

Cooperation in the face of thresholds, risk, and uncertainty

S1 File

Appendix 1. Game instructions

Normal text: read out loud to the participants
<Italics: Actions to take by experimenters and assistants>
“——” means: take a short break while talking
Something underlined needs to be emphasized

Welcome and thank you for coming and participating in this activity! You have been invited to participate in this activity as part of a study about natural resource management. In this study, the participation of people like you is very important, because of your work and daily experience managing fishing resources. We are a group of researcher from the Beijer Institute of Ecological Economics and Magdalena University. My name is Juan Carlos Rocha and all members of our team have their name written on their nametag. Thanks to your participation we all can learn from this study. During this activity, we will play a decisions game. And after the game, we will interview each of you. In total, the whole activity will take approximately 3 hours of your time.

As announced earlier, you will receive a minimum of \$15.000 pesos by taking part in this activity. This means, no matter the result of the game, you will receive \$15.000 Pesos. Depending on the decisions you make in the game, you can earn extra money. You will receive the money at the end of the activity – after you have been interviewed – and paid in private.

You might ask: Why do we use money? – We do NOT see the money you earn as a payment for taking part in this activity, nor the reason for you to be here. — We use money because the exercise requires that you make decisions that have economic consequences. It is to make the game realistic. Please note that if you have participated in any other economic game in the past, the game we will play today is completely different.

Before we start, we would like you to sign a consent form. – The consent form is a payment authorization that states that you are here voluntarily. Next, I will read the consent form out loud in case anyone forgot his/her glasses or have difficulties reading. <read consent form>. In summary, the consent form states that you are here voluntarily. Please note that the consent form is also an agreement between you and us that you will participate in the whole activity. If you or one of the members of your group leaves before the end, neither you or your group members can finalize the activity and – therefore – won't receive any money. Please sing up the consent form now and the assistants will pass collecting them.

Explain common access to a fishing ground

In this game, we want you to imagine that you – as a group – have common access to a fishing ground.

<Point to the bowl on the table in front of them with something in that represents fish>

Although in reality it is impossible to know exactly how much fish there is in a given fishing ground – in this game, we ask you to pretend that we can know exactly how much fish there is. We also assume that there is only one fish species in the fishing ground. And each of you can catch this fish from this common fishing ground.

34 **Explaining decision-making**

35 The game has two stages, each stage will last several rounds, and in each round you will take an individual decision of
36 how much fish to catch. We will take care that the other members of your group wont see your decisions. This means
37 that you can talk about whatever you want, even about how much you want to fish.

38 *<Introduce and show the decision cards. Explain what to write where on the card. Show them the decision cards and
39 explain: >*

40 Each round in the game is equivalent to a day of fishing. On the left column “Individual fish catch” *<point it out>*
41 you indicate how much fish you want to catch. Our assistants are here to help you if you need it, in case you
42 have difficulties writing, reading, or if you have any questions about the game. In each round you can chose
43 the amount of fish available or not fish at all, which is zero. Bear in mind that your decision affect your individual
44 benefits as well as the benefits of the community.

45 For each fish you catch, you get 500 Pesos. So – for example – if you catch 10 fish, you will earn $10 * 500 = 5.000$
46 Pesos. (Additional to the 15.000 Pesos you already earned by participating in this activity). You can track your individual
47 earnings on the second column of your decision card coloured in gray *<point it out>*. We will give you calculators and
48 if you need any help please do not hesitate on contact any of our assistants to help you out with the accounting.

49 Once you have made your decision, we will collect your decision cards at the end of each round. – Please close your
50 decision card when you hand it out to the assistant. We will help you to keep the privacy of your decisions and your
51 group partners.

52 Once we have collected your decision cards, we will calculate how much fish there will be available for your group in
53 the next round and then inform you about it by telling you and by writing it here *<point it out>* on the board.

54 Apart from your decisions of you and your group members on how much to fish in each round, the fish stock is also
55 affected by reproduction.

56 **Explain that the fish stock replenishes depending on the stock size**

57 Now I will explain how the fish stock reproduces, using the illustration here *<textitpoint to illustration with the fish>* . The
58 fish stock grows (or not) between each round of the game. How much the fish stock grows depends on how much fish
59 there is – it is the population size or fish bank. We start with 50 fish in the first round. And you see here that...

60 *<Walk them though the illustration.>*

61 – If there are 46-50 fish, there is no fish population growth. The fish stock available is in that case in fact the same in
62 the next round. *<If participants ask why, answer: there is too high competition for food. They are too many in relation
63 to the size of the fishing ground.>*

64 – If there is 35-45 fish, there will be 5 more fish in the next round. *<If participants ask why, answer: there is some
65 competition for food, as they are so many in relation to the size of the fishing ground. This results in that the fish stock
66 does not grow as much as between 24 and 34>*

67 – If there is 20-34 fish, there will be 10 more fish in the next round. *<If participants ask why, answer: There is enough
68 fish so that they can find mating partners and not too much fish so they do not have to compete for food and space>*

69 – If there is 5-19 fish, there will be 5 more fish in the next round. *<If participants ask why, answer: There is very little
70 fish so to find mating partners is difficult>*

71 – If there is less than 5 fish, the fish stock doesn't grow either (as for stock size between 46-50). *<If participants ask
72 why, answer: there is too little fish so they cannot find mating partners>*

73 As I said before, this game lasts several rounds and has two stages. We will tell you when the first stage fin-
74 ishes and explain what happen on the second stage. – We will not tell you the exact number of rounds that you
75 will play in each stage. However, you know that we will play a maximum of 2 hours. – Remember: if there is
76 no more fish, the game stage ends and you will not earn any more money. As far as there is fish stock to fish,
77 the game stage continues and you will be able to make some money. Also remember: your decisions affect your
78 individual earnings but also affect the benefits of the group with whom you share the fish stock.

79 Do you have any questions so far before we go through an example?

80 *<If someone asks about how to share a harvest that is larger than the stock, answer: we will share proportionally
81 according to your catch claim>*

82 Examples

83 *<Use the bowl on the table for it, i.e., take out and put in fish accordingly when describing the example. Also actively
84 engage the participants in the example, i.e., ask them about what they think the reproduction is in the given examples>*

85 There are 50 fish in the beginning of the game. Now - let's say - you catch together in the first round 12 fish (for example:
86 you take 4, you 3, you also take 3 and you 2). *<take 12 fish out of the bowl>* So now there are then 38 fish remaining,
87 that is 50 fish minus 12. Now we can check here on the board *<point to illustration>* the reproduction of a fish stock with
88 size 38. How much do you think fish will reproduce? *<ask the participants>* - Yes! Exactly, it is 5 more. *<add the five
89 fish>* So in the next round the fish stock will be then 43 fish (50 – 12 + 5) and this number we will then communicate to
90 you out loud and write up here *<point to where the stock size is displayed for each round>*.

91 Let's do another example... So now there is 43 fish in the bowl *<Ask a fishermen to be the assistant>*. If you then catch
92 13 fish in total *<take out 13 fish>*, there are then 30 fish left and the stock will then grow with how much more fish for
93 next round? *<ask participants>* Exactly! 10 fish more. *<add the 10 fish>* so then at the beginning of the next round you
94 would start with 40 fish.

95 If your group catch is in any round bigger than the available catch, the game stage ends, as there is no more fish to
96 catch. In that case, the share of fish will be divided proportionally.

