

What is the right approach to tackle the illegal consumption and trade of marine turtle products in Cape Verde?

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TABLE S1 Drivers and assumptions underlying wildlife trade interventions (TRAFFIC, 2008), and indicators used in this study to assess their success.

Drivers	Assumptions	Indicators
Laws & regulations	Imposition of restrictions & penalties reduces illegal trade	Proportional decrease in trade & consumption
Awareness	Consumer awareness campaigns reduce the volume of consumption	Level of harvest & consumption
	Increasing harvester/trader awareness reduces illegal trade	Attitude towards marine turtle conservation & protection Impact of awareness in behavioural change

TABLE S2 Demographic information about the interview respondents on Boa Vista (147 individuals from four villages and one city) and Santiago (291 individuals from six villages and one city).

Demographics	Boa Vista	Santiago
	No. (%)	No. (%)
Gender		
Male	113 (76.9)	214 (73.8)
Female	34 (23.1)	76 (26.2)
Age (years)		
15–25	36 (24.5)	44 (15.2)
26–35	51 (34.7)	121 (41.7)
36–45	33 (22.4)	50 (17.2)
46–55	18 (12.2)	48 (16.6)
55–65	7 (4.8)	19 (6.6)
> 65	2 (1.4)	6 (2.1)
Origin		
Boa Vista	49 (33.3)	0 (0)
Santiago	66 (44.98)	218 (75.2)
Other island	24 (16.3)	69 (23.8)
Other country	8 (5.4)	0 (0)
<i>Total (No.)</i>	147	291

TABLE S3 Value comparison of various marine turtle products, based on interview data. (χ^2 test of significance).

Marine turtle product	Island	Mean \pm SD	Range	Mode	No. of interviews	Statistical significance
Adult Turtle ¹	Boa Vista	10,000 \pm 4,000	5,000–20,000	10,000	17	*
	Santiago	12,000 \pm 4,000	4,000–20,000	10,000	96	
Juvenile turtle (Whole) ¹	Santiago	5,000 \pm 4,500	1,500–10,000		3	
Raw meat (kg) ²	Boa Vista	400 \pm 100	250–600	300	10	
	Santiago	400 \pm 100	200–600		11	
Penis (Whole) ¹ (Drink) ¹	Santiago	8,000 \pm 4,000	3,500–15,000		5	
		1,000 \pm 500	500–2,000	1,000	6	
Serving (Cooked) ²	Boa Vista	150 \pm 50	100–200	200	5	
	Santiago	150 \pm 50	50–300	200	70	

¹Values rounded to the nearest CVE 1,000; EUR 1 = CVE 110

²Values rounded to the nearest 100 CVE

TABLE S4 Responses to interview questions regarding (a) the perceived importance of marine turtles at an ecological and cultural level, (b) the use of marine turtles as an economic resource, and (c) the measures in place to protect and conserve marine turtles on Boa Vista and Santiago.

	Boa Vista			Santiago				
	No. of interviews	Response (%)			No. of interviews	Response (%)		
		Yes	No	No opinion		Yes	No	No opinion
Importance of marine turtles								
Do marine turtles play an important role in nature?	143	97.2	2.8		103	92.2	4.9	2.9
Are marine turtles important in the culture of this island?	142	93.7	6.3		102	80.4	12.7	6.9
Is it important for you that marine turtles don't go extinct?	142	99.3	0.7		103	89.3	7.8	2.9
Use of marine turtles as an economic resource								
Should marine turtles be used as a tourist attraction?	144	75.0	25.0		284	57.4	39.4	3.2
Should the consumption of marine turtle meat be allowed?	137	13.9	86.1		207	10.6	88.4	1.0
If the population is not declining, or is stable, should sustainable harvesting be permitted?	140	12.9	87.1		280	11.1	87.9	1.1
Should low-income residents ever be allowed to sell marine turtle products as an alternative source of income?	141	7.9	92.2		104	19.2	78.8	1.9
Marine turtle protection and conservation								
Should marine turtles be protected?	147	91.8	7.5	0.7	220	95.9	3.2	0.9
Should the government be more active in marine turtle protection?	139	94.2	5.8		280	50.0	48.9	1.1
c) Are the current laws effective in protecting the turtles?	114	49.1	50.9		102	68.6	26.5	4.9
d) Are people well informed?	132	68.2	31.8		282	69.9	28.7	1.4

SUPPLEMENTARY MATERIAL 1 Questionnaire regarding drivers of the illegal consumption and trade of marine turtle products in Cape Verde (Fig. 1).

