

Appendix 1

Questionnaire that was used to document the process design, outcomes, and context parameters of participatory processes performed in Spain, Portugal, and 13 DESIRE dryland cases globally.

Section 1: background information

- 1) Case study name (project & country): _____
2) Additional literature used: _____

Author type (1=Mediator, 2=Participant, 3=Researcher (inside), 4=Researcher (externally))
(code 3, 8)

- 3) In which group would you place yourself (more than 1 possible)?

- farmer
 representing a farmers organisation
 representing a nature conservation organisation
 representing a governmental organisation.

At what level: local regional national international

- private company
 scientist
 other: _____

- 4) What is your age? <26 26-35 36 – 45 46 – 55 56+

- 5) Male Female

- 6) When did the process start (year, month)?

- 7) When did the process end (year, month)?

- 8) When was a decision made (year, month)?

- 9) What was your role in the process?

Section 2: participants' general impressions (*open questions*)

- 10) What 3 factors do you think are required to make participation successful in achieving goals in environmental management?

- 11) What are the main challenges to participation in environmental management in the context of your project?

- 12) Based on your experience, what do you think are the most important outcomes of participation?

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13) Can you give a short description of the environmental problem and what is at stake for environmental quality and society, both on and off-site?

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Section 3: Results

14) To what degree did participants provide information (technical information as well as information about general aims of the actors) used for developing the output?

low -> -> **high**
0 1 2 3 4 not relevant

15) To what degree did the process develop mutual gains (win-win solutions)?

low -> -> **high**
0 1 2 3 4 not relevant

16) To what extent do the environmental outputs meet the goals specified at the beginning of the decision-making process? (0 = the initiator's environmental goal was fulfilled; -4 = the output is much worse for the environment than what the initiator sought; 4 = the output is much better for the environment than the initiator aimed at)

result<<goal -> -> -> -> **result>>goal**
-4 -3 -2 -1 0 1 2 3 4

17) Please rate the *feasibility* of the agreed measures in the sense of monitoring, controlling, and sanction possibilities.

low -> -> **high**
0 1 2 3 4 not relevant

18) To what degree is the output (i.e. selected solution) flexible, incremental and adaptive to new knowledge or changing conditions?

low -> -> **high**
0 1 2 3 4 not relevant

19) To what degree do the selected solutions address *social, economic* and *environmental* interests as well as a long-term perspective?

low -> -> **high**
0 1 2 3 4 not relevant

20) Please indicate the degree to which an existing conflict was resolved through the process (-4 = conflict severely intensified or developed; 0 = degree of conflict did not change; 4 = conflict was fully resolved).

intensified -> -> -> -> **resolved**
-4 -3 -2 -1 0 1 2 3 4 not relevant

21) Please rate the *acceptance* of the decision by each of the following groups.

- | | | | | | | |
|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|---------------------------------------|
| | low | | -> | -> | high | |
| a) those who have to comply with and implement the decision: | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> not relevant |
| b) the competent authority: | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> not relevant |
| c) other participants: | <input type="checkbox"/> 0 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> not relevant |

22) To what extent did participants learn and did they better understand the problem after the process?

low -> -> **high**

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23) For each of the following indicate to what extent trust was built-up (positive values) or lessened (negative values).

| | []0 | []1 | []2 | []3 | []4 | []not relevant | | | |
|--|-------------------|-------|-------|-------|------|-------------------|------|------|------|
| | less trust | -> | -> | -> | -> | more trust | | | |
| a) Amongst general public: | []-4 | []-3 | []-2 | []-1 | []0 | []1 | []2 | []3 | []4 |
| b) Between public and the competent authority: | []-4 | []-3 | []-2 | []-1 | []0 | []1 | []2 | []3 | []4 |
| c) Between competent authority and scientists: | []-4 | []-3 | []-2 | []-1 | []0 | []1 | []2 | []3 | []4 |
| d) Between public and scientists: | []-4 | []-3 | []-2 | []-1 | []0 | []1 | []2 | []3 | []4 |

24) To what extent was the output economically rational?

| | []-4 | []-3 | []-2 | []-1 | []0 | []1 | []2 | []3 | []4 |
|--|-------------------|-------|-------|-------|------|-----------------|------|------|------|
| | irrational | -> | -> | -> | -> | rational | | | |

25) To what extent was the output socially equitable?

| | []-4 | []-3 | []-2 | []-1 | []0 | []1 | []2 | []3 | []4 |
|--|----------------------|-------|-------|-------|------|------------------|------|------|------|
| | non-equitable | -> | -> | -> | -> | equitable | | | |

26) Please rate the degree to which the selected solutions, recommendations and decisions are being (or will most probably be) implemented and complied with.

| | []0 | []1 | []2 | []3 | []4 | []not relevant |
|--|------------|------|------|-------------|------|-----------------|
| | low | -> | -> | high | | |

Section 4: Actual process

27) To what degree were important leaders involved, i.e. people whose opinion stakeholders respect in relation to the specific issue?

| | []0 | []1 | []2 | []3 | []4 | []not relevant |
|--|------------|------|------|-------------|------|-----------------|
| | low | -> | -> | high | | |

28) To what degree were those who will have to implement the output involved?

| | []0 | []1 | []2 | []3 | []4 | []not relevant |
|--|------------|------|------|-------------|------|-----------------|
| | low | -> | -> | high | | |

29) To what degree was there a 'legitimate' representation of all affected parties?

| | []0 | []1 | []2 | []3 | []4 | []not relevant |
|--|------------|------|------|-------------|------|-----------------|
| | low | -> | -> | high | | |