97 *<Example if they ask: For example, if there is only 10 fish on the fishing ground but your collective catch is 100 fish
98 (let's say 30, 20, 30, 20), the remaining 10 fishes will be divided proportionally to your intended catch. So if you
99 intended to take 30 out of 100 as a group (30%), then you get 30% of the actually fish available, this is 3>*

100 – So now you know how to indicate your catch decisions on your decision card in each round or fishing day – and you
101 also know how to calculate the size of the fish stock for the next round: you subtract the sum of your individual catch
102 decisions from the current fish stock and then you add reproduction accordingly. Remember, we do the calculations
103 for you but we also want you to understand how it works. Any questions so far?

104 Now let's get to the third column on the decision card. The first and second column correspond to individual fishing and
105 earnings *<point them out>*. We want you to note down there what you think the size of the fish stock will be in the next
106 round – what you think we will write on the board to start the next round. You decide how much to fish in each round,
107 make your accounting of individual earnings or ask an assistant to help you with the accounting, and also speculate
108 about what will happen with the stock size for next round. Then we also make the accounting and communicate
109 publically what happen with the collective resource but we wont reveal who fished what, only what happen at the level
110 of the group. Thus, you can compare what you expected to happen (the third column) with what it really happens (the
111 public table with the fish stock state).

112 Communication

113 ... throughout the whole game and from the very beginning, you are allowed to talk to each other. This means that you
114 can talk about whatever you want, about your decisions, about the rules of the game, strategies and even how much
115 you want to fish. You cannot make any threats or arrangements for side-payments during or after this activity. You have
116 two minutes in between rounds to discuss with other members of your group how much you want to fish, after the two
117 minutes you can write your individual decision. We keep the account of time and will inform you when you need to hand
118 out your decision cards.

119 Do you have any questions? — Please also remember, – in case you have any questions during the game, please
120 don't hesitate on asking any of us. We will clarify your doubts.

121 **Group division**

122 You will now be divided into groups of 4 people.

123 *<Make group division. Ask assistants to distribute the player number tags. Each subject randomly picks a name tag,
124 which tells which group (color assigned) he will be assigned to and which number (1-4) he is in that group. So, for
125 example, if we have three groups playing at the same time we could have something like Blue (1,2,3,4); Green
126 (1,2,3,4) and Yellow (1,2,3,4). Keep in mind that people from the same household (e.g., siblings, cousins) or close
127 friends should participate in different groups if possible>*

128 Now that the groups are formed, could you please raise your hand if any member of your household or close friend is
129 on the same group as you?

130 *<From now on each group works with their own experimental leader. Each leader summarizes the rules of the game
131 before starting the practice rounds>*

132

133 On a different room:

134 Good morning / afternoon. My name is *<your name here>* and our assistant is *<assistant name>* and we will guide you
135 throughout the game. Now you are a group of 4 fishermen who share the same fishing ground with 50 fish. In front of
136 you, you will find a folder with your decision cards, calculators and a pen. If you need help writing or keeping the count,
137 please let us know, our assistant and me are here to help you.

138 **Practice rounds**

139 Before we start the first stage of the game we are going to do some practice rounds to make sure we all have understood
140 the instructions. Please note: you do not earn any money during the practice rounds. During the practice rounds we
141 do not reveal who took what, only what "someone took" and we will do the calculation of the stock size openly together
142 so that everyone can follow it. Now you have two minutes that you can use to discuss your decisions, after that time
143 you must write your decision and we will gather the decision folders.

144 *<We pick up the decision cards and bring them to Caroline. She will return a paper with the individual catch on a
145 random order so you can read it publically. Use the bowl with the fake fish on the table, i.e., take out fish and then add
146 fish to the bowl accordingly>*

147 Okay, during this practice some one caught *<take out fish from the bowl as you read>*, another person caught..., the
148 third person... and the last one.... *<make sure to count how many fish is left in the bowl afterwards with the fishermen>*.
149 Therefore, the fish stock is left with **XX** fish. So, how many fish will reproduce for the next round?

150 *<Let them answer. Once they had calculated the new stock size write it down on the poster in front of round P1
151 (practice round 1). Repeat the practice round 2 or 3 times and make sure everyone has understood the dynamics of
152 the game>*

153 Any questions?

154 If not, let's start the first stage of the game. – This means that from now on you will earn some money according to the decisions you make

155 In case you listen to other groups playing, you should know that what happens in other groups is not related to what
156 happen in our group game. Maybe they finish earlier, but that does not mean that the game you are participating will
157 also end. Before we start the first stage of the game for real, here is a short summary of the rules of the game:

- 158 • The four of you share together a fishing ground.
- 159 • In each round, you will take an individual and private decision of how many fish to catch. You can choose to fish
160 as much fish as there is available or not fishing at all (zero). For each fish you capture you earn 500 pesos. You
161 will also guess how many fish will be left in the stock for the next round.
- 162 • Your decisions affect your individual earnings but also the resource of the community.
- 163 • As long as there is fish left, this stage of the game continues and you can keep earning money.
- 164 • If the resource collapses, this stage of the game ends.
- 165 • We do not tell you how many rounds you will play.
- 166 • The fish reproduction depends on how much fish there is left on the fish stock *<point to illustration and remind
167 them of the tables they got>*
- 168 • You are not allowed to show each other what you write down on your decision cards.
- 169 • Remember, you are allowed to talk in the game. This means you can talk about whatever you want even of how
170 much you want to fish for a maximum of 2 minutes time between rounds. After the 2 minutes, you need to write
171 down your decision.

172 Do you have any questions?

173 — end of practice rounds, start of the game —

174 The fish stock starts with 50 fish, now you have two minutes that you could use to discuss your decisions. After that
175 time you need to write your decision and we will pick up the decision folders.

176 *<After each round you announce the new stock size>*

177 The new stock size is [...]

178 *<The group assistant adjust the stock size in the bowl accordingly – Bear in mind that you only need to update the stock
179 size, do not reveal the individual catch when you put or add fish tokens>*

180 *<Example if they ask: For example, if there is only 10 fish on the fishing ground but your collective catch is 100 fish (let's
181 say 30, 20, 30, 20), the remaining 10 fishes will be divided proportionally to your intended catch. So if you intended to
182 take 30 out of 100 as a group (30%), then you get 30% of the actually fish available, this is 3>*

183

184 Introducing the treatments

185 Threshold treatment

186 *<after 6 rounds>*

187 Now we are going to play the second stage of the game. In this round, we want to inform you about the new stock
188 size, which is [...<write down the stock size for next round>]. We also want to inform you that a climate event – with
189 long lasting and negative consequences for the fishing ground you manage in common might occur.

190 The climate event will affect the fish reproduction rate, it will decrease below fish stock size of 28 fish. As you can
191 see here <point out the new illustration with threshold dynamics>, the reproduction will only be of a fish for stock size
192 between 2 and 27 fish. For any other stock size, the reproduction rate will be the same, between 28-34 it will be 10
193 fish, between 35-45 it will be 5 fish, as you can see here<point out>. The stock size between 0-4 and between 45-50
194 wont reproduce extra fish.