Section 1: Demographic information

Target: All interviewees

- 1.1. Gender
- 1.2. Age
- 1.3. Origin (Country, and island if a native of Cape Verde)
- 1.4. Level of education (None/ Primary/ Secondary/ University)

Section 2: Economic background

Target: All interviewees

- 2.1. Occupation
- 2.2. Level of monthly income (Low, < CVE 50,000; Medium, CVE 51,000–150,000; High, CVE >150,000)

Section 3: Harvesting (direct and intentional captures)

Target: Fishers/Potential poachers

- 3.1. Have you ever harvested marine turtles? (Yes/No)

If not, or if activity has stopped:

- 3.1.1. What are the main reasons for not harvesting? (Awareness of conservation need/ Law/ Pity for the animal/ Religious beliefs/ Other)

If yes:

- 3.1.2. Do you still harvest marine turtles? (Yes/No)
- 3.1.3. What are/were the main uses of the harvested turtles? (Eat/ Sell/ Offer in the community)

- 3.1.3. Rank the importance of marine turtles as a source of income to the family, on a scale of 1–4. (1, Very important; 4, Little importance)
- 3.1.4. Where are/were turtles captured? (Sea/ Beach/ Both)
- 3.1.5. On which island(s) are/were turtles captured?
- 3.1.5. In which months are/were turtles captured? Which species?
- 3.1.6. How are/were turtles captured? (Opportunistically/ Intentionally/ Both)
- 3.1.7. What is the level of harvesting? (Low, < 3 turtles per year; Medium, 3–10 per year; High, > 10 per year)

Section 4: Sale and trade I

Target: Poachers, fishers, fish sellers

- 4.1. Have you ever sold harvested turtles, either whole or in parts? (Yes/No)

If yes:

- 4.1.1. If yes, what product did you sell?
- 4.1.2. Where and to whom did you sell the whole turtle?
- 4.1.3. Where and to whom did you sell the meat and other parts?
- 4.2. What are prices of the various turtle products? (Mean price in CVE per unit)
- 4.3. What factors affect the price?

Section 5: Sale and trade II

Target: Merchants, workers at places that can be used as entry or selling points (e.g. fish markets, docks or landing sites)

- 5.1. Is turtle meat currently available for sale in this establishment/area/neighbourhood? (Yes/No)

If yes:

- 5.2.1. Is the sale of turtle meat done openly? (Yes/No)
- 5.2.2. Is the sale of turtle meat controlled by the authorities? (Yes/No)

5.2.3. What species of marine turtles are sold here, and from which island do they come?

5.2.4. How is the price of the turtle meat determined?

Section 6: Consumption

Target: All interviewees

6.1. Have you ever consumed turtle meat? (Yes/No)

6.2.1. If not, why not? (Awareness of conservation need/Law/Pity for the animal/Religious beliefs/Lack of opportunity/Taste/Other)

6.2.2. If you still consume turtle meat, what is the main reason? (Culture/Taste/Medicinal properties/Tradition/Infinite resource/Other)

6.3. How can you get turtle meat in the village where you live?

6.4. Please give details of what you can buy, and for how much. (Mean price in CVE per unit)

6.5. From which island does the meat come?

6.6. Have you noticed any difference in the amount of turtle meat on offer in the last 7 years? (Increase/Decrease/None/Don't know)

6.6.1. What are the main reasons for this change?

6.7. Have you noticed any difference in the demand for marine turtles in the last 7 years? (Increase/Decrease/None/Don't know)

6.7.1. What are the main reasons for this change?

6.8. What are the current laws (if any) that protect marine turtles in Cape Verde?

6.8.1. Who breaks these laws, fishers or consumers?

6.9. Do you agree with the following statements? (Yes/No)

- a) Marine turtles must be protected.
- b) Marine turtles should be used as tourist attractions.
- c) The existing laws are being enforced properly.
- d) Some of the money generated by turtle tourism should be used for turtle conservation.
- e) Marine turtles should be used not only as tourist attractions but also as a source of food.
- f) Marine turtles have an important ecological role.

- g) The government should have a more active role in the protection of marine turtles.
- h) Local residents should be allowed to capture and consume marine turtles, if this does not affect turtle populations.
- i) It is important to preserve marine turtles for the future generations.