply chain, enabling a product to be traced back along the chain no matter what process or transformation the product may undergo. This provides a mechanism to verify the integrity of "chains of custody" (FAO, 2014).

Traceability is fundamental to the effective operation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) to support the system of permits and certificates required for listed species (Mundy & Sant, 2016). CITES Parties are required to maintain records of international trade in listed species, and to provide the CITES Secretariat with annual trade reports. An exporting State issues export permits only after determining that the trade is not detrimental to the survival of the species in the wild (sustainability), through a Non-detriment Finding (NDF), and declaring that the specimens were lawfully acquired (legality).

Declarations of legality are made by national CITES Management Authorities (MAs) and generally require information about the origin and any processing stages a specimen has undergone, administration that is fundamentally supported by traceability. The CITES MA should not issue an export permit until its national Scientific Authority (SA) has made a NDF. Traceability can facilitate the production of a NDF by linking a specimen to its geographic origin so that the impact of international trade on the wild population can be ascertained (Mundy & Sant, 2016).

Dried shark fin in Hong Kong retail store. Red label on bag of fins reads Jin Shan Gou Fin (which means: gold mountain caudal fin). © Joyce Wu/TRAFFIC

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In some cases, a CITES MA will issue an export permit with conditions to allow for continual improvement in the data that serves as the basis for a NDF and which should, therefore, lead to greater confidence in the NDF decision, better management of the species, etc. (Figure 1, Step 6). Traceability systems can allow for new information to be collected and fed back into the NDF assessment process, allowing for such improvements. Identifying the species, source, and population status associated with a specimen in trade relies on cost effective collection and analysis of samples[2]. Gathering such samples during the traceability process, particularly if a NDF and resulting export permit includes a condition requiring sampling along the supply chain, could significantly accelerate the production of a more comprehensive NDF.