195 Thus, the climate event brings an abrupt reduction on the fish growth if the population size is 28 fish or less. <if
196 participants ask why: the climate event can reduce rain showers, increase water temperature and the risk of droughts.
197 These events impact nutrient availability for fish and the fish reproduction as well as other species in the ecosystem on
198 which fish depends>

199 The assistant will hand out a new table showing the relationship between population size and the reproduction after the
200 climate event <hand out>. From this round on and to the end of the game the climate event occurs and it affects the
201 resource's reproduction.

202 With this new information, we will also reestablish the population size back to 50 fish <here please strikethrough the
203 number of fish left last round of the first stage and clarify that the stock size starts again with 50 fish>, just as the
204 beginning of the game. All other rules remain the same:

- 205 • The four of you share together a fishing ground.
- 206 • In each round, you will take an individual and private decision of how many fish to catch. You can choose to fish
207 as much fish as there is available or not fishing at all (zero). For each fish you capture you earn 500 pesos. You
208 will also guess how many fish will be left in the stock for the next round.
- 209 • Your decisions affect your individual earnings but also the resource of the community.
- 210 • As long as there is fish left, this stage of the game continues and you can keep earning money. If the resource
211 collapses, this stage of the game ends.
- 212 • We do not tell you how many rounds you will play.
- 213 • The fish reproduction depends on how much fish there is left on the fish stock and if the climate event occurs or
214 not <point to illustration and remind them of the tables they got>
- 215 • You are not allowed to show each other what you write down on your decision cards.
- 216 • Remember, you are allowed to talk in the game. This means you can talk about whatever you want even of how
217 much you want to fish for a maximum of 2 minutes time between rounds. After the 2 minutes, you need to write
218 down your decision.

219 The only difference is that – a climate event did happen and from now on the resource reproduction is lower if the
220 population size is below 28 fish.

221 Any questions?

222 If not, let's keep playing. The fishing ground restarts with 50 fish, now you have 2 minutes that you could use to discuss
223 your decisions. After that time you need to write your decision and we will pick up the decision folders.

224 **Uncertainty treatment**

225 <after 6 rounds>

226 Now we are going to play the second stage of the game. In this round, we want to inform you about the new stock
227 size, which is [...<write down the stock size for next round>]. We also want to inform you that a climate event – with
228 long lasting and negative consequences for the fishing ground you manage in common might occur.

229 These kinds of climate events are highly unpredictable. This means that you do not know whether and when this event
230 will happen. It could happen in the next round, in four rounds, – or never...

231 In case the event does happen, – the reproduction of fish will reduce below a stock size of 28, – as you can see here <put
232 up visualization of threshold stock dynamics> reproduction will be only 1 for stock sizes between 2-27. Reproduction
233 stays the same for stock sizes between 28 and 34 (it will be 10) and between 35 and 45 (it will be 5), as you can see
234 here <point to it>. And for stock sizes between 0-4 and 45-50, do not reproduce.

235 Thus, the climate event brings an abrupt reduction on the fish growth if the population size is 28 fish or less. <if
236 participants ask why: the climate event can reduce rain showers, increase water temperature and the risk of droughts.
237 These events impact nutrient availability for fish and the fish reproduction as well as other species in the ecosystem on
238 which fish depends>

239 The assistant will hand out a new table showing the relationship between population size and the reproduction after the
240 climate event <hand out>.

241 We also do not know whether and when this event might happen. I will now tell you how we will determine in which
242 round the event will happen:

243 We have here two bowls – one with 5 green and the other one with 5 red <point out> balls in it. The red ball represents
244 the climate event, the green one means nothing changes – reproduction stays the same. We will now take 1 white and
245 1 red balls <mix in the third non-transparent urn> and then [name of person] will take out 8 of the remaining balls from
246 this bowl, in which we mixed the remaining green and red balls. However, (s)he will do this under the cover of a cloth –
247 so we all won't know the amount of white and red balls among the four balls that (s)he picks. <hold a cloth over both
248 urns so that everyone can see that (s)he takes out balls and also how many but neither we nor the participants can see
249 the color>. So now we have here an urn with 10 balls with 1 white, 1 red and 8 balls of which color is uncertain both
250 for you and us.

251 At the beginning of each new round – before you make your decisions – from now on, [assistant name] will draw a ball
252 – but without any of you seeing the color of the ball (s)he draws – If (s)he draws a green ball, nothing will change in that
253 round. But if (s)he will draw the red ball, the climate event will happen. This means we would then calculate the stock
254 size according to the new relation between stock size and reproduction <point to the table again>.

255 As I mentioned before, the event is long lasting. This means, once we drew a red ball, the new relation between stock
256 size and reproduction will apply until the end of the game. Please note, however, that regardless whether we draw a
257 red ball or not, we will continue drawing. Remember – the occurrence of the event is unpredictable and we also do not
258 know whether and when it will happen.

259 With the introduction of this information, we will also reset the stock size to 50 <here please strikethrough the number
260 of fish left last round of the first stage and clarify that the stock size starts again with 50 fish>, like in the beginning of
261 the game. All other rules remain exactly the same:

- 262 • The four of you share together a fishing ground.
- 263 • In each round, you will take an individual and private decision of how many fish to catch.
- 264 • You can choose to fish as much fish as there is available or not fishing at all (zero). For each fish you capture
265 you earn 500 pesos. You will also guess how many fish will be left in the stock for the next round.
- 266 • Your decisions affect your individual earnings but also the resource of the community.

- 267 • As long as there is fish left, this stage of the game continues and you can keep earning money. If the resource
268 collapses, this stage of the game ends.
- 269 • We do not tell you how many rounds you will play.
- 270 • The fish reproduction depends on how much fish there is left on the fish stock and if the climate event occurs or
271 not *<point to illustration and remind them of the tables they got>*
- 272 • You are not allowed to show each other what you write down on your decision cards.
- 273 • Remember, you are allowed to talk in the game. This means you can talk about whatever you want even of how
274 much you want to fish for a maximum of 2 minutes time between rounds. After the 2 minutes, you need to write
275 down your decision.

276 The only difference is that – a climate event could happen in the following rounds.

277 Do you have any questions?

278 If not, let's keep playing. The fishing ground restarts with 50 fish, now you have 2 minutes that you could use to discuss
279 your decisions. After that time you need to write your decision and we will pick up the decision folders.

280 *<Example if they ask: For example, if there is only 10 fish on the fishing ground but your collective catch is 100 fish (let's
281 say 30, 20, 30, 20), the remaining 10 fishes will be divided proportionally to your intended catch. So if you intended to
282 take 30 out of 100 as a group (30%), then you get 30% of the actually fish available, this is 3>*

283 Risk treatment

284 *<after 6 rounds>*

285 Now we are going to play the second stage of the game. In this round, we want to inform you about the new stock
286 size, which is [...] *<write down the stock size for next round>*. We also want to inform you that a climate event – with
287 long lasting and negative consequences for the fishing ground you manage in common can occur.

288 These kinds of climate events are highly unpredictable. This means that you do not know whether and when this event
289 will happen. It could happen in the next round, in four rounds, – or never...

290 In case the event does happen, – the reproduction of fish will reduce below a stock size of 28 fish, – as you can
291 see here *<put up visualization of threshold stock dynamics>* reproduction will be only 1 for stock sizes between 2-27.
292 Reproduction stays the same for stock sizes between 28 and 34 (it will be 10) and between 35 and 45 (it will be 5), as
293 you can see here . And for stock sizes between 0-4 and 45-50, do not reproduce.

