LIFE20 NAT/NL/001107
LIFE Bear-Smart Corridors

Qualitative study of stakeholder attitudes towards bears and the project

ACTION A4 (Task A4.1)

LIFE | BEAR SMART CORRIDORS

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1. SUMMARY (EN)

The current report presents the methods and results of the qualitative study of stakeholder attitudes towards bears and the project (Action A4; Task A4.1). The report builds on data collection and analysis by means of interviews and coding in three areas: (1) Abruzzo Lazio e Molise National Park; (2) Gran Sasso e Monti della Laga National Park; (3) Greek project area of Trikala-Meteora. Results include the most frequent items in interviews, how they clustered, and items where stakeholder groups focused or converged. Key discussion points per stakeholder group are given in the form of an adapted Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis. This analysis will inform Actions C1 (Development and operation of Bear Smart Communities), D1 (Monitoring the development of the Bear Smart Communities; Task D1.2), E1 (Raising awareness about bear conservation) and E3 (Local, regional and national media activities). The SWOT template can also be used to inform the development of the instrument to be used in Task A4.2 (questionnaire for quantitative survey) and as a reference level for our qualitative approach in Action D3 (Monitoring the project's impact on the local community and stakeholders, Task D3.2).

ΠΕΡΙΛΗΨΗ (GR)

Η παρούσα αναφορά παρουσιάζει τις μεθόδους και τα αποτελέσματα της ποιοτικής μελέτης των στάσεων των ενδιαφερόμενων μερών απέναντι στην αρκούδα και το πρόγραμμα (Δράση Α4, Τμήμα Α4.1). Η αναφορά βασίζεται σε συλλογή και ανάλυση δεδομένων μέσω συνέντευξης και κωδικοποίηση των συνεντεύξεων σε τρεις περιοχές: (1) Εθνικό Πάρκο Abruzzo Lazio e Molise, (2) Εθνικό Πάρκο Gran Sasso e Monti della Laga, (3) Περιοχή Τρικάλων-Μετεώρων. Τα αποτελέσματα περιλαμβάνουν τις συχνότερες αναφορές των ερωτωμενων στις συνεντεύξεις, πως οι αναφορές αυτές ομαδοποιούνται, καθώς και αναφορές όπου εστιάστηκαν ή συνέκλιναν οι ερωτώμενοι για κάθε ενδιαφερόμενο μέρος. Τα βασικά σημεία συζήτησης δίνονται στη μορφή μιας προσαρμοσμένης Ανάλυσης Ερεισμάτων, Αδυναμιών, Ευκαιριών και Απειλών (Strengths, Weaknesses, Opportunities and Threats – SWOT). Η ανάλυση αυτή θα καθοδηγήσει τους εταίρους της κοινοπραξίας στις Δράσεις C1 (Ανάπτυξη και λειτουργία των Κοινοτήτων «Έξυπνης» Συνύπαρξης με την Αρκούδα), D1 (Παρακολούθηση της ανάπτυξης των Κοινοτήτων «Έξυπνης» Συνύπαρξης με την Αρκούδα, Τμήμα D1.2), E1 (Ευαισθητοποίηση σχετικά με την πρόκληση διατήρησης της αρκούδας μεταξύ των πιο σχετικών ενδιαφερομένων μερών) και E3 (Δράσεις επικοινωνίας με τοπικά, περιφερειακά και εθνικά μέσα ενημέρωσης). Η ανάλυση SWOT μπορεί, ακόμη, να αξιοποιηθεί στην ανάπτυξη του εργαλείου συλλογής ποσοτικών δεδομένων του Τμήματος Α4.2 (ερωτηματολόγιο) αλλά και ως επίπεδο αναφοράς για την ποιοτική προσέγγιση που θα ακολουθήσουμε στη Δράση D3 (Παρακολούθηση του αντίκτυπου του έργου στην τοπική κοινότητα και τα ενδιαφερόμενα μέρη, Τμήμα D3.2)

SOMMARIO (IT)

Questo report presenta i metodi e i risultati dello studio qualitativo sulle attitudini degli stakeholder nei confronti dell'orso bruno marsicano e del progetto (Azione A4; Task A4.1). Il report si basa sulla raccolta di dati attraverso interviste e sulla loro codifica in tre aree: (1) Parco Nazionale d'Abruzzo Lazio e Molise e corridoi ecologici tra questa area protetta e quelle circostanti (Italia); (2) Parco Nazionale del Gran Sasso e Monti della Laga (Italia); (3) area di Trikala-Meteora (Grecia). I risultati includono le questioni più frequenti toccate dalle interviste, il modo in cui sono raggruppati e i temi su cui i gruppi di stakeholder si sono concentrati o sono confluiti. I punti chiave della discussione per ogni gruppo di stakeholder sono riportati sotto forma di un'analisi SWOT (Strengths, Weaknesses, Opportunities and Threats) adattata. Questa analisi informerà le azioni C1 (Sviluppo e funzionamento delle Bear Smart Communities), D1 (Monitoraggio dello sviluppo delle Bear Smart

Communities; Task D1.2), E1 (Sensibilizzazione alla conservazione degli orsi) ed E3 (Attività di comunicazione locali, regionali e nazionali). Il modello SWOT può essere utilizzato anche per informare lo sviluppo dello strumento da utilizzare nella Task A4.2 (questionario per l'indagine quantitativa) e come livello di riferimento per il nostro approccio qualitativo nell'Azione D3 (Monitoraggio dell'impatto del progetto sulla comunità locale e sugli stakeholder, Task D3.2).

2. INTRODUCTION

Action A4 (Ex-ante survey of public attitudes and stakeholder opinions) aims to collect and analyze public and stakeholder attitudes towards bears, bear conservation, and the project itself. Task A4.1 of Action A4 is a qualitative study that will first identify key stakeholders and then provide in-depth stakeholder input with the main stakeholder positions on the following themes: (1) Bear numbers and trends; (2) local attitudes toward bears; (3) bear behavior; (4) damages caused by bears and damage prevention methods; (5) compensation of damage caused by bears; (6) safety issues linked with bear presence; (7) human-bear conflict; (8) intergroup relations between stakeholders; (9) willngness to participate in the project; (10) expectations from the project and sustainability of project outcomes. Task A4.1 of Action A4 will inform the development of the questionnaire to be used in Task A4.2 (quantitative study). It will also be used as a reference base for Action D3, Task D3.1, where another qualitative study will be conducted to monitor the impact of the project on local communities and stakeholders. Action A4 will further inform Actions C1 (Development and operation of Bear Smart Communities), D1 (Monitoring the development of the Bear Smart Communities; Task D1.2), E1 (Raising awareness about bear conservation), and E3 (Local, regional and national media activities).