30) To what degree was there an imbalance of power among participants during the process?

| | | | | |
|--|------------|----|----|-------------|
| | low | -> | -> | high |
|--|------------|----|----|-------------|

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- 0 1 2 3 4 not relevant
- 31) To what degree did participants not representing government institutions influence decisions made during the process?
- low** -> -> **high**
0 1 2 3 4 not relevant
- 32) To what extent did non-state participants receive information from state and non-state participants?
- low** -> -> **high**
0 1 2 3 4 not relevant
- 33) Please rate the degree of information exchange taking place through face-to-face discussions between all participants (state and non-state)?
- low** -> -> **high**
0 1 2 3 4 not relevant
- 34) To what degree did deliberation with equal opportunities to contribute take place amongst participants?
- low** -> -> **high**
0 1 2 3 4 not relevant
- 35) To what degree were people permitted to initiate discourse and to participate in discourse and decision making during the process?
- low** -> -> **high**
0 1 2 3 4 not relevant

Section 5: Process design

- 36) To what degree was each of the following a rationale for using a participatory approach?
- low** -> -> **high**
- a) *Empowerment (pragmatic):*
- 0 1 2 3 4 not relevant
- b) *democratic legitimacy (normative):*
- 0 1 2 3 4 not relevant
- c) *effective/efficient achievement of goals:*
- 0 1 2 3 4 not relevant
- d) *conflict resolution:*
- 0 1 2 3 4 not relevant
- e) *fulfilment of legal requirements:*
- 0 1 2 3 4 not relevant
- f) *achievement of environmental benefits:*
- 0 1 2 3 4 not relevant

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Section 6: Contextual

48) Is there any existing law or agreement that regulates the policy field of the environmental problem under consideration? Yes No

49) To what degree were the existing laws and agreements uncertain (i.e. frequently changing) or ambiguous (i.e. multi- interpretable)?

uncertain -> -> **certain**
[]0 []1 []2 []3 []4 []not relevant

50) To what degree was autonomous decision-making at the problem scale possible in the context of your project? (From no room for manoeuvre (0) to fully autonomous at the process level (4)).

no room -> -> **open**
[]0 []1 []2 []3 []4 []not relevant

51) What was the number of significantly involved different levels of governance? (e.g. municipal + catchment + state + national + supranational authority = 5). To be counted as significantly involved, an agency must have been present at least at one third of the meetings. []

52) At what governance level did the process take place?

[]0 (*municipal*) []1 (*regional*) []2 (*province*) []3 (*national*) []4 (*international*)
[]not relevant

53) For each of the following groups indicate how important they were to (help) bring the problem onto the agenda? **(0= not important; 4 = very important)**

a) *a previous political decision (a law):* []0 []1 []2 []3 []4 []not relevant

b) *the competent authority:* []0 []1 []2 []3 []4 []not relevant

c) *general public:* []0 []1 []2 []3 []4 []not relevant

d) *research or development project:* []0 []1 []2 []3 []4 []not relevant

54) For each of the following indicate how well social networks are functioning. Negative values indicate non functioning networks and distrust. Positive values mean functioning networks and good trust base amongst groups. **(-4= not functioning, no trust; 4 = functioning, high trust)**

a) *Amongst general public:*

[]-4 []-3 []-2 []-1 []0 []1 []2 []3 []4

b) *Between public and the competent authority:*

[]-4 []-3 []-2 []-1 []0 []1 []2 []3 []4

c) *Between competent authority and scientists:*

[]-4 []-3 []-2 []-1 []0 []1 []2 []3 []4

d) *Between public and scientists:*

[]-4 []-3 []-2 []-1 []0 []1 []2 []3 []4

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55) To what degree was participation institutionalized and common practice in the local context?

(code 57)

uncommon -> -> **very common**
0 1 2 3 4

56) Please indicate to what extent the environmental problem of your project is related to:

(0= not important; 4 = very important)

a) *nature conservation (e.g. biodiversity):* 0 1 2 3 4 not relevant

b) *human health (e.g. pollution):* 0 1 2 3 4 not relevant

c) *exploitation of scarce natural resources:* 0 1 2 3 4 not relevant

57) How complex are the environmental problem and its possible solutions?

simple -> -> **very complex**
0 1 2 3 4 not relevant

58) Please indicate how much public attention there was for the problem before beginning of the decision process (media attention).

no attention -> -> **full attention**
0 1 2 3 4 not relevant

59) To what degree was there potential for a *conflict of values* as indicated for example by an actual dispute among stakeholders?

low -> -> **high**
0 1 2 3 4 not relevant

60) To what degree was there a conflict over *where* a certain problem should be solved?

low -> -> **high**
0 1 2 3 4 not relevant

61) How many people are affected by the problem?

[]

62) To what degree is there a win-win potential?

low -> -> **high**
0 1 2 3 4 not relevant

63) Please indicate to what extent each of the following were *cooperative* towards the process and how well did they *understand* the environmental issue at stake:

low -> -> **high**

a) *government agencies:*

Cooperative: 0 1 2 3 4 not relevant

Understanding: 0 1 2 3 4 not relevant

b) *private enterprises:*

Cooperative: 0 1 2 3 4 not relevant

Understanding: 0 1 2 3 4 not relevant

c) *civil society organisations:*

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Cooperative: 0 1 2 3 4 not relevant
Understanding: 0 1 2 3 4 not relevant

d) *individuals (e.g. land users):*

Cooperative: 0 1 2 3 4 not relevant
Understanding: 0 1 2 3 4 not relevant

64) Is there anything else we should need to know?