294 Thus, the climate event brings an abrupt reduction on the fish growth if the population size is 28 fish or less. *<if
295 participants ask why: the climate event can reduce rain showers, increase water temperature and the risk of droughts.
296 These events impact nutrient availability for fish and the fish reproduction as well as other species in the ecosystem on
297 which fish depends>*

298 The assistant will hand out a new table showing the relationship between population size and the reproduction after the
299 climate event *<hand out>*.

300 We also do not know whether and when this event might happen. I will now tell you how we will determine in which
301 round the event will happen:

302 We have here two bowls – one with 5 green and the other one with 5 red *<point out>* balls in it. The red ball represents
303 the climate event, the green one means nothing changes – reproduction stays the same. *[Name of person]* will take
304 the 10 balls (5 green and 5 red) and mix them on the bowl. At the beginning of each new round – before you make your
305 decisions – from now on, *[assistant name]* will draw a ball – but without any of you seeing the color of the ball (s)he

306 draws – If (s)he draws a green ball, nothing will change in that round. But if (s)he will draw the red ball, the climate
307 event will happen. This means we would then calculate the stock size according to the new relation between stock size
308 and reproduction *<point to the table again>*.

309 As I mentioned before, the event is long lasting. This means, once we drew a red ball, the new relation between stock
310 size and reproduction will apply until the end of the game. Please note, however, that regardless whether we draw a
311 red ball or not, we will continue drawing. Remember – the occurrence of the event is unpredictable and we also do not
312 know whether and when it will happen. But we both know the probability is 50-50.

313 With this new information, we will also reset the stock size to 50 *<here please strikethrough the number of fish left last
314 round of the first stage and clarify that the stock size starts again with 50 fish>*, like in the beginning of the game. All
315 other rules remain exactly the same:

- 316 • The four of you share together a fishing ground.
- 317 • In each round, you will take an individual and private decision of how many fish to catch. You can choose to fish
318 as much fish as there is available or not fishing at all (zero). For each fish you capture you earn 500 pesos. You
319 will also guess how many fish will be left in the stock for the next round.
- 320 • Your decisions affect your individual earnings but also the resource of the community.
- 321 • As long as there is fish left, this stage of the game continues and you can keep earning money. If the resource
322 collapses, this stage of the game ends.
- 323 • We do not tell you how many rounds you will play.
- 324 • The fish reproduction depends on how much fish there is left on the fish stock and if the climate event occurs or
325 not *<point to illustration and remind them of the tables they got>*
- 326 • You are not allowed to show each other what you write down on your decision cards.
- 327 • Remember, you are allowed to talk in the game. This means you can talk about whatever you want even of how
328 much you want to fish for a maximum of 2 minutes time between rounds. After the 2 minutes, you need to write
329 down your decision.

330 The only difference is that – a climate event could happen in the following rounds.

331 Do you have any questions?

332 If not, let's keep playing. The fishing ground restarts with 50 fish, now you have 2 minutes that you could use to discuss
333 your decisions. After that time you need to write your decision and we will pick up the decision folders.

334 *<Example if they ask: For example, if there is only 10 fish on the fishing ground but your collective catch is 100 fish (let's
335 say 30, 20, 30, 20), the remaining 10 fishes will be divided proportionally to your intended catch. So if you intended to
336 take 30 out of 100 as a group (30%), then you get 30% of the actually fish available, this is 3>*

337 **Base line**

338 *<after 6 rounds>*

339 Now we are going to play the second stage of the game. In this round, we want to inform you about the new stock size,
340 which is [...] *<write down the stock size for next round>*. We also want to inform you that this has been a really good
341 year and the fish stock recover more than normal. The stock size is 50 fish *<here please strikethrough the number of
342 fish left last round of the first stage and clarify that the stock size starts again with 50 fish>*, like in the beginning of the
343 game. All other rules remain exactly the same:

- 344 • The four of you share together a fishing ground.
- 345 • In each round, you will take an individual and private decision of how many fish to catch. You can choose to fish
- 346 as much fish as there is available or not fishing at all (zero). For each fish you capture you earn 500 pesos. You
- 347 will also guess how many fish will be left in the stock for the next round.
- 348 • Your decisions affect your individual earnings but also the resource of the community.
- 349 • As long as there is fish left, this stage of the game continues and you can keep earning money. If the resource
- 350 collapses, this stage of the game ends.
- 351 • We do not tell you how many rounds you will play.
- 352 • The fish reproduction depends on how much fish there is left on the fish stock *<point to illustration and remind*
- 353 *them of the tables they got>*
- 354 • You are not allowed to show each other what you write down on your decision cards.
- 355 • Remember, you are allowed to talk in the game. This means you can talk about whatever you want even of how
- 356 much you want to fish for a maximum of 2 minutes time between rounds. After the 2 minutes, you need to write
- 357 down your decision.

358 The only difference is that – a positive event made that the stock size grew more than normal and we start with 50 fish
359 again.

360 Do you have any questions? If not, let's keep playing. The fishing ground restarts with 50 fish, now you have 2 minutes
361 that you could use to discuss your decisions. After that time you need to write your decision and we will pick up the
362 decision folders.

363 *<Example if they ask: For example, if there is only 10 fish on the fishing ground but your collective catch is 100 fish (let's*
364 *say 30, 20, 30, 20), the remaining 10 fishes will be divided proportionally to your intended catch. So if you intended to*
365 *take 30 out of 100 as a group (30%), then you get 30% of the actually fish available, this is 3>*

366 **Appendix 2. Questionnaire**

Information for surveyers:
*<Text in italics should not be read outloud, it is recommendations
 about how to ask or how to guide the fisher in certain questions>*
 “——” means: take a short break while talking
Something underlined needs to be emphasized

Place:	Date:	Interviewer:	Participant no:
		Group color:	Time:

369 We remind you that the same as your decisions in the experiment, the information of this survey is completely confi-
370 dential (besides the researchers, no one else will have access to your answers) and the data is for only for research
371 purposes.

372 *<First introduce yourself and ask the interviewee name to make the exercise more personal>*

- 373 1. What is your name? _____
- 374 2. How satisfied are you with your life?
- 375 Very satisfied (1) Satisfied (2) Disatisfied (3) Very disatisfied (4)

376 **Questions about the game:**

377 Now we will start with some questions related to the game you participated on:

378 3. Have you participated before in an economic game? Yes ___ (1) No ___ (0)

379 4. In the game we did just now - - was someone in your group you usually go out fishing with? Yes ___ (1) No ___ (0)

380 5. Were you surprised when the game finished? Yes ___ (1) No ___ (0)

381 6. *<If yes>* How many more rounds did you expect that you would played?

382 No more rounds ___ less than 5 rounds ___ more than 5 rounds ___

383 6.1. Any other comments about the game? *<Capture any relevant experience that the participant wants to share*
384 *about the game>* _____

385 **Description of fishing activities**

386 7. How old were you when you started fishing? ___

387 8. Have you been fishing ever since *<repeat year or age from question above>* (for most of the time)? Yes ___ (1)
388 No ___ (0)

389 9. Have you been fishing here *<community name>* ever since (or at least mos of the time) you started fishing? Yes
390 ___ (1) No ___ (0)

391 10. *<If not>* Where have you fished before? _____

392 11. During the last 12 months, were there any months when you did not fish? Yes ___ (1) No ___ (0)

393 12. *<If yes>* In whcih months did you not fish?