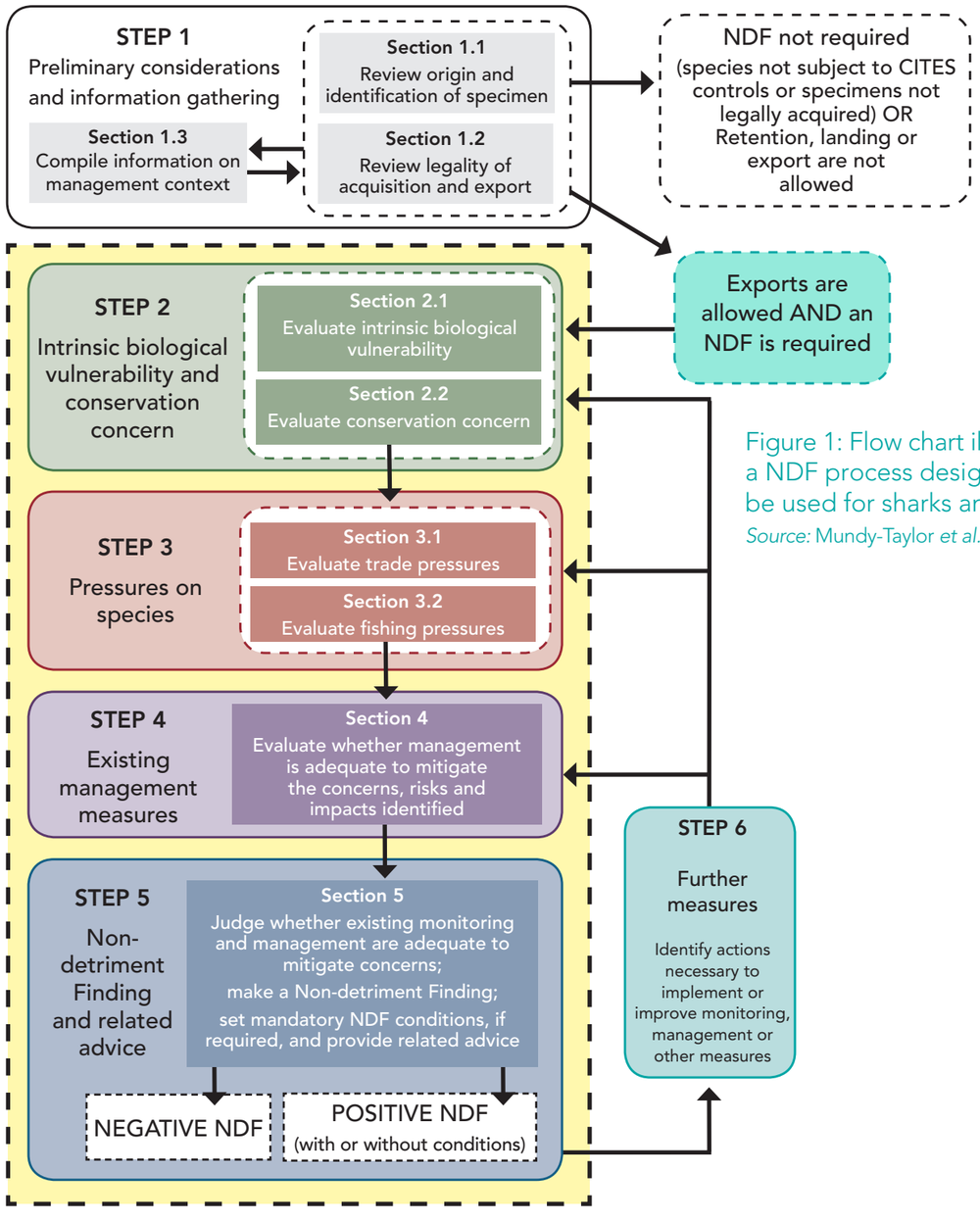

Figure 1: Flow chart illustrating a NDF process designed to be used for sharks and rays.
Source: Mundy-Taylor *et al.*, 2014.

[2] From Mundy & Sant, 2016 – Kinship between individuals of the same species may be used as an indicator of stock abundance, which could particularly assist with the NDF process for shared stocks (C. Davies, CSIRO, pers. comm., 2015). See, for example: http://frdc.com.au/research/Documents/Final_reports/2007-034-DLD.pdf

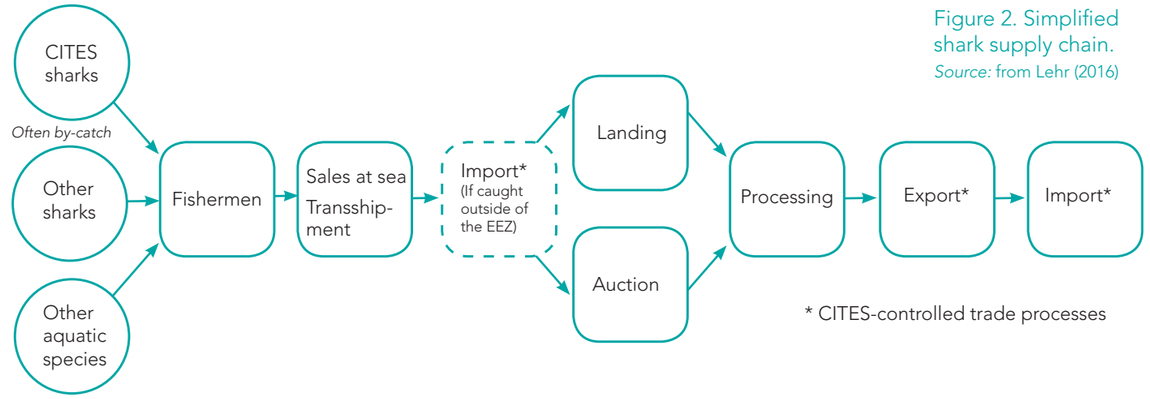

Figure 2. Simplified shark supply chain.
Source: from Lehr (2016)

Traceability systems for sharks and rays need to accommodate a complex system of trade involving chain of custody (Figure 2) and the many different forms of traded products[3]. In related cases, CITES has recommended additional measures beyond what is normally required for the issuance of permits and certificates. These measures are designed to facilitate identification of origin as well as trade monitoring and control, and include:

- universal labelling requirements for sturgeon (order: Acipenseriformes) caviar *(CITES Resolution Conf. 12.7* (*Rev. CoP16*));
- a universal tagging system for the identification of crocodilian skins and parts *(CITES Resolution Conf. 11.12* (*Rev. CoP15*));
- the recommended marking of whole elephant (*Elephantidae* spp.) tusks and cut pieces of ivory *(CITES Resolution Conf. 10.10* (*Rev. CoP16*));
- the recommended tagging of hunting trophies of leopard *Panthera pardus* and Markhor *Capra falconeri (CITES Resolution Conf. 10.14* (*Rev. CoP16*) and *CITES Resolution Conf. 10.15* (*Rev. CoP14*), respectively); and
- consideration of options to enhance traceability for a number of taxa, including timber and Queen Conch *Strombus gigas (CITES Decision 16.144)*.