3. PROJECT AREAS

3.1 Abruzzo Lazio e Molise National Park

The Abruzzo Lazio e Molise National Park (PNALM) is mountainous and largely forested, extending along the central Apennine chain from 800 meters to 2249 m asl. PNALM lies at the intersection of different biogeographical regions giving rise to a rich flora and fauna including endemic and glacial relict species. The result is the remarkable species diversity of over 2,000 plant species, equivalent to about a third of the flora present in the national territory. The park also hosts a variety of animal species: 60 species of mammals. 300 birds, 40 species of reptiles, amphibians and fish, and around 5,000 species of insects. Among the most significant mammal species are the Apennine chamois (*Rupicapra pyrenaica ornata*) and the Marsican brown bear (*Ursus arctos marsicanus*). Chamois are the only endemic Italian mammal listed in Appendix II of CITES. PNALM represents the core area for the Marsican Brown bear, besides being an area of high natural value, as testified by the presence of other species and priority habitats (Wolf, Chamois, Rosalia alpina, Osmoderma eremita, Dalmatian woodpecker, Ursini's viper, European otter). The Marsican brown bear population is high given the size of the area. It was recently estimated at between 47 and 61 individuals through genetic sampling (through the LIFE Arctos project). In the peripheral parts of the park, bear population levels are low restricted to a few wandering males although breeding females are found around the periphery of the park. With such a low population, Marsican brown bears are critically endangered although the population is stable and may have slightly increased in recent years. The Park itself is considered to be at full occupancy, such that population expansion can only occur through range expansion.

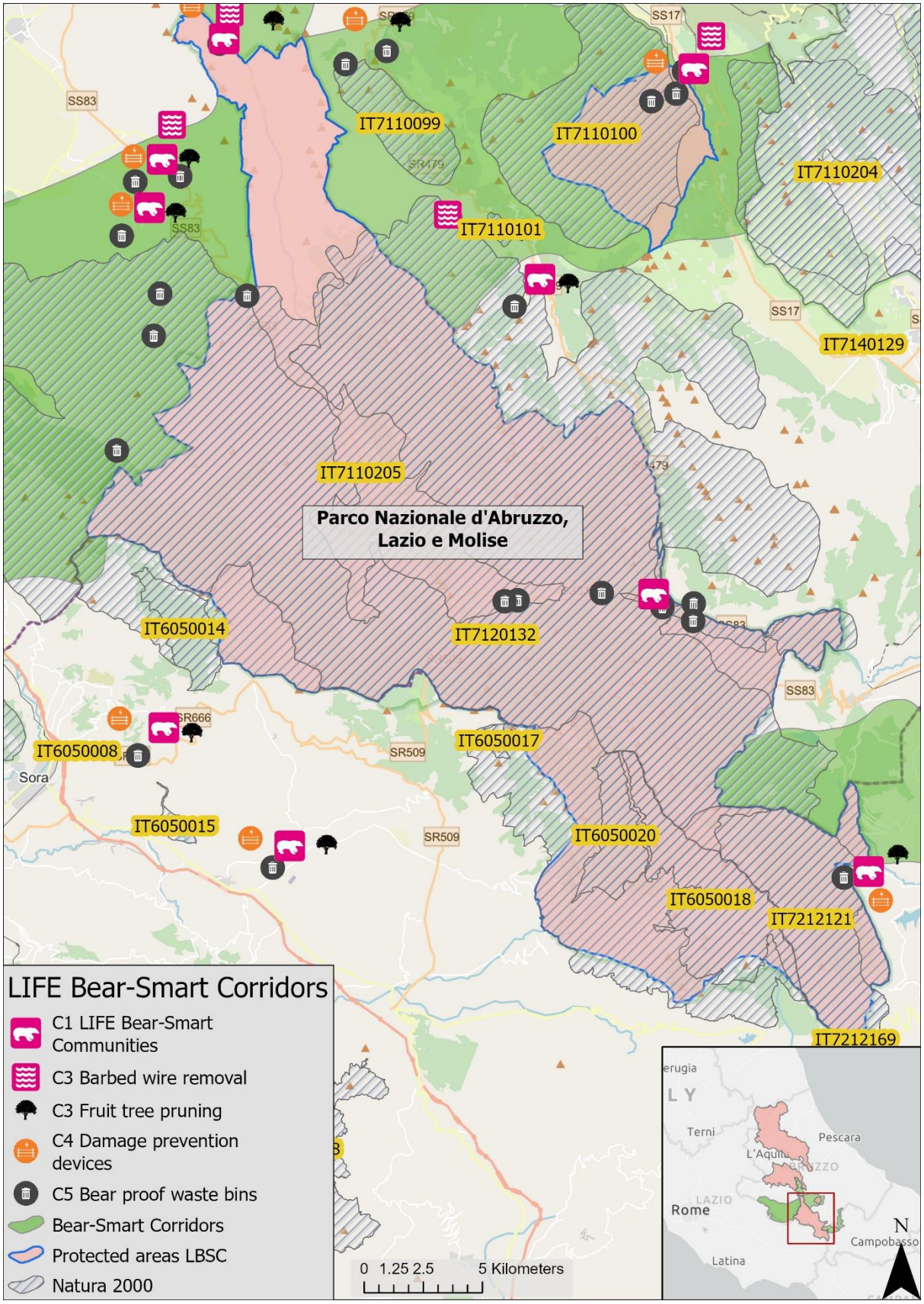

Figure 3.1. Map of Italian project area Abruzzo Lazio e Molise National Park

3.2 Gran Sasso e Monti della Laga National Park

The project area contains the Gran Sasso Massif, and the Monti della Laga chain. The two areas are linked through the Valico delle Capannelle (1300 m) and the Vomano River valleys. Beech forests dominate up to 1800 m above sea level, often mixed with silver fir, yew and holly, with a typical undergrowth of blueberry. Bilberry moors are characteristic above the treeline, intermixed with nardus and tundra type grasslands, peat-bogs and alpine (winter snowed) valleys. The Park hosts a variety of animal species: 60 species of mammals. 300 birds, 40 species of reptiles, amphibians and fish, and around 5000 species of insects. Among the most significant mammal species are Apennine chamois (*Rupicapra pyrenaica ornata*). In the past year, a brown bear individual (*Ursus arctos marsicanus*) has been reported several times – the first recent record for the Park. It is now confirmed that an adult male bear is resident in the Park including during hibernation. Standard bear monitoring has accordingly been initiated (from May 2020) with several direct sightings of the young adult male bear. This clearly shows that Gran Sasso National Park is suitable for bear range expansion through the Majella National Park. If bear dispersal corridors can be made suitable for bears from PNALM through the Majella National Park and into Gran Sasso National Park, as the presence of this bear seems to suggest, that would represent a very substantial range expansion which would allow bear numbers to increase. Building positive coexistence between bears and people living and visiting the Park is crucial.