394 Jan___ Feb___ Mar___ Apr___ May___ Jun___ Jul___ Aug___ Sep___ Oct___ Nov___ Dec___

395 13. What do you do in the months you are not fishing? _____

396 In the months you fish...

397

398 14. How many days do you go fishing in a normal week? ___

399 15. How many hours do you fish on an average day? ___

400 16. How much fish (in Kg) and how much money (in pesos) do you make at the end of normal, a good and a bad day?

401

402 a) Normal day: ___ Kg ___ pesos

403

404 b) Good day: ___ Kg ___ pesos

405

406 c) Bad day: ___ Kg ___ pesos

407

408 17. In the case of a bad day with no catch or earnings at all, how often does that happen?

409 Once a year ___ Once a month ___ Once a week ___ Several times a week ___

410 **Fishing styles and gears**

411 Now let's talk about how you go fishing...

412 18. Do you at times fish with other people? Yes __ (1) No __ (0)

413 18.1. <If yes> How often do you fish with others?

414 Rarely __ Half of the times __ Most of the time __ Always __

415 18.2. How many is the crew? __

416 18.3. Is it always the same crew? Yes __ (1) No __ (0)

417 18.4. <If yes> Who in the crew decide when to go fishin? Me __ Other person __ [If so, who? _____]

418 19. Do you use a boat or a vessel? Yes __ (1) No __ (0)

419 19.1. <If yes> Are you the captain? Yes __ (1) No __ (0)

420 19.2 <If yes> Do you own the boat? Yes __ (1) No __ (0)

421 20. Do you always go to the same fishing place? Yes __ (1) No __ (0)

422 21. <If yes> Where do you go? _____

423 22. What are the most important species you fish over the year? How do you capture them? What is the one you
424 fish the most? Which one leaves better profits?

425

22.1 What are the species you fish the most?	22.2 What arts do you use?	22.3 From what do you fish them?	22.4 From 1-4, which do you fish the most (Kg)	22.5 From 1-4, which leaves better profits (pesos)
426				

427 22.6 Is the fishing art that you uses the most own by yourself? Yes __ (1) No __ (0)

428 **Decision-making**

429 How much of your share of the daily catch...

430 23. ... do you consume yourself (your household including what you eat right away and what you keep for storing)

431 None __ Some __ Half __ More than half __ All __

432 24. How much do you sell?

433 None __ Some __ Half __ More than half __ All __

434 24.1 Who do you sell to? _____

435 25. How much do you give away? (e.g. neighbours, friends)

436 None __ Some __ Half __ More than half __ All __

437 **Future**

438 26. Do you think you will continue being a fisher, let's say, in the next 10 years?

439 Absolutely yes __ Yes __ Absolutely no __ No __ I do not know/no opinion __

- 440 27. <If no> Why? _____
- 441 28. Do you think your children would like to become fishers in the future?
- 442 Absolutely yes ___ Yes ___ Absolutely no ___ No ___ I do not know/no opinion ___
- 443 29. <If no> Why? _____

444 **Changes in fish abundance, shocks, knowledge and attitudes**

- 445 30. Have you been landing the same types of species since you started fishing here <name of place>? Yes ___ No ___
- 446 _____
- 447 31. <If no> How did it change? _____
- 448 32. Is there a certain type of species that you cannot get enough of today in comparison to the past? Yes ___ No ___
- 449 33. <If yes> Which ones? _____
- 450 34. Have you ever experienced a sudden (more dramatic) change in fish abundance? This would be something more dramatic than a seasonal variation, where you really noticed that a particular species seems to have disappeared for a longer time period. Yes ___ No ___
- 451
- 452
- 453 35. <If yes> Please describe how did you noticed that change: what has happened? (which species disappeared, for example), when that was (approx. year) and for how long or ongoing, what you think caused the change:
- 454

455

35.1 What happened? (which fish species)	35.2 When?	35.3 For how long? still ongoing?	35.4 Causes?	35.5 How did it affect you? what was your reaction (e.g. change gear, fishing spots?)

457 <Possible causes include: over fishing, pollution, weather or climate events, destructive fishing arts such as dinamite, industrial fishing, increase on number of fishers, infrastructure developments such as roads, pipelines; and invasive species>

458

459

460 <Questions 36-40 are to be asked only in case that abrupt events have been reported>

- 461 36. Since the occurrence of the event, have you changed your fishing practice? Yes ___ No ___
- 462 36.1 <If yes> How did it change? _____
- 463 36.2 Since the event, do you spend more, less or the same time fishing? More ___ Less ___ The same ___
- 464 36.3 Since the event, did you change your fishing area? Yes ___ No ___

465 **Future**

- 466 37. Do you expect more sudden (more dramatic) changes in fish abundance in the future, or other aspects of the ecosystem such as mangroves and birds? Yes ___ No ___
- 467
- 468 38. In your opinion, what will be the main cause of future sudden (more dramatic) changes in fish abundance?
- 469 _____

470 39. Please imagine that the amount of fish decreases and you can only fish half of what you fish today. What would
471 you do? *<Do not read the options first, just listen to the interviewee. If the person do not propose any options,
472 read the options then:>*

473 39.1 *<Mark if you had to read the options>* ___

474 39.2 Would you continue fishing? Yes ___ No ___

475 39.2.1 Why? _____

476 39.3 Would you increase fishing effort to increase catch? Yes ___ No ___

477 39.3.1 How? _____

478 39.4 Would you fish less? Yes ___ No ___

479 39.4.1 What would you do besides fishing? _____

480 39.5 Would you change the fishing area where you go fishing? Yes ___ No ___

481 39.5.1 Where would you fish instead? _____

482 39.6 Would you change your fishing art?

483 39.6.1 Which one would you use? _____

484 39.7 Would you stop fishing? Yes ___ No ___

485 39.7.1 What would you do instead of fishing? _____

486 39.8 Other? Which one: _____

487 **Cooperation and communication**

488 Now let's talk about your connection or relation with other fishers...

489

490 40. Do you lend each other gear? Yes ___ No ___

491 41. If you have a problem with, for example, your boat engine or fish traders, who do you ask for help?

492 _____

493 **Fishing cooperatives and formal organizations**

494 42. Are you part of a fishing cooperative or similar organization? Yes ___ No ___

495 42.1 Which one? _____

496 42.2 How often do you meet?

497 Once a year ___ Twice a year ___ Every month ___ Every week ___

498 42.3 When was the last time you meet? _____ (year)

499 42.4 What is your role in this organization?

