Appendix 3. Questionnaire

This appendix contains the questionnaire used to interview fishers in the three marine protected areas located on the Brazilian northeastern coast.

Questionnaire

Does the fisher consent to participate in the interview: (   ) Yes  (   ) No
(If no, cease the interview.)

Reserve: _________________________    Community: _________________________

Socioeconomic Aspects
1. Age: _________________________
2. Gender: (   ) Female    (   ) Male
3. Marital status: (   ) Single    (   ) Married    (   ) Widower    (   ) Separate/Divorced
4. Where are you from: (   ) Community    (   ) Another village    (   ) Outside the community
5. Which community, city, state: _________________________
6. How many years living in the community: _________________________
7. Profession of father: _________________________
8. Fishing time: _________________________
9. How long fishing community: _________________________
10. What do you do in the fishing activity: (Can select more than one option)
   (   ) Boat owners    (   ) Partner fisher    (   ) Employee fisher
   (   ) Boat conductor    (   ) Autonomous fisher    (   ) Other: ______
11. Do you have any own vessel?
   (   ) Motorized small boat    (   ) Canoe    (   ) Boat    (   ) Other:    ______
   (   ) Baitera (small boat)    (   ) Raft    (   ) Motorized boat
12. Which fishing gear do you use? (Can select more than one option)
   (   ) Trawl    (   ) Jereré (a hand net shaped like a funnel)    (   ) Dive
   (   ) Hook and line    (   ) Manzuá (semi-fixed bottom trap)    (   ) Flashlight
   (   ) Gillnet    (   ) Espinhel (hook and line trap)    (   ) Casting net
   (   ) Hand collecting    (   ) Seine nets    (   ) Others: ______

Indicator of Flexibility
13. Do you have others jobs: (   ) Yes    (   ) No    Which: _________________________
14. What is the most important activity as a source of income? _________________________
15. What is the most important activity as the power supply? _________________________
16. Financial contribution of each activity in family income (%): _________________________
17. How many people living in your home: _________________________
18. How many people fish in your home: _________________________
19. How many people work in your home and what work? _________________________
20. Do you want that your son to be fisherman? (   ) Yes    (   ) No    Why:    ______
21. Do you have own house? (   ) Yes    (   ) No
22. If the fish ran out and you could not to fish anymore, do you think that you could find a job in the community:
23. If the fish ran out and you could not to fish anymore, do you think you are young enough to get another job (apart from fishing) in the community:
   ( ) Yes ( ) No ( ) Maybe
   Why? ______________________

24. If the fish ran out and you could not to fish anymore, do you think you are more prone to adapt than other fishers?
   ( ) Yes ( ) No ( ) Maybe
   Why? ______________________

25. Would you like to work in another job (apart from fishing):
   ( ) Yes ( ) No ( ) Maybe
   Which? ____________________
   Why? ______________________

26. Do you have wife: ( ) Yes ( ) No

27. What is your wife’s educational level:
   ( ) Illiterate ( ) 1 - 3 years of school ( ) High school
   ( ) Only write your name ( ) Literate ( ) Graduate

28. How old is your wife: ______________________

29. Does she participate in the fishery: ( ) Yes ( ) No

30. How frequently does your wife participate in the fishery (daily/weekly/monthly): __

31. Does she have any additional work: ( ) Yes ( ) No

32. How many people are supported by the fisher (dependents): ________________

33. Which resources do you catch besides fish: ________________________________

34. When is the fishery is better and worse: ________________________________

35. Which resources are more utilized when the fishing is down: ________________

36. In the reserve, can you exploit everything or there is some rule about the use of resources:
   ( ) Yes ( ) No
   Which rule: ________________________________

37. Are there some marine resource that cannot be eaten in specific period of year:
   Which marine resource: ________________________________
   Which period of year: ________________________________
   Why it is prohibited: ______________________________________________________

**Indicator of Ability to organize**

38. Are there any community organizations or fishermen's associations:
   ( ) Yes ( ) No
   Which: ______________

39. Do you or someone from your family participate in these organizations:
   ( ) Yes ( ) No
   Which: ______________

40. How often do you take part:
   ( ) Once for week ( ) Once for month ( ) Once for year

41. Do your family take part in decision making processes in the community:
   ( ) Yes ( ) No
   Why? ______________________

42. How are you involved in this process? What do you do? ______________________

43. Is this active or passive participation? ( ) Active ( ) Passive

44. Do you think that you should invest in your fishery (e.g.: new gear or boats)?
   ( ) Yes ( ) No ( ) Maybe
   How? ______________________
   Why? _________________________________________________________________
   Other investment: ______________________________________________________

45. Do you have any plans for your financial security?
   ( ) Any trade ( ) Savings ( ) Other property for rent ( ) Others
   If others, which: ______________________________

Indicator of Ability to learn

46. School degree:
   ( ) Illiterate ( ) 1 - 3 years of school ( ) High school
   ( ) Only write your name ( ) Literate ( ) Graduate