For the time being, however, bear presence in Gran Sasso is minimal and this will be reflected in the content of this report. Namely, average duration of interviews was the lowest in Gran Sasso and interviewee extracts were rather short and did not depict any substantial experiences of interviewees with bears or bear related issues. Therefore, Gran Sass was not finally incorporated in the adapted Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis which will be presented for Abruzzo National Park and corridors in Italy and Trikala-Meteora in Greece (see Section 6). Still, this first qualitative data collection in Gran Sasso will be crucial for providing a reference base for Action D3 (Monitoring the project's impact on the local community and stakeholders) as is of course the case with the two other areas as well.

3.3 Greek project area of Trikala-Meteora

The Greek project area of Trikala-Meteora includes two Municipalities (Trikala and Meteora), with about 80000 and 20000 permanent residents, respectively, who are concentrated in the two main urban centers of each Municipality (Trikala and Kalampaka, respectively), and several villages scattered around them. Most land is under public and community ownership and there is the mountain complex of Antichasia and Kalampaka-Meteora in the South. Agricultural land is extensive and involves mainly cereals and vineyards. The western part of the area had a permanent bear population (*Ursus arctos*), which colonized the eastern part in the 1990s. Altogether, the bear population in the area represents 25-30% of the total bear population in Greece. The Greek project area of Trikala-Meteora is linked with the other Greek project area of Amyntaio through a mega-corridor providing gene flow for the bear population over the Pindos Mountain Range (see project proposal for more details, page 146). Beyond the bear population, the biodiversity of the area is exceptional with several critically endangered species and birds of prey (Important Bird Area – IBA) and is a breeing area for the wolf (*Canis lupus*) in the region of Thessaly. Finally, the area hosts the World Heritage Site of the rock formations of Meteora, which attracts millions of domestic and international tourists annually. Indeed, numbers of visitors arriving at Meteora may reach 2000000 annually, which makes Meteora the second site in Greece in terms of visitation after Acropolis, Athens.

Figure 3.2. Gran Sasso e Monti della Laga National Park

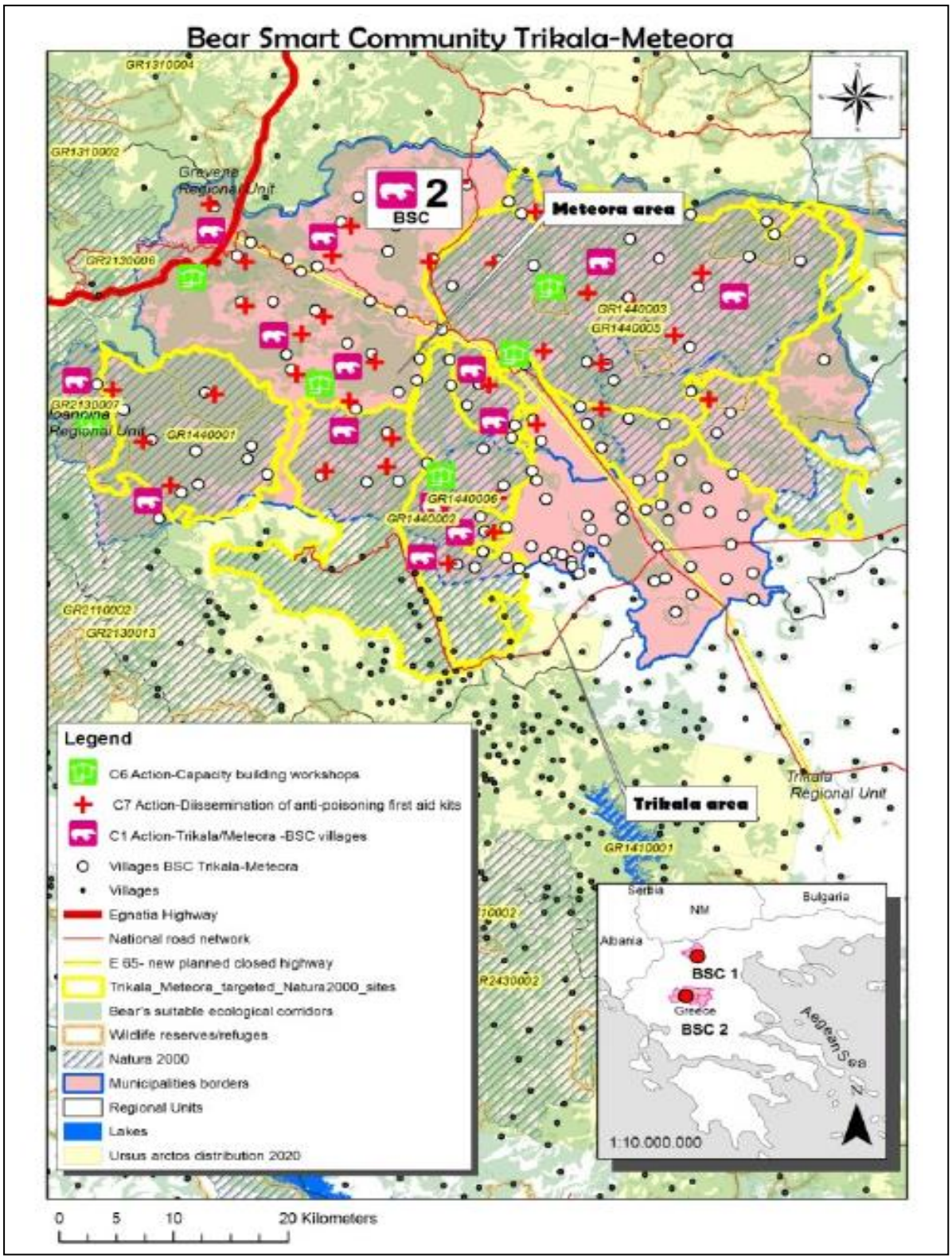

Figure 3.3. Map of Greek project area of Trilala-Meteora. Source: Project proposal, page 148.

4. METHODS

4.1 Interview protocol

An interview protocol was developed for data selection (Annex 1). It included two parts, a first part with all necessary background information for the project and Action A4, so that each interviewee could grant their informed consent for participation, and a second part with all interview questions. These were split in four different sections: (1) Bear perceptions, representations and attitudes; (2) human-bear conflict; (3) human-bear coexistence; (4) stakeholder expectations from the project. A first series of questions were accompanied by follow-up questions (prompts) to encourage interviewees to clarify their points and delve deeper in selected aspects of interviewees. A semi-structured format was chosen, keeping a draft structured as reflected in the interview protocol but allowing respondents to expand on any aspects they considered worth discussing as well as to introduce any new aspect they thought to be relevant. The interview protocol was reviewed and approved by all partners.