500 Legal representative ___ President ___ Secretary ___ Treasurer ___ Active member ___

501 42.4.1 Other? _____

- 502 42.5 How do you benefit from being part of this organization? *<Do not read the options first, just listen to the*
 503 *interviewee. If the person do not propose any options, read the options then:>*
- 504 42.5.0 *<Mark if you had to read the options>* ___
- 505 42.5.1 Better prices ___
- 506 42.5.2 Conservation of fishing resources ___
- 507 42.5.3 Support in times of low income ___
- 508 42.5.4 Being respected and recognized as a member of the organization ___
- 509 42.5.5 Pushed / forced of being a member by the government, local leaders, friends or family ___
- 510 42.5.6 Social aspects (making friends, working with other fishers, fear of being excluded) ___
- 511 42.5.7 More fishing and income ___
- 512 42.5.8 Better quality of the fishing products
- 513 42.5.9 Other, which? _____

514 **Demographic and household information**

- 515 43. Gender: Male ___ Female ___
- 516 44. Marital status:
 517 Single ___ Married ___ co-habitation ___ Divorced / widow ___
- 518 45. Age: ___ years old
- 519 46. Education: How many years of formal education have you completed?
 520 No formal education ___ Elementary school ___ Secondary school ___ Higher education ___ (Please specify) ___
- 521 47. Where you born here, in *<name of community>*? Yes ___ No ___
- 522 48. *<If not>* Where were you born? _____
- 523 49. *<If not>* When did you move here? _____ (year)
- 524 50. *<If yes>* Have you always lived here? Yes ___ No ___
- 525 51. *<If no>* How long have you lived here? _____ (years / months) *<If the person mentioned being forcibly displaced,*
 526 *ask how long did he/she lived elsewhere>* _____
- 527 52. Now we will talk about ho do you feel today in *<name of place>*. I will reed a few options and ask you how in
 528 agreement or disagreeemnt you are with the following sentences:
- 529 52.1 I miss *<name of place>* when I'm away
 530 Strongly agree ___ Agree ___ Disagree ___ Strongly disagree ___
- 531 52.2 I don't feel that I belong to *<name of place>*.
 532 Strongly agree ___ Agree ___ Disagree ___ Strongly disagree ___
- 533 52.3 I feel safe when I am in *<name of place>*.
 534 Strongly agree ___ Agree ___ Disagree ___ Strongly disagree ___
- 535 52.4 I am proud when I am in *<name of place>*.
 536 Strongly agree ___ Agree ___ Disagree ___ Strongly disagree ___

537 52.5 <name of place> is part of myself.
538 Strongly agree __ Agree __ Disagree __ Strongly disagree __

539 52.6 I would like to leave <name of place>.
540 Strongly agree __ Agree __ Disagree __ Strongly disagree __

541 52.7 I would like to be more committed with <name of place>.
542 Strongly agree __ Agree __ Disagree __ Strongly disagree __

543 52.8 My roots are in <name of place>.
544 Strongly agree __ Agree __ Disagree __ Strongly disagree __

545 52.9 I would like that my family and friends stay in <name of place> in the future.
546 Strongly agree __ Agree __ Disagree __ Strongly disagree __

547 **Household composition:**

548 53. Please list below the people who live with you in your house <live under the same roof and eat from the same
549 kitchen> and their relationship with you:

550 <* Please mark the ranking according to their contribution to the household income. Listen carefully and take note if
551 people also work in fish processing or commercialization>

53.1 Relationship?	53.2 Age	53.3 Job	53.4 Earnings rank*
Yourself			[1, 2, 3, 4]
			[1, 2, 3, 4]
			[1, 2, 3, 4]
			[1, 2, 3, 4]

553 54. If any of your relatives is gravely sick and needs an expensive treatment, how would you rise the nec-
554 essary money? <Example answers: selling something, bank loan, loan with friend, family or neighbour>
555 _____

556 55. <if savings are not mentioned> Do you have the possibility of requesting a loan? Yes __ No __

557 56. Do you have any additional comment (e.g. about fishing, the experiment, or any recommendation for your grand-
558 children) _____

Table S1: Clustered and robust standard errors estimation for individual extraction with White method and (1) HC1, (2) HC2, (3) HC3, (4) HC4 weighting schemes, and (5) Newey and West method with HC4 scheme.

	(1)	(2)	(3)	(4)	(5)
Constant	-0.12 (0.19)	-0.12 (0.19)	-0.12 (0.19)	-0.12 (0.19)	-0.12 (0.18)
Treatment: Threshold	-0.26 (0.16)	-0.26 (0.16)	-0.26 (0.16)	-0.26 (0.16)	-0.26 (0.18)
Treatment: Risk	0.09 (0.20)	0.09 (0.20)	0.09 (0.20)	0.09 (0.20)	0.09 (0.24)
Treatment: Uncertainty	-0.35** (0.16)	-0.35** (0.16)	-0.35** (0.16)	-0.35** (0.16)	-0.35** (0.17)
Part	-0.03 (0.11)	-0.03 (0.11)	-0.03 (0.11)	-0.03 (0.11)	-0.03 (0.11)
Round	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
Stock size	0.08*** (0.003)	0.08*** (0.003)	0.08*** (0.003)	0.08*** (0.003)	0.08*** (0.003)
Threshold * part	-0.20* (0.11)	-0.20* (0.11)	-0.20* (0.11)	-0.20* (0.11)	-0.20 (0.12)
Risk * part	-0.50*** (0.14)	-0.50*** (0.14)	-0.50*** (0.14)	-0.50*** (0.14)	-0.50*** (0.16)
Uncertainty * part	-0.22** (0.11)	-0.22** (0.11)	-0.22** (0.11)	-0.22** (0.11)	-0.22* (0.12)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table S2: Clustered and robust standard errors estimation for proportion of available stock with White method and (1) HC1, (2) HC2, (3) HC3, (4) HC4 weighting schemes, and (5) Newey and West method with HC4 scheme.

	(1)	(2)	(3)	(4)	(5)
Constant	0.09*** (0.01)	0.09*** (0.01)	0.09*** (0.01)	0.09*** (0.01)	0.09*** (0.01)
Treatment: Threshold	-0.02 (0.02)	-0.02 (0.02)	-0.02 (0.02)	-0.02 (0.02)	-0.02 (0.01)
Treatment: Risk	-0.004 (0.02)	-0.004 (0.02)	-0.004 (0.02)	-0.004 (0.02)	-0.004 (0.02)
Treatment: Uncertainty	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.02)	-0.02 (0.01)	-0.02* (0.01)
Part	-0.004 (0.01)	-0.004 (0.01)	-0.004 (0.01)	-0.004 (0.01)	-0.004 (0.01)
Round	0.001*** (0.0004)	0.001*** (0.0004)	0.001*** (0.0004)	0.001*** (0.0004)	0.001*** (0.0004)
Threshold * part	-0.01* (0.01)	-0.01* (0.01)	-0.01* (0.01)	-0.01* (0.01)	-0.01** (0.01)
Risk * part	-0.03*** (0.01)	-0.03*** (0.01)	-0.03*** (0.01)	-0.03*** (0.01)	-0.03*** (0.01)
Uncertainty * part	-0.02** (0.01)	-0.02** (0.01)	-0.02** (0.01)	-0.02** (0.01)	-0.02** (0.01)

Note:

*p<0.1; **p<0.05; ***p<0.01

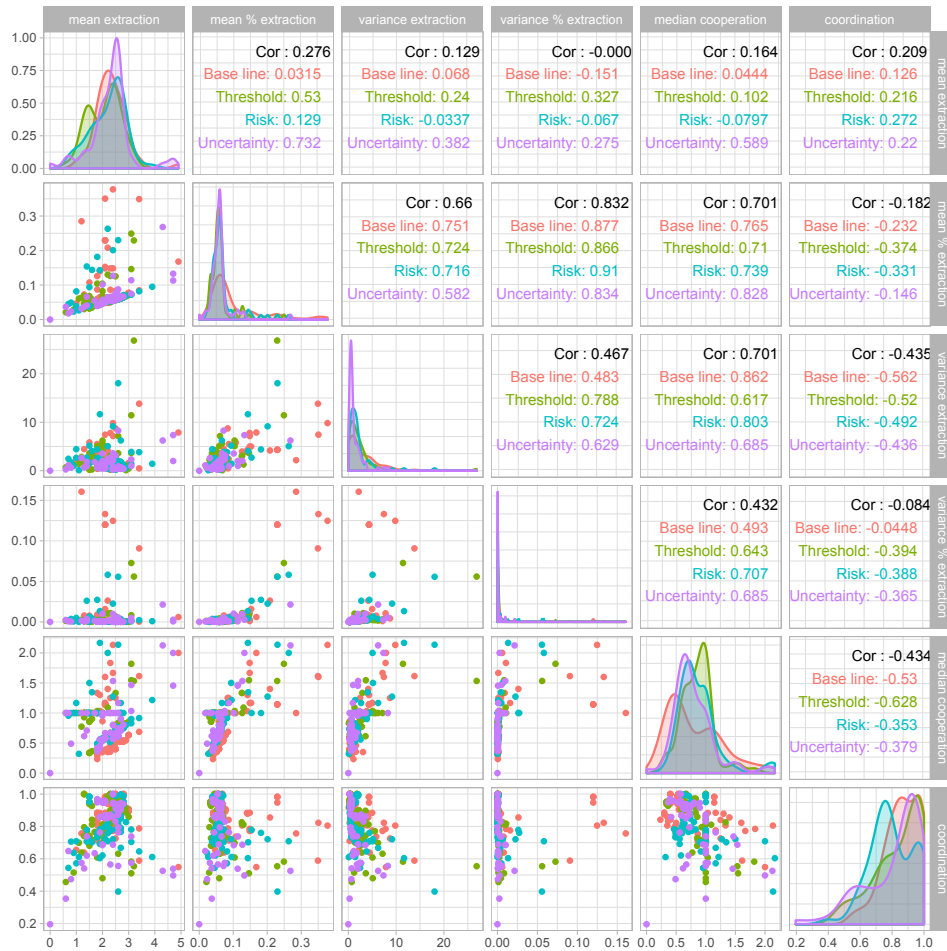


Figure S1: **Correlations between response variables.** Correlation coefficients are calculated by variable and by treatment.

Table S3: Clustered and robust standard errors estimation for cooperation with White method and (1) HC1, (2) HC2, (3) HC3, (4) HC4 weighting schemes, and (5) Newey and West method with HC4 scheme.

	(1)	(2)	(3)	(4)	(5)
Constant	0.79*** (0.13)	0.79*** (0.13)	0.79*** (0.13)	0.79*** (0.13)	0.79*** (0.16)
Treatment: Threshold	-0.21 (0.18)	-0.21 (0.18)	-0.21 (0.18)	-0.21 (0.18)	-0.21 (0.20)
Treatment: Risk	-0.08 (0.18)	-0.08 (0.18)	-0.08 (0.18)	-0.08 (0.18)	-0.08 (0.20)
Treatment: Uncertainty	-0.24 (0.16)	-0.24 (0.16)	-0.24 (0.16)	-0.24 (0.16)	-0.24 (0.18)
Part	-0.34*** (0.06)	-0.34*** (0.06)	-0.34*** (0.06)	-0.34*** (0.06)	-0.34*** (0.08)
Round	0.05*** (0.004)	0.05*** (0.004)	0.05*** (0.004)	0.05*** (0.004)	0.05*** (0.004)
Threshold * part	0.19*** (0.07)	0.19*** (0.07)	0.19*** (0.07)	0.19*** (0.07)	0.19** (0.08)
Risk * part	0.06 (0.07)	0.06 (0.07)	0.06 (0.07)	0.06 (0.07)	0.06 (0.08)
Uncertainty * part	0.13* (0.07)	0.13* (0.07)	0.13* (0.07)	0.13* (0.07)	0.13* (0.07)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table S4: Original regression models as shown in Fig 3. Dependent variables are (1) mean extraction, (2) mean proportion of extraction, (3) median cooperation, (4) variance of cooperation, (5) variance of extraction, (6) variance of the proportion of extraction, and (7) coordination.

	<i>Dependent variable:</i>						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Constant	1.38*** (0.26)	0.08*** (0.02)	0.87*** (0.16)	0.98*** (0.33)	4.01*** (0.76)	0.02* (0.01)	0.23** (0.10)
Treatment: Threshold	-0.19 (0.12)	-0.02* (0.01)	0.09 (0.09)	0.18 (0.28)	-0.06 (0.71)	-0.01 (0.01)	-0.02 (0.02)
Treatment: Risk	-0.15 (0.11)	-0.03** (0.01)	0.06 (0.10)	0.09 (0.34)	-0.69 (0.51)	-0.01 (0.01)	-0.02 (0.02)
Treatment: Uncertainty	-0.03 (0.12)	-0.03** (0.01)	0.05 (0.08)	0.19 (0.26)	-0.97* (0.53)	-0.01 (0.01)	-0.08*** (0.03)
Place: B	-0.22* (0.13)	0.003 (0.01)	0.03 (0.10)	-0.07 (0.46)	1.78** (0.66)	0.001 (0.01)	-0.07*** (0.02)
Place: C	0.25 (0.17)	-0.01 (0.01)	-0.11 (0.09)	-0.11 (0.26)	0.72 (0.51)	-0.003 (0.01)	-0.01 (0.03)
Place: D	0.29** (0.13)	-0.02 (0.01)	-0.19** (0.09)	-0.52 (0.36)	-0.26 (0.50)	-0.01 (0.01)	-0.03 (0.02)
Education	0.001 (0.01)	-0.001 (0.001)	-0.003 (0.01)	-0.03 (0.03)	-0.12** (0.05)	-0.0002 (0.0003)	-0.001 (0.001)
Frequency of bad fishing days	0.04* (0.02)	0.001 (0.002)	0.005 (0.01)	-0.04 (0.05)	0.11 (0.09)	-0.0003 (0.001)	-0.002 (0.003)
Expectation of fishing children	-0.07 (0.08)	0.005 (0.01)	-0.05 (0.05)	-0.11 (0.15)	-0.48 (0.40)	0.01 (0.01)	0.01 (0.01)
Fishing art sharing	-0.20* (0.11)	-0.01 (0.01)	-0.05 (0.05)	-0.12 (0.16)	0.29 (0.46)	-0.003 (0.003)	0.01 (0.01)
Group fishing	0.02 (0.11)	0.002 (0.01)	0.03 (0.06)	-0.08 (0.25)	0.03 (0.50)	-0.002 (0.004)	0.01 (0.01)
Risk aversion	0.01 (0.02)	0.0001 (0.002)	-0.003 (0.01)	0.06 (0.05)	-0.11 (0.08)	0.0004 (0.001)	0.004 (0.003)
Ambiguity aversion	-0.01 (0.02)	0.002* (0.001)	0.01 (0.01)	0.01 (0.03)	0.03 (0.07)	0.001 (0.001)	0.004 (0.003)
Rounds with agreements	0.20 (0.14)	-0.03** (0.01)	-0.33** (0.12)	-0.69* (0.37)	-2.13*** (0.69)	-0.01 (0.01)	0.20*** (0.04)
Part 1 variable (1)	0.29*** (0.08)						
Part 1 variable (2)		0.53*** (0.14)					
Part 1 variable (3)			0.27*** (0.06)				
Part 1 variable (4)				0.24 (0.20)			
Part 1 variable (5)					0.06 (0.04)		
Part 1 variable (6)						0.22 (0.17)	
Part 1 variable (7)							0.62*** (0.11)
Observations	236	236	236	236	236	236	236
R ²	0.31	0.54	0.43	0.31	0.41	0.30	0.78
Adjusted R ²	0.26	0.51	0.39	0.26	0.37	0.25	0.77
Residual Std. Error	0.58	0.04	0.29	1.31	2.34	0.02	0.08
F Statistic	6.60***	17.21***	10.94***	6.58***	10.34***	6.18***	53.24***