47. Do you think that anything can affect the fish stock? What?
   ( ) Do not know ( ) Agrotoxics ( ) Industry ( ) Lack of inspection
   ( ) Water pollution ( ) Tourism ( ) Garbage ( ) Aquaculture
   ( ) Overfishing ( ) Outside fishers ( ) Crops ( ) Lack of public policies
   ( ) Predatory fishing ( ) Sewage ( ) Lack of fishery sector

Others: ____________________________

48. Could you do anything to decrease the fish stocks in the ocean? How?
   ( ) Fishing in reproductive period ( ) Fishing small fishes ( ) Polluting the ocean
   ( ) Fishing outside of community ( ) Fishing a lot ( ) Predatory fishing

Why? ____________________________

49. Could you do anything to increase the fish stocks in the ocean? What?

50. Do you know if there is an organization that implements environmental actions or has supervision over environmental actions in the community? Which?

51. Are there some environmental monitoring (about fishes, plants, wood, and others natural resources) in the community? Do you participate?
   ( ) There is, but I do not participate. ( ) There is, and I participate. ( ) Do not know.

52. How is the environmental monitoring done in the community? __________________________

53. Who does the environmental monitoring in the community? __________________________

54. Does the community help in environmental monitoring? __________________________

55. Would you like to have some involvement in creating environmental regulations?
   ( ) I would not like that.
   ( ) Only on fishery sector.
   ( ) Yes, but in other work besides fishery.

56. If you could not fish anymore, would you be willing to learn a new activity as a source of income?
   ( ) Yes ( ) No ( ) Maybe

Why? ____________________________

Indicator of Infrastructure

57. Are there other income generating activities in your community? ________________

58. Could you suggest any additional income generating activities to be implemented in the community?

59. Which building materials are used in the construction of your house:
   ( ) Brick and cement ( ) Wood ( ) Branches and straw ( ) Wood and mud

Floor: ___________________ Walls: ________________ Roof: ________________

60. Which infrastructure items do you have in your house:
   ( ) TV ( ) Home phone ( ) Microwave ( ) Satellite dish
   ( ) Freezer ( ) Mobile phone ( ) Wash machine ( ) Motorcycle
   ( ) Refrigerator ( ) VCR ( ) Stove ( ) Air conditioning
   ( ) Car ( ) DVD ( ) Blender ( ) Stereo
   ( ) Bike ( ) Cable TV ( ) Ventilator ( ) Computer
61. How do you describe the house of a wealthy person:
   ( □ ) TV       ( □ ) Home phone ( □ ) Microwave ( □ ) Satellite dish
   ( □ ) Freezer ( □ ) Mobile phone ( □ ) Wash machine ( □ ) Motorcycle
   ( □ ) Refrigerator ( □ ) VCR ( □ ) Stove ( □ ) Air conditioning
   ( □ ) Car       ( □ ) DVD ( □ ) Blender ( □ ) Stereo
   ( □ ) Bike       ( □ ) Cable TV ( □ ) Ventilator ( □ ) Computer

62. How do you describe the house of a poor person:
   ( □ ) TV       ( □ ) Home phone ( □ ) Microwave ( □ ) Satellite dish
   ( □ ) Freezer ( □ ) Mobile phone ( □ ) Wash machine ( □ ) Motorcycle
   ( □ ) Refrigerator ( □ ) VCR ( □ ) Stove ( □ ) Air conditioning
   ( □ ) Car       ( □ ) DVD ( □ ) Blender ( □ ) Stereo
   ( □ ) Bike       ( □ ) Cable TV ( □ ) Ventilator ( □ ) Computer

63. Which infrastructure basic have in your community:
   ( □ ) Schools ( □ ) Hotels ( □ ) Sewage collection and treatment ( □ ) Pharmacies
   ( □ ) Access roads ( □ ) Security service ( □ ) Electrical services ( □ ) Food markets
   ( □ ) Post office service ( □ ) Health centers

Ecological Aspects

<table>
<thead>
<tr>
<th>Fishing gear</th>
<th>Species</th>
<th>Preferred Species</th>
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64. How long during your fishery (summer/winter)? _______________ _______________

65. How much do you catch (daily/weekly/monthly)? ____________________________

About the implementation and management of the reserve:

66. Do you agree with the implementation?
   ( □ ) Yes       ( □ ) No       Why? ____________________________

67. Do you think that fishing was better before or after the implementation?
   ( □ ) Before ( □ ) After    Why? ____________________________

68. Do you wish to remain in the reserve?
   ( □ ) Yes       ( □ ) No       ( □ ) Maybe    Why? ____________________________

69. Do you know any management rules?
   ( □ ) Yes       ( □ ) No       Which? ____________________________

70. Are these management rules revised?
   ( □ ) Yes       ( □ ) No       ( □ ) Do not know

71. When these management rules are revised?
   ( □ ) Every year ( □ ) Requested by community ( □ ) Only with government change

72. What changes have happened in the management rules? ______________________

73. Why were the management rules changed? ________________________________

74. Who changed the management rules? ________________________________