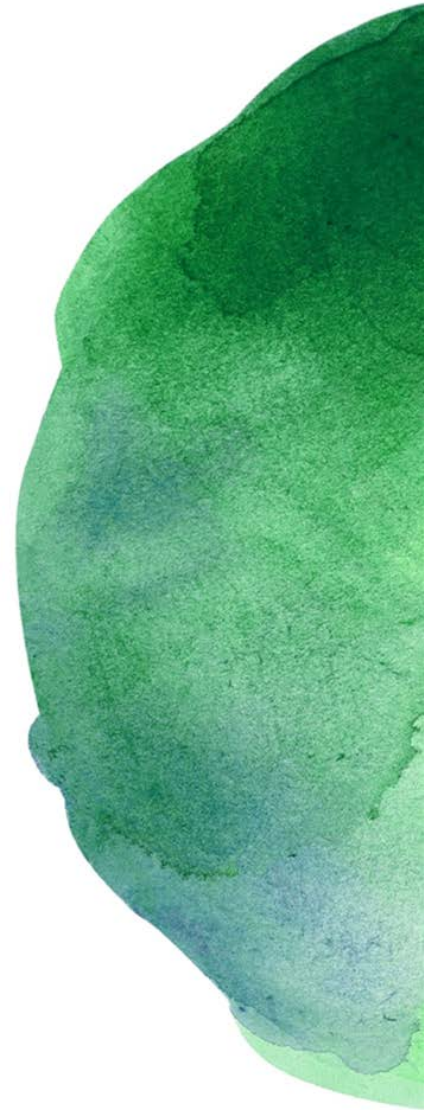




Ecosystem services in the Dinaric Arc parks

Andrea Stefan
WWF Mediterranean Programme





Protected Areas Benefit Assessment

- The **biggest ever** participatory assessments of protected areas benefits
- Over a **whole** region – 8 countries
- Workshops held in **58 protected areas**
- Over **1,250 participants**
- WWF now has a database of information about benefits from over **50%** of the protected areas in the Dinaric Arc
- The database has over **20,000 items** of information