4.2 Sample selection

A purposive and snowball technique for sample selection was chosen, focusing on key stakeholder groups (stock breeders, farmers, beekeepers, local authorities, park authorities, foresters, eNGOs, hunters, tourism entrepreneurs). Sampling started with identifying potential interviewees among contacts of projects partners in the three areas (Abruzzo Lazio e Molise National Park in Italy; Gran Sasso e Monti della Laga National Park in Italy; Trikala-Kalampaka in Greece). These people were contacted, informed about the project and Action A4 and asked to be interviewed. All people who agreed were then asked, during the interview, to name other people who could then be contacted for data selection following the same steps and principles. All interviewees granted their informed consent for participation in Action A4 and for data selection and processing according to the General Data Protection Regulation (GDPR).

4.3 Coding

Interviews were recorded digitally and stored in a digital repository after the consent of interviewees was secured. Interviews were coded based on an open coding process[1], where recurrent themes (codes) for each main question in the interview protocol were identified. Inter-coder reliability was calculated for each data set to check for reliability in coding. Specifically, for a 10% of all data for each data set, we calculated Cohen's kappa for two independent coders and found the index to amount to over 0.85 for each case.

4.4 Data analysis

The frequency of each code was calculated in the sample for each area. Cluster analysis was also used to depict clusters of items as they concurred in interviewee accounts. (Cluster method: Between groups linkage; Interval: Squared Euclidean Distance; Measure: Dice ; Cluster distance rescaled between 0 and 25). Clustered items will provide valuable insight for Action E1 (Raising awareness about bear conservation) and Action E3 (Local, regional and national media activities).

[1] Strauss, A., & Corbin, J. M. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Thousand Oaks, CA: Sage.

5. RESULTS

5.1 Sample characteristics and average duration of interviews

Table 1 presents sample characteristics and the average duration of interviews in the two Italian areas and the Greek area. We need to note that in each area there was a broad representation of all key stakeholder groups. A reason of concern is the relatively low percentage of females in the sample across locations, which should be addressed in the other actions of the project aiming to increase female participation.

Table 5.1. Sample characteristics

	Abruzzo Lazio e Molise National Park (number of interviewees and sample percentage in parenthesis)	Gran Sasso e Monti della Laga National Park (number of interviewees and sample percentage in parenthesis)	Trikala-Meteora (number of interviewees and sample percentage in parenthesis)
Stock breeders	8 (16)	9 (22.5)	4 (13.3)
Farmers	5 (10)	9 (22.5)	3 (10.0)
Beekeepers	6 (12)	6 (15)	3 (10.0)
Local authorities	5 (10)	-	3 (10.0)
Park authorities	6 (12)	3 (7.5)	4 (13.3)
Foresters	5 (10)	2 (5)	3 (10.0)
eNGOs	5 (10)	4 (10)	3 (10.0)
Hunters	4 (8)	1 (2.5)	3 (10.0)
Tourism entrepreneurs	6 (12)	6 (15)	4 (13.3)
Total sample size	50	40	30
Number of female interviewees	12 (24)	8 (20)	4 (13.3)
Average duration of interviews (min)	34.8	18.25	43

5.2 Results for the Italian areas of Abruzzo Lazio e Molise National Park (PNALM) and Gran Sasso e Monti della Laga National Park

5.2.1 Bear numbers and trends

In both PNALM/corridors and Gran Sasso the majority of respondents believed that bear numbers increased (26 out of 50 respondents in Abruzzo, 52%; 32 out of 51 respondents in Gran Sasso, 62.7%):

Look, compared to the last few years, in the last few years so compared to what it was previously, the bear population has certainly increased, fortunately, because it's not unpleasant at all, also because it was an endangered species and so it's not unpleasant to know that the bear is more present in the park because it means that the conservation actions are working well. (Interviewee No 28, Beekeeper, Abruzzo)

[There is an] … expansion of the species from the areas where it was located in the Abruzzo National Park to the rest of the territory that may be compatible with the life of this animal. (Interviewee No 21, Forester, Gran Sasso)

In both areas, interviewees highlighted that increasing trends are clear since 5-10 years (26 out of 50 respondents in PNALM/corridors, 52%; 32 out of 51 respondents in Gran Sasso, 58.8%). The rest of respondents in PNALM/corridors believe that bear numbers remained more or less stable (24 out of 50 respondents; 48%). The same was valid for a smaller percentage of the sample in Gran Sasso (7 out of 50 respondents; 13.7%). We need to highlight that there was no significant difference of respondent replies between the PNALM area and corridors.

5.2.2 Local attitudes toward bears

The majority of interviewees in PNALM/corridors agreed that bear numbers and trends influence local attitudes towards bears (14 out of 50 respondents) or that bears' behavior influences people's attitudes, for instance, in the case of bears accustomed to human presence (16 out of 50 respondents). An analogous majority was observed among respondents in Gran Sasso (34 out of 51 respondents). These are three typical examples of how interviewees expressed these three dimensions, respectively, the first two from PNALM/corridors and the third from Gran Sasso:

Well yes, here it has gone from killing bears to feeding them on the street, so I think that is a big problem. Neither is good... Exactly because it has gone from one excess to another and this is definitely not good. Of course the good thing is that it attracts tourism, but obviously on the other hand there could be serious problems. (Interviewee No 23, Farmer, PNALM/corridors)

Well, certainly having a bear in front of the house or in a barn or whatever anyway influences so much. And I repeat, the important thing in my opinion is that probably the less said about it the better, I am convinced of that, so go searching on the social the guy who posted the photo that there is the mother or the cub all people goes there. I for example never saw Amarena with the four cubs, I always refused to go there, or for example Giacomina who now runs around the same Carrito or whatever. I think that if we love the bear the best thing to do is that the less said about it the better. (Interviewee No 18, Tourism entrepreneur, PNALM/corridors)

Of course, as long as there are few of them it is not a big problem but if they increase it will become a problem like that of wolves and wild boars… (Interviewee No 27, Stock breeder, Gran Sasso)

Compared to other stakeholder groups, foresters in PNALM/corridors tended to decline more that bear numbers influence local attitudes towards bears (Likelihood ratio chi-square = 5.84, $p < 0.05$; Phi = 0.40, $p < 0.01$). There was no difference in responses between interviewees in the park and those in corridors.