Note: *p<0.1; **p<0.05; ***p<0.01
Clustered robust standard errors and confidence intervals were calculated with the CR2 estimator

Table S5: Modified model without place terms. Dependent variables are (1) mean extraction, (2) mean proportion of extraction, (3) median cooperation, (4) variance of cooperation, (5) variance of extraction, (6) variance of the proportion of extraction, and (7) coordination.

	<i>Dependent variable:</i>						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Constant	1.16*** (0.22)	0.07*** (0.01)	0.88*** (0.10)	0.90** (0.39)	4.68*** (0.71)	0.02*** (0.01)	0.16*** (0.04)
Treatment: Threshold	-0.22* (0.12)	-0.02*** (0.01)	0.10* (0.06)	0.20 (0.25)	0.05 (0.47)	-0.01*** (0.004)	-0.02 (0.02)
Treatment: Risk	-0.15 (0.11)	-0.03*** (0.01)	0.06 (0.06)	0.10 (0.24)	-0.70 (0.45)	-0.01*** (0.004)	-0.02 (0.02)
Treatment: Uncertainty	-0.04 (0.11)	-0.03*** (0.01)	0.05 (0.06)	0.19 (0.25)	-0.92** (0.46)	-0.01*** (0.004)	-0.08*** (0.02)
Education	0.01 (0.01)	-0.001 (0.001)	-0.01 (0.01)	-0.03 (0.02)	-0.10** (0.04)	-0.0003 (0.0004)	-0.001 (0.001)
Frequency of bad fishing days	0.04* (0.02)	0.001 (0.002)	0.004 (0.01)	-0.03 (0.05)	0.10 (0.09)	-0.0003 (0.001)	-0.0002 (0.003)
Expectation of fishing children	-0.11 (0.10)	0.01 (0.01)	-0.02 (0.05)	-0.05 (0.22)	-0.44 (0.41)	0.01* (0.003)	0.01 (0.01)
Fishing art sharing	-0.08 (0.09)	-0.01** (0.01)	-0.09* (0.05)	-0.17 (0.20)	-0.14 (0.38)	-0.005 (0.003)	0.03** (0.01)
Group fishing	0.06 (0.11)	0.0004 (0.01)	0.01 (0.05)	-0.14 (0.23)	0.14 (0.43)	-0.003 (0.004)	0.001 (0.01)
Risk aversion	0.004 (0.03)	0.0002 (0.002)	-0.003 (0.01)	0.06 (0.05)	-0.05 (0.10)	0.0005 (0.001)	0.002 (0.003)
Ambiguity aversion	-0.02 (0.03)	0.002 (0.002)	0.01 (0.01)	0.002 (0.06)	0.06 (0.10)	0.001 (0.001)	0.002 (0.003)
Rounds with agreements	0.35*** (0.13)	-0.03*** (0.01)	-0.36*** (0.07)	-0.70** (0.28)	-2.68*** (0.53)	-0.01* (0.004)	0.21*** (0.02)
Part 1 variable (1)	0.31*** (0.04)						
Part 1 variable (2)		0.54*** (0.05)					
Part 1 variable (3)			0.28*** (0.04)				
Part 1 variable (4)				0.23*** (0.03)			
Part 1 variable (5)					0.05*** (0.01)		
Part 1 variable (6)						0.22*** (0.04)	
Part 1 variable (7)							0.65*** (0.05)
Observations	236	236	236	236	236	236	236
R ²	0.24	0.53	0.38	0.29	0.35	0.28	0.76
Adjusted R ²	0.20	0.50	0.35	0.26	0.32	0.24	0.75
Residual Std. Error	0.60	0.04	0.30	1.32	2.45	0.02	0.08
F Statistic	5.99***	20.64***	11.55***	7.71***	10.01***	7.31***	58.82***

Note: *p<0.1; **p<0.05; ***p<0.01
Clustered robust standard errors and confidence intervals were calculated with the CR2 estimator.

Table S6: Modified model with only treatment and place. Dependent variables are (1) mean extraction, (2) mean proportion of extraction, (3) median cooperation, (4) variance of cooperation, (5) variance of extraction, (6) variance of the proportion of extraction, and (7) coordination.

	Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Constant	1.44*** (0.15)	0.06*** (0.01)	0.63*** (0.06)	0.39* (0.21)	2.29*** (0.40)	0.02*** (0.003)	0.19*** (0.04)
Treatment: Threshold	-0.23** (0.10)	-0.03*** (0.01)	0.09* (0.05)	0.06 (0.22)	-0.22 (0.42)	-0.01*** (0.004)	0.001 (0.02)
Treatment: Risk	-0.12 (0.10)	-0.03*** (0.01)	0.07 (0.05)	0.10 (0.22)	-0.70 (0.42)	-0.01*** (0.004)	-0.005 (0.02)
Treatment: Uncertainty	0.03 (0.10)	-0.03*** (0.01)	0.01 (0.05)	0.03 (0.23)	-1.28*** (0.42)	-0.01*** (0.004)	-0.05*** (0.02)
Place: B	-0.20** (0.10)	0.01 (0.01)	0.09 (0.05)	0.13 (0.22)	1.80*** (0.42)	0.003 (0.004)	-0.08*** (0.02)
Place: C	0.35*** (0.10)	-0.02** (0.01)	-0.18*** (0.05)	-0.42* (0.22)	-0.45 (0.42)	-0.01** (0.004)	0.03* (0.02)
Place: D	0.22** (0.10)	-0.02*** (0.01)	-0.16*** (0.05)	-0.54** (0.22)	-0.60 (0.42)	-0.01** (0.004)	-0.02 (0.02)
Part 1 variable (1)	0.28*** (0.04)						
Part 1 variable (2)		0.57*** (0.05)					
Part 1 variable (3)			0.33*** (0.04)				
Part 1 variable (4)				0.25*** (0.03)			
Part 1 variable (5)					0.06*** (0.01)		
Part 1 variable (6)						0.23*** (0.04)	
Part 1 variable (7)							0.83*** (0.04)
Observations	256	256	256	256	256	256	256
R ²	0.26	0.51	0.34	0.27	0.32	0.27	0.69
Adjusted R ²	0.24	0.49	0.33	0.25	0.31	0.25	0.68
Residual Std. Error	0.58	0.04	0.30	1.27	2.39	0.02	0.09
F Statistic	12.43***	36.51***	18.62***	13.36***	16.99***	13.10***	78.03***

Note: *p<0.1; **p<0.05; ***p<0.01
 Clustered robust standard errors and confidence intervals were calculated with the CR2 estimator.