Relevance of traceability to CITES CoP17

In May 2014, at the joint meeting of the Animals and Plants Committees (AC27/PC21), the CITES Secretariat noted that a multidisciplinary approach would be required to meet the objectives under the different CITES Decisions and Resolutions on the identification of specimens of CITES-listed species (AC27/PC21 Doc. 1415). At AC28 in 2015, reviews commissioned by the CITES Secretariat led to traceability discussions relevant to snakes and sharks (Lehr, 2016 and Mundy & Sant, 2016), after which the committee invited the CITES Standing Committee (SC) to:

"…consider the drafting of a decision on traceability based on the different decisions related to traceability adopted at CoP16 with a view to increasing coherence, reducing duplication of effort and providing guidance to Parties implementing traceability systems."

As a result of this recommendation and discussions at SC66 in 2016 (SC66 SR, Para 34.), the Parties at CoP17 will consider adopting a Decision which directs, *inter alia*, the SC to recommend a definition of traceability, provide guidance on a governance structure, and develop umbrella guidelines and standards, all of which would be posted on the CITES website. Also, the draft Decision requests the SC to draft a Resolution on traceability for consideration at CoP18.

Frozen Blue Shark (*Prionace glauca*) meat in a Milan, Italy retail outlet, caught using longline in FAO area 87.© Monica Barone

[3] Shark and ray products occur for many parts and derivatives including, but not restricted to, meat, fins, gill plates, skin, liver oil, teeth, cartilage, and in many forms, including dried, fresh/chilled, frozen, canned in brine, etc.

At CoP17, CITES Parties will also consider the recommendations contained in CoP17 Doc. 56.1, which calls for adoption of a Decision specifically related to traceability of sharks and rays:

"17.GG On the basis of information provided by the Secretariat and the Animals Committee, the Standing Committee shall consider issues concerning the conservation and management of sharks and rays, and provide guidance as appropriate, pertaining to:

a) legislative matters that might arise in exporting, transit or consumer countries, and those relating to legality of acquisition and introduction from the sea;

b) identification and traceability, taking into consideration requirements that have been developed for the trade in specimens of other Appendix-II species, and their applicability to specimens of CITES-listed sharks and rays in trade;

c) catch documentation and product certification schemes that could assist in the implementation of Appendix II shark and ray listings;

d) conservation and management measures for sharks and rays taken by Regional Fisheries Management Organisations to support the implementation of CITES; and

e) coherence of CITES provisions concerning sharks and rays with conservation and management measures of other relevant multilateral environmental agreements.

The Standing Committee shall report on the implementation of this decision, with recommendations as appropriate, at the 18th meeting of the Conference of the Parties."

The CITES Secretariat commissioned TRAFFIC to review traceability systems developed for the trade in several CITES Appendix II-listed species so as to inform the development of such schemes for sharks and rays. Through consideration of four case studies (caviar, timber, queen conch and crocodile skins), experts found a common theme in the need to strike a balance between establishing minimum standards/universal guidelines for traceability systems while also affording operators and Parties flexibility to implement systems that are well-adapted to their specific contexts (e.g. in terms of level of technology, available resources and capacity of users). The lack of universal standards has allowed for the proliferation of different systems, which are not necessarily inter-operable.

Traceability systems and the architecture of information technology that supports them should be tailored to particular supply chains and should take into account local communication infrastructures, technological capacities, physical conditions, internal systems, and business practices. Systems should be simple, user-friendly, cost-effective, inclusive, transparent, and robust. There is an urgent need to agree and implement traceability schemes to ensure that CITES trade measures are effective in combatting illegal trade, preventing corruption, and providing the solid legality and sustainability assurances increasingly expected by related businesses and consumers.

Based on the factors outlined above:

Our organizations encourage Parties attending CoP17 to accept the recommendations contained in Agenda Documents 45 and 56.1 to prevent the unsustainable and illegal trade in shark and ray products.

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