5.2.3 Bear behavior

Bear accustomed to human presence was the most frequent item in this section of interviews for both PNALM/corridors (30 out of 50 respondents) and Gran Sasso (17 out of 51 respondents):

I find that it is not easy to achieve this goal of coexistence because the bear in particular is really attracted. We were in August of, I don't want to be wrong, three years ago, clearly it was a festival with hundreds of people and the bear was spotted maybe 50 metres from this crowd of people… the smell of food clearly attracted it… there were still hundreds of people, so imagine this animal approaching, the risk of all things because it's hungry or because it's curious, I don't know. So the fact that it approaches despite the presence of all these people, so it is not even afraid. (Interviewee No 32, Beekeeper. PNALM/corridors)

Lately it is getting very close even to the inhabited centers [of human settlements]. (Interviewee No 37, Forester, Gran Sasso)

A number of interviewees in PNALM/corridors (8 out of 50) elaborated on the issue of bear behavior by resorting to a contrast between supposedly real and fake bears, which was closely linked to arguments of accustomization:

Yes, going into the mountains in the woods I saw a 'bear bear' not a 'village bear', [I saw a] forest bear, mountain bear which goes away when you see it [...] The bear we're talking about is a bear that is born and lives in the mountains, it's not a bear that comes to the village to eat fruit on the tree while 60 people watch. That's not a 'real' bear. (Interviewee No 44, Forester, PNALM/corridors)

In PNALM/corridors, several interviewees discussed changes in bear behavior (21 out of 50 respondents) or reasons to changes in bear behavior (20 out of 50 respondents), while these two items tended to coexist in interviewee accounts. These are two characteristic extracts, the first describing change and the second offering a reson for that change:

As I said before, certainly the fact that it has become accustomed to the presence of man, this is a big problem, because there is no longer a difference between its home and man's home here. (Interviewee No 23, Farmer, PNALM/corridors).

Before, because there were fewer of them anyway, also because before, the ones that bothered them [the shepherds] were killed in some way, now you can't even hear about it or you risk going to jail. When there was an animal that was too annoying it was taken away by the shepherds themselves [...] destroys the chicken coops because they got him used to that, maybe when they kept him close they would bring him chicken carcasses, chickens, all scraps, so he is used to eating this, his mother continued so his children got used to that, until he went into Roccaraso inside the bakeries. (Intervewee No 42, Stock breeder, PNALM/corridors)

There were three last items on bear behavior in PNALM/corridors, the first presenting myths or histories or legends about the bear (mentioned by 11 out of 50 respondents), the second displaying positive perceptions and attitudes toward bears and a kind ot local bear culture (mentioned by 10 out of 50 respondents) and the third arguing that it should be human behavior that ought to be discussed (mentioned by 9 out of 50 respondents), meaning that it was irresponsible people's behavior to blame for a series of cases and not the bear's behavior. The three following extracts showcase an example of these three items, respectively:

One that comes to mind is the one linked to Scanno of the bear's bread, which everyone knows, that shepherds used to leave in their saddlebags a sweet almond-flour cake that was to beguile the bear and keep it away from the sheep. (Interviewee No 20, Tourism entrepreneur, PNALM/corridors)

Rather than talking about conflict, it is necessary to talk about a sort of cooperation, because the interest in biodiversity should lead to a mutual respect, so the beekeeper, rather than entering into conflict, should, with his own service, [promote] pollination, [and] with the pollination service, guarantee the resources also for the bear. Because, clearly, through the pollination service, there is also the possibility to have wild fruit, and the wild fruit is what the bear feeds on. The bear, by feeding, then defecates and when it defecates it passes on to the environment the seeds of what it has eaten, therefore it also increases biodiversity, so I would speak more of a union, we absolutely cooperate and there is no conflict… we would somehow close what is a life cycle and not interrupt it. (Interviewee 28, beekeeper, PNALM/corridors)

It's people, it's the extreme [tourist] guides that go to take pictures of them [bears], that too is a matter of controversy. I mean in the end if I should tell you that it gives us so many problems, no, it's that it is often fed by the restaurants food in the sense that they put honey, It has happened. I have heard stories, to bring it near [to] these tourist activities… (Interviewee No 41, Stock breeder, PNALM/corridors)

In the case of PNALM/corridors, items on bear behavior revealed considerable differentiation among stakeholder groups and within the park vs. in corridors. References to bears accustomed to human presence (Likelihood ratio chi-square = 12.65, $p < 0.001$; Phi = 0.49, $p < 0.001$) and the closely related distinction between real and fake bears (Likelihood ratio chi-square = 5.92, $p < 0.05$; Phi = 0.33, $p < 0.05$) were much more salient in interviewee accounts within the park as compared to interviewees in corridors. Tourism entrepreneurs offered more myth, histories and legends than other stakeholder groups (Likelihood ratio chi-square = 12.23, $p < 0.001$; Phi = 0.55, $p < 0.001$). Hunters gave more reasons for changes in bear behavior (Likelihood ratio chi-square = 7.86, $p < 0.01$; Phi = 0.36, $p < 0.05$), while stock breeders stressed more the fact that it was human behavior that should be discussed (Likelihood ratio chi-square = 5.39, $p < 0.05$; Phi = 0.36, $p < 0.05$).

5.2.4 Damages caused by bears and damage prevention methods

Items on damage and damage prevention are presented in Table 5.2.4. In PNALM/corridors damages seemed to be much more pronounced than in Gran Sasso. Perception of trends of damages in PNALM/corridors, however, were mixed, with 13 out of 50 respondents believing that damages increased, 6 mentioning that they decreased, 6 saying that they were stable, and another 5 not being able to give a clear trend. Two items on damage in PNALM/corridors revelaed an implict tolerance towards bears, namely, that damage caused by bears was considerably lower than that caused by wolves (16 out of 50 respondents) and that damage was caused by other wildlife species other than the bear, for instance, deer, wild boars, etc (23 out of 50 respondents). The following extracts present an example of each category:

They [local people who inhabitat the local area in the past] could reason with the bear, the problem has always been wolves from that point of view, because they are too cunning and unpredictable, and aggressive, the bear is not like that. (Interviewee No 34, Stock breeder, PNALM/corridors)

I fortunately have had no bear damage, the fences I built here, electric fences, these are for the management of wild boar and deer, which unfortunately are really many and, in my opinion, this is a very underestimated problem. (Interviewee 23, farmer, PNALM/corridors)

A number of interviewees in Gran Sasso underlined that they may have suffered damage caused by bears but this was not ascertained (5 out of 51 respondents):

I had damage to a couple of bee hives but the park did not confirm bear damage. (Interviewee No 39, Beekeeper, Gran Sasso)

The bear was on the carcass of a horse but we were not sure of the causes of death of the animal. (Interviewee No 25, Stock breeder, Gran Sasso)

Table 5.2.4 Items on damage and damage prevention

	Abruzzo Lazio e Molise National Park (n=50)	**Gran Sasso e Monti della Laga National Park (n=51)**
Items on damage		
Damages	30	18
No_damages	5	18
Damages_increasing	13	-
Damages_decreasing	6	-
Damages_stable	6	-
No_trend	5	-
Bear_versus_wolf	16	-
Damage_other_than_bear	23	
Damage_not_ascertained	-	5
Items on damage prevention		
Prevention_ methods	45	7
No_methods	-	26
Methods_efficient	41	-
Methods_should_be_improved	6	-
Side_effects	5	-