STAKEHOLDER GROUPS

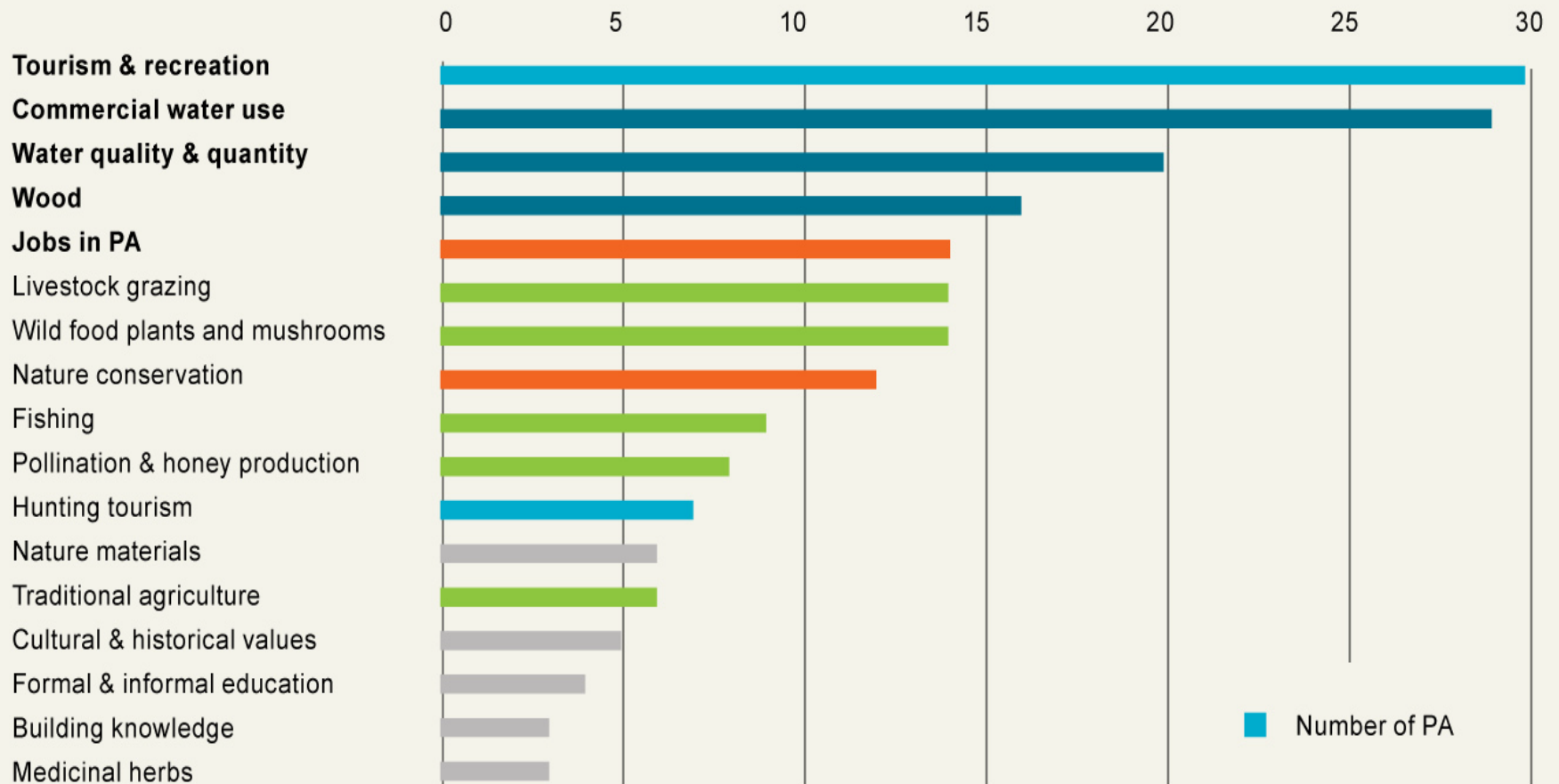
- 1 Locals living in the PA
- 2 Locals living near the PA
- 3 National population
- 4 NGOs/experts/scientists
- 5 Civil associations
- 6 Government(s)
- 7 Business sector
- 8 Global community

PROTECTED AREA VALUES

1	Nature conservation	13	Tourism & recreation
2	Jobs in PA	14	Building knowledge
3	Hunting	15	Formal & informal education
4	Wild food plants and mushrooms	16	Genetic material
5	Fishing	17	Climate change mitigation
6	Traditional agriculture	18	Soil stabilization
7	Livestock grazing	20	Flood prevention
8	Commercial & non-commercial water use	21	Water quality & quantity
9	Cultural & historical values	22	Pollination & honey production
11	Specific site value	23	Nature materials
12	Medicinal herbs	24	Wood

