

### 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 ( ) *Jeréré* (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: \_\_\_\_\_

- ( )Yes ( )No ( )Maybe Why? \_\_\_\_\_
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  
 Banking access             Phone services             Health centers

### Ecological Aspects

Fishing gear	Species	Preferred Species

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? \_\_\_\_\_