Note: Counts may add to more than 100% of sub-samples (n=50 for Abruzzo Lazio e Molise National Park; n=51 for Gran Sasso e Monti della Laga National Park) because each respondent could mention more than one item; counts not presented if frequency lower than a threshold of 10% of subsample

With regard to damage prevention methods, these were well reported in PNALM/corridors (45 out of 50 respondents) but much lesser referred to in Gran Sasso (7 out of 51 respondents). Althoug a considerable majority in PNALM/corridors believed that methods are effecitve (41 out of 50 respondents), there was a minority who highlighted that damage prevention methods need to be imporved and that these have some important side-effects that need to be tackled. Both these categories of responses indicate that good practice in damage prevention methods cannot be transferred from one place to another without proper anchoring and adaptation to the local

context and without proper monitoring of the effectiveness of any method. These are two characteristic extracts from these two categories:

Some other time, two years ago, despite the electric fence being in operation here in the village, I don't know how it managed to get some hives out of the fence, perhaps because I had put them too close to the electric fence. It managed to get them out and damage them. When it wants to, it manages to come up with some way to deal even with the fence. I hope it doesn't come again because, especially now, I have hives here with honeycombs and they are still full and I hope it will not visit them. (Interviewee No 29, Beekeeper, PNALM/corridors)

It depends on the people: initially everyone asks for it [electric fences] because they take it as a great way to defend what they have, from the vegetable garden to the fruit tree, the farm, the apiary. Then those who carry out these activities professionally… make very good use of it, try to be careful, do maintenance, do everything we tell them to do so that the fence stays fully operative. The others, kind of settle down, in the sense that it was given to them by the park, the park takes care of it, and then if it works or does not work the thing is no longer carefully evaluated… So in the vast majority of cases they work and they work well, and then there are also those who get a bit carried away in this situation, the fence stops working and the damage starts again, but due to people's carelessness. (Interviewee No 9, Park staff, PNALM/corridors)

The clustering of these items for PNALM/corridorsis given in Figure 5.2.4. A first cluster with frequent items includes damage instances, damage prevention methods implenented and accounts on the effiicacy of these methods. The two items implying tolerance towards damages caused by the bear were loosely interrelated in this cluster, namely, that the bear causes lesser damage than the wolf and that there are other wlidlife species which also cause damage apart from bears. Quite interestingly, the item which highlightes that damages are increasing is included in this cluster as well. This denotes thay in interviewee accounts damage may increase despite the fact that effective damage prevention methods are in place. Another cluster was built with less frequent items, presenting damage as stable and highlighting the need to improve damage prevention methods and address their side-effects.

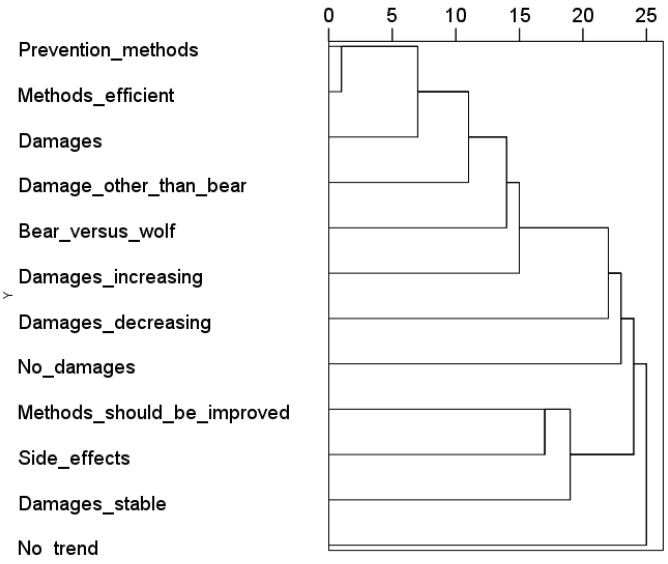

Figure 5.2.4. Cluster analysis of items mentioned by interviewees in the Abruzzo Lazio e Molise National Park on damage and damage prevention methods (Cluster method: Between groups linkage; Interval: Squared Euclidean Distance; Measure: Dice ; Cluster distance rescaled between 0 and 25). Cluster distance rescaled between 0 and 25.

The first (Likelihood ratio chi-square = 6.47, $p < 0.05$; Phi = 0.47, $p < 0.01$) and third (Likelihood ratio chi-square = 7.92, $p < 0.01$; Phi = 0.49, $p < 0.001$) item in this cluster tended to be voiced more by interviewee employed by the park. These findings indicate that park staff may not share the same trends for damages caused by bears with the rest of stakeholders. They also indicate that park staff may be much more concerned about optimizing and monitoring damage prevention methods than the rest of staeholders. We need to highlight that no significant difference was observed between park and corridors for Abruzzo Lazio e Molise National Park in items on damage and damage prevention.

5.2.5 Compensation of damage caused by bears

With regard to compensation, a minority of interviewees in PNALM/corridors stated that compensation systems work well (10 out of 50 respondents). However, there were several complaints by other interviewees who noted compensation is not considered enough to balance damage (15 out of 50 respondents), that compensation works well inside park limits only (11 out of 50 respondents), that there are several side-effects and problems related to compesation (11 out of 50 respondents, and that compencsation systems are too slow (6 out of 50 respondents). These are characteristic examples of interviewee accounts for each of the three above categories (not enough to balance damage; work well inside park limits only; and side effects, respectively):

Luckily I have never experienced them, but I know of colleagues who have suffered serious damage and, in my opinion, compared to the damage sufffered, the compensation has not been enough. …when the bear arrives you lose swarms, equipment, beekeeping material, beehives, frames pulled, stocks, honeycombs. The quantifiable damage…must be 250-400 euros…but I know that the compensation is not so high. I have never had this direct experience, I don't know how much they give, I've been told that they don't give very much, maybe around 100, 150, 200 euros, but consider that a swarm in a hive is developed with a queen, often it's a queen of the year or the year before, plus a honeycomb with stocks, that is, when you take out ten kilos of honey, 80 euros, 90 euros for the material and then all the wood, wax, the structure of a hive that costs 120 euros. (Interviewee No 32, Beekeeper, PNALM/corridors)

As far as damaged trees are concerned, let's say there are two points to highlight: As far as the park area is concerned, if these trees, in my specific case, are inside the perimeter of the national park and there, let's say the park rangers and foresters carry out the inspection and practically draw up a report, if one accepts the estimation of the damage, etc., you get a refund. If the trees are located outside the park... if you can prove that it was the bear, the park turns a blind eye and reimburses you. If, on the other hand, it is not clear what was the animal that did the damage, then let's say that the region, which used to be the province, is now the region, which reimburses you for the damage. Only, as we were saying before, the people who have a business for income, and therefore are professional farmers, are few, all the others do it for passion and therefore have neither registration with the chamber of commerce nor VAT registration. So those who are within these two schemes, i.e. they have a proven profession can ask for reimbursement, all the others have nothing. The Region does not compensate those who are not registered as farmers anyway. (Interviewee No 25, Farmer, PNALM/corridors)

Instead of compensating and keeping you quiet, the park starts asking you for 10,000 documents: The vinca [evaluation of environmental impact] and where it was at the time of the attack, photographs to proove it, and then they summarise and pay you 30 per cent, they gave us 300 euros which were not enough to pay the vets. (Interviewee No 42, Stock breeder, PNALM/corridors)

Compared to other stakeholder groups, representatives of local authorities were much more probable to state that compensation systems work well (Likelihood ration chi-square = 4.41, $p < 0.05$; Phi = 0.33, $p < 0.05$), while members of environmental non-governmental organizaitons were more likely to record that compensation systems are too slow in their operation (Likelihood ration chi-square = 7.92, $p < 0.001$; Phi = 0.49, $p < 0.001$). There was no difference between interviewees in the park and in corridors across all items in this section.