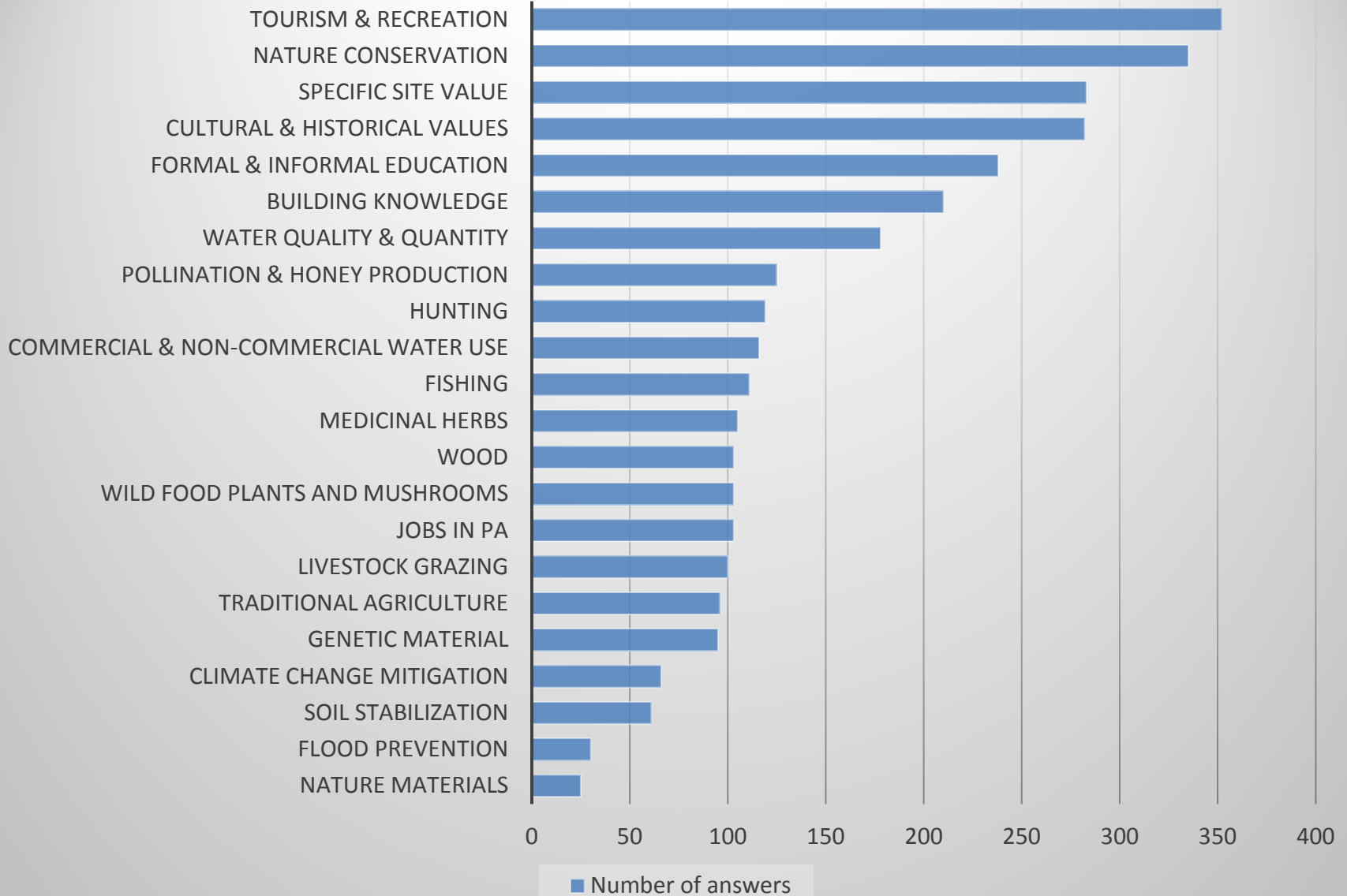


Summary of results: economic values





Summary of results: non-economic values





Ecosystem services

- The values related to regulating ecosystem services (flood protection, soil erosion, carbon sequestration) were recognised **the least** in the region
- The services are either **taken for granted** or there is **lack of awareness** of the role natural systems play in regulating climate, stabilizing soils, purification of water, etc.
- Importance of PAs as places for adaptation and mitigation also not recognized





Flood prevention

- Flood prevention is the most recognized regulating service in the region
- Present in 6 PAs (10%) bordering rivers and floodplains
- Mostly recognized by experts, locals and PA managers
- Catastrophic floods in 2014





Database

PA-BAT Login

Welcome!
Please provide your login credentials to start assessment

Username:

Password:

Language:

Log in

	A	B	C	D	E	F	G
	Country	Protected area	Group name	Question number	Question	Type of value	Stakeholder group
1	Bosnia and Herzegovina	NP Kozara	Nature conservation values	1	Nature conservation	Importance of value	Locals
2	Bosnia and Herzegovina	NP Kozara	Nature conservation values	1	Nature conservation	Economic importance of value	Locals
3	Bosnia and Herzegovina	NP Kozara	Management values	2	Jobs in PA	Importance of value	Locals
4	Bosnia and Herzegovina	NP Kozara	Management values	2	Jobs in PA	Economic importance of value	Locals
5	Bosnia and Herzegovina	NP Kozara	Values related to food	3	Hunting	Importance of value	Locals
6	Bosnia and Herzegovina	NP Kozara	Values related to food	3	Hunting	Economic importance of value	Locals
7	Bosnia and Herzegovina	NP Kozara	Values related to food	4	Wild food plants and mushrooms	Importance of value	Locals
8	Bosnia and Herzegovina	NP Kozara	Values related to food	4	Wild food plants and mushrooms	Economic importance of value	Locals
9	Bosnia and Herzegovina	NP Kozara	Values related to food	5	Fishing	Importance of value	Locals
10	Bosnia and Herzegovina	NP Kozara	Values related to food	5	Fishing	Economic importance of value	Locals
11	Bosnia and Herzegovina	NP Kozara	Values related to food	6	Traditional agriculture	Importance of value	Locals
12	Bosnia and Herzegovina	NP Kozara	Values related to food	6	Traditional agriculture	Economic importance of value	Locals
13	Bosnia and Herzegovina	NP Kozara	Values related to food	7	Livestock grazing	Importance of value	Locals
14	Bosnia and Herzegovina	NP Kozara	Values related to food	7	Livestock grazing	Economic importance of value	Locals
15	Bosnia and Herzegovina	NP Kozara	Values related to water	8	Commercial & non-commercial water use	Importance of value	Locals
16	Bosnia and Herzegovina	NP Kozara	Values related to water	8	Commercial & non-commercial water use	Economic importance of value	Locals
17	Bosnia and Herzegovina	NP Kozara	Cultural and Spiritual Values	9	Cultural & historical values	Importance of value	Locals
18	Bosnia and Herzegovina	NP Kozara	Cultural and Spiritual Values	9	Cultural & historical values	Economic importance of value	Locals
19	Bosnia and Herzegovina	NP Kozara	Health and Recreation Values	10	Specific site value	Importance of value	Locals
20	Bosnia and Herzegovina	NP Kozara	Health and Recreation Values	10	Specific site value	Economic importance of value	Locals
21	Bosnia and Herzegovina	NP Kozara	Health and Recreation Values	11	Medicinal herbs	Importance of value	Locals
22	Bosnia and Herzegovina	NP Kozara	Health and Recreation Values	11	Medicinal herbs	Economic importance of value	Locals
23	Bosnia and Herzegovina	NP Kozara	Health and Recreation Values	12	Medicinal herbs	Importance of value	Locals
24	Bosnia and Herzegovina	NP Kozara	Health and Recreation Values	12	Medicinal herbs	Economic importance of value	Locals
25	Bosnia and Herzegovina	NP Kozara	Health and Recreation Values	13	Tourism & recreation	Importance of value	Locals
26	Bosnia and Herzegovina	NP Kozara	Health and Recreation Values	13	Tourism & recreation	Economic importance of value	Locals
27	Bosnia and Herzegovina	NP Kozara	Knowledge	14	Building knowledge	Importance of value	Locals
28	Bosnia and Herzegovina	NP Kozara	Knowledge	14	Building knowledge	Economic importance of value	Locals
29	Bosnia and Herzegovina	NP Kozara	Knowledge	15	Formal & informal education	Importance of value	Locals
30	Bosnia and Herzegovina	NP Kozara	Knowledge	15	Formal & informal education	Economic importance of value	Locals
31	Bosnia and Herzegovina	NP Kozara	Knowledge	16	Genetic material	Importance of value	Locals
32	Bosnia and Herzegovina	NP Kozara	Knowledge	16	Genetic material	Economic importance of value	Locals
33	Bosnia and Herzegovina	NP Kozara	Environmental Services	17	Climate change mitigation	Importance of value	Locals
34	Bosnia and Herzegovina	NP Kozara	Environmental Services	17	Climate change mitigation	Economic importance of value	Locals
35	Bosnia and Herzegovina	NP Kozara	Environmental Services	18	Soil stabilization	Importance of value	Locals
36	Bosnia and Herzegovina	NP Kozara	Environmental Services	18	Soil stabilization	Economic importance of value	Locals
37	Bosnia and Herzegovina	NP Kozara	Environmental Services	19	Conservation	Importance of value	Locals