For Gran Sasso, 15 out of 51 interviewees stated that compensation exists, 12 respondents stated that they do not know about compensation and another 9 respondents stated that compensation does not exist.

5.2.6 Safety issues linked with bear presence

Interviewees in Abruzzo expressed their concerns for human safety through three items: One that focused on the fact that bears were wild animals and they behaved accordingly (27 out of 50 respondents), which was closely related to another item underlining that safety issues dependent largely upon the behavior of humans (8 out of 50 respondents) and another item documenting initiatives to address human safety issues (6 out of 50 respondents). These are typical extracts of the above items following the same order of presentation:

…if your behaviour is appropriate and you approach it with respect, because it is still an animal, it is still a wild animal and therefore certainly not to be chased, certainly you have to keep your distance, so, with the right precautions, it is not dangerous at all. (Interviewee No 28, Beekeeper, PNALM/corridors)

The problem is in August when there are tourists who never go to sleep, so they all chase the bear, so let's say the problem arises when the tourists go after the bear, it is clear that it becomes a problem because it is clear that the bear cannot just stay there…(Interviewee No 3, NGO member, PNALM/corridors)

…the authorities disperse the crowds at times, for example in August, when there is the height of tourism, in Villetta there are problems with the deer because they are in the middle of the road, they create traffic jams for safety reasons, that is, because blocking a road is a problem. So the authorities try to disperse the crowd… (Interviewee No 23, Farmer, PNALM/corridors)

Compared to other stakeholder groups, tourism entrepreneurs highlighted more that safety issues relied on human behavior mostly (Likelihood ratio chi-square = 4.49, $p < 0.05$; Phi = 0.34, $p < 0.05$), while farmers mentioned more often initiatives to address human safety issues (Likelihood ratio chi-square = 7.92, $p < 0.01$; Phi = 0.49, $p < 0.001$). There were no differences between responses of interviewees in the park from those in corridors.

In Gran Sasso, 23 out of 51 respondents stated that the bear cannot be a threat for human safety. References in Gran Sasso concentrated on the fact that the Marsican bear was not an aggressive species or that there were no cases of bear attacks ot humans in the central Apennines. Still, 9 out of 51 interviewees in Gran Sasso underlined that the bear can be a threat for human safety. This is a characteristic extract in this case:

…I used to go to collect mushrooms in the woods, now I don't go there anymore. Now I prefer to move by car. (Interviewee No 20, Beekeeper, *Gran Sasso*)

5.2.7 Human-bear conflict

In PNALM/corridors there was a wide allocation of respondent accounts across a variety of items on human-bear conflict. Specifically, 12 out of 50 interviewees characterized conflict as stable, 5 mentioned that conflict was increasing, 11 stated that conflict was decreasing, and another 8 believed that there was no conflict at all and that local people have always coexisted with bears. There were several items elaborating on different types of conclict, for instance: Description of human-bear conflict (14 out of 50 respondents); options to address human-bear conflict (14 out of 50 respondents); how human-human conflict is more important than human-bear conflict (11 out of 50 respondents); conflicts related to space use (11 out of 50 respondents); new conflicts due to ecotourism development (7 out of 50 respondents). Below we present one extract from each one of the above categories followng the same line of presentation:

… coexistence is not always totally peaceful, because it is well understood that the presence of a bear in a henhouse, in an agricultural area, in an activity managed at family level, can naturally lead to situations of conflict. I believe that our population is, as I said before, aware and also very tolerant, you will allow me to use that term… but it is equally true that we have to find the right solution, the right compromise… (Interviewee No 16, Representative of local authorities, PNALM/corridors).

So the first priority is to minimize the opportunities [of conflict], by securing those who have animals, bees, chickens or whatever… The thing that should be practiced is you have to scare them when you encounter them because they need to understand that we are bad and dangerous. If instead they continue the raids in broad daylight, those are dangerous for them, not for us, because unfortunately they put their survival at risk. (Interviewee No 48, Hunter, PNALM/corridors)

… there is such a conflict between actors or secondary actors with respect to the management and protection of this animal [the bear], that it is really stressful to work on such an animal. What happens a little bit also in other cases when you have flag species or animals like the bear, that is, such a circle of interests that may be understandable, [but] other times [it is just] their own economic interests...so you see acronyms, I underline the term acronyms, of ten different associations, Parks, Reserves, the Region, forest police, universities....And, one who worked within the PATOM tells you, to put together the heads of these I think it is more difficult than to protect the bear. I do not [have to] add anything else. (Interviewee No 4, NGO member, PNALM/corridors)

On the other hand, there are those who still perceive the presence of the bear as a limit to their activities because they cannot go on that path, I cannot do this, now they can no longer hunt because there is a bear… I have hikers who want to go on a path, when maybe on that path you can't go, or a hunter who necessarily wishes to go hunting because "it's my home", let's say that there is still a very selfish perception of the territories, not as a common good but something that belongs [to someone] and to which we have an exclusive right… (Interviewee No 7, Park staff, PNALM/corridors)

… the bear represents a powerful focus of attraction so it is used to attract hikers and bikers… which brings you to the mountains to see animals. This over time creates conflicts because then this has also led to excesses, that is, to situations in which groups of hikers have been brought too close to the animals, off the trails, in areas that were not allowed so this over time is creating quite serious conflicts. (Interviewee No 9, Park staff, PNALM/corridors)

Compared to other stakeholder groups, tourism entrepreneurs were more probable to state that conflict was decreasing (Likelihood ratio chi-square = 6.50, $p < 0.05$; Phi = 0.40, $p < 0.01$), hunters were more probable to refer to ways to address human-bear conflict (Likelihood ratio chi-square = 4.19, $p < 0.05$; Phi = 0.31, $p < 0.05$), and park staff were more likely to mention conflicts due to space use (Likelihood ratio chi-square = 6.50, $p < 0.05$; Phi = 0.40, $p < 0.01$). Interviewees in the

park were much more likely to record new conflicts due to ecotourism development as compared to interviewees in corridors (Likelihood ratio chi-square = 4.55, $p < 0.05$; Phi = 0.29, $p < 0.05$),

In Gran Sasso, 23 out of 51 respondents stated that human-bear conflict was stable. A considerable number of interviewees underlined the lack of data on human-bear conflict (13 out of 51 respondents).