Protected Areas Benefits Assessment Tool

Export Synchronize Open next

Zoom

Click here to change question

Values related to water

9: Is non-commercial water use (e.g. subsistence agriculture, drinking, hydro-electric power or municipal drinking water source) permitted in the protected area?

Use of the resource

	Local people living in the PA	Local people living near the PA
Non-commercial water use is of minor importance to subsistence	<input type="radio"/>	<input type="radio"/>
Non-commercial water use is of major importance to subsistence	<input type="radio"/>	<input type="radio"/>

9: Does the protected area have cultural and historical values (e.g. archaeological sites, monuments, memorials, etc.)?

10: Does the protected area include sacred natural sites or landscapes (e.g. sacred groves, waterfalls, etc.)?

11: Does the protected area contain wilderness values or other similar iconic values (i.e. waterfalls, mountains etc.)?

12: Is the collection of medicinal resources (i.e. herbs) for local use or for the pharmaceuticals industry important for local use or for the pharmaceuticals industry?

13: Is the protected area important for recreation and tourism?

14: Is the protected area an important resource for building knowledge (i.e. formal research, local knowledge, etc.)?

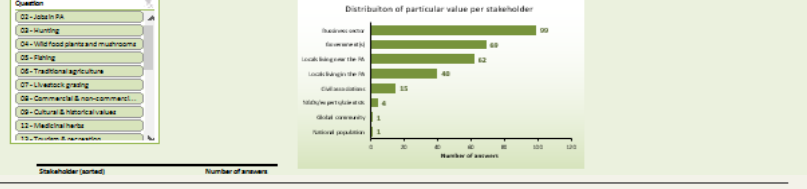
PA - BAT Application installation and user manual

Summary

Clear selection	Local people living in the PA	Local people living near the PA	National population	Global community	NGOs (except 'stakeholders')	Civil associations	Government	Business sector	Other
01- Nature conservation	3	1					9	4	17
02- Jobs in PA	8	12							20
03- Hunting			1						10
04- Wild food plants and mushrooms	5	10							15
05- Fishing	2	1							3
06- Traditional agriculture	1								1
07- Livestock grazing	1								1
08- Commercial & non-commercial water use	1								1
09- Cultural & historical values	1								1
10- Specific site value	1								1
11- Medicinal herbs	7								7
12- Medicinal herbs	1								1
13- Tourism & recreation	3	12							15
14- Wilderness	1								1
15- Formal & informal education			2						2
16- Genetic material									0
17- Climate change mitigation									0
18- Soil stabilization									0
19- Conservation									0
20- Subsistence agriculture									0
21- Water quality & quantity									0
22- Pollination & honey production									0
23- Fisheries									0
24- Subsistence									0
TOTAL	40	22	1	2	4	15	9	6	101

Listing of protected areas for selected combination of "Question" and "Stakeholder"

Question	Stakeholder	Number of answers
02 - Jobs in PA	Government	99
02 - Jobs in PA	Local people living in the PA	89
02 - Jobs in PA	Local people living near the PA	80
02 - Jobs in PA	Global community	15
02 - Jobs in PA	National population	4
02 - Jobs in PA	Civil associations	1
02 - Jobs in PA	Business sector	1
02 - Jobs in PA	Other	1





Contact us!

dporej@wwfmedpo.org

astefan@wwfmedpo.org

www.discoverdinarides.com/PABAT