5.2.8 Intergroup relations between stakeholders

Items on intergroup relations between stakeholders for the sub-sample in PNALM/corridors and how they clustered are presented in Table 5.2.8 and Figure 5.2.8, respectively. There were numerous references to collaboration between stakeholders (28 out of 50 respondents), which clustered together with successcul initiatives of that kind (25 out of 50 respondents). At a higher cluster distance, critical reflections on stakeholder relations (10 out of 50 respondents) were clustered with references to the contingency in stakeholder relations, where the outcome of collaboration would depend on background conditions or people involved (5 out of 50 respondents). Another cluster involved the absence of colaboration (8 out of 50 respondents), unsuccessful initiatives (7 out of 50 respondents) and instances of human-human (stakeholder) conflict (5 out of 50 respondents). Taken together, the three clusters describe three different categories of intergroup relations: (1) successful collaboration, (2) collaboration that may work under certain conditions, and (3) concerns about absence of collaboration or problems in stakeholder relations.

Table 5.2.8. Items on iIntergroup relations between stakeholders for the sub-sample in Abruzzo

Items	**Count**
Successful_initiatives	28
Collaboration	25
Critical_reflections	10
No_collaboration	8
Unsuccessful_initiatives	7
Collaboration_depends	5
Human_human_conflict	5

Note: Counts add to more than 100% of the sub-sample (N=50) because each respondent could mention more than one item; items displayed in order of decreasing frequency

Compared to other stakeholder groups, stock breeders were more likely to report that there was no collaboration at all (Likelihood ratio chi-square = 6.46, $p < 0.05$; Phi = 0.41, $p < 0.01$), to refer to human-human (stakeholder) conflict (Likelihood ratio chi-square = 5.84, $p < 0.05$; Phi = 0.40, $p < 0.01$) or to describe unsuccessful initiatives (Likelihood ratio chi-square = 7.79, $p < 0.01$; Phi = 0.45, $p < 0.001$). These findings indicate that stock breeders populated the cluster in Figure 5.2.8 with concerns about stakeholder relations. NGO members (Likelihood ratio chi-square = 6.23, $p < 0.05$; Phi = 0.30, $p < 0.05$) and representatives of local authorities (Likelihood ratio chi-square = 6.23, p <

0.05; Phi = 0.30, p < 0.05) were more probable to refer to instances of successful initiatives. There were no differences in responses of interviewees in the park compared to those in corridors.

In Gran Sasso, 24 out of 51 respondents referred to collaboration between stakeholder groups, while 9 interviewees mentioned that there was no collaboration.

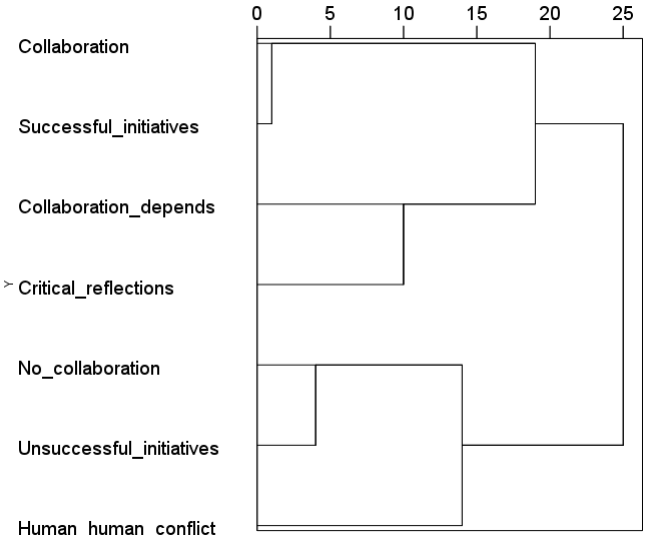

Figure 5.2.8. Cluster analysis of items mentioned by interviewees in the Abruzzo Lazio e Molise National Park on intergroup relations between stakeholders (Cluster method: Between groups linkage; Interval: Squared Euclidean Distance; Measure: Dice ; Cluster distance rescaled between 0 and 25). Cluster distance rescaled between 0 and 25.

5.2.9 Willngness to participate in the project

Items on willingness to participate in the project are presented for both subsamples in Table 5.2.9. Clustering of items is given in Figure 5.2.9.1 for PNALM/corridors and Figure 5.2.9.2 in Gran Sasso. The majority of interviewees in Abruzzo believed that stakeholders would willing to participate in the project (18 out of 50 respondents) or that this was possible if certain conditions were met (16 out of 50 respondents). The following extract is an example of that last item, which highlights the importance of how project partners will reach out to stakeholders to invite them:

It depends on who it is that comes to you and it depends on how you stand, this does a lot, that is, if someone comes and says "I know everything about bears and you don't know anything" you have lost at the start. On the other hand, if you come with the logic "let's try to figure out what we can do together" that's different, that's the attitude. (Interviewees No 19, Tourism entrepreneur, PNALM/corridors)

Several interviewees gave a number of reasons for stakeholder participation (16 out of 50 respondents). This was also valid in the case of interviewee participation as well, where another 16 out of 50 respondents elaborated on corresponding reasons (Table 5.2.9). In the case of interviewee willingness to participate, here we had a clear majority replying affirmatively (30 out of 50 respondents), while 9 interviewees underlined that this was possible under conditions. This is how a stock breeder described these conditions:

Time permitting, for the time that I have…I like to relate to intelligent, non-extremist people…then, yes if I have to find extremist people, I prefer not to participate. (Interviewee No 39, Stock breeder, Abruzzo)

Table 5.2.9 Items on willingness to participate in the project

	Abruzzo Lazio e Molise National Park (n=50)	**Gran Sasso e Monti della Laga National Park (n=51)**
Stakeholders		
Stakeholders_willing	18	18
Stakeholders_willing_conditions	16	-
Only_certain_stakeholders	-	6
Reasons_to_participate_Stakeholders	16	-
Stakeholders_not_willilng	-	7
Interviewee		
Interviwee_willing	30	32
Interviwee_willing_conditions	9	
Reasons_to_participate_Interviewee	16	
Interviwee_not_willing	-	7

Note: Counts may add to more than 100% of sub-samples (n=50 for Abruzzo Lazio e Molise National Park; n=51 for Gran Sasso e Monti della Laga National Park) because each respondent could mention more than one item; counts not presented if frequency lower than a threshold of 10% of subsample

Compared to other stakeholder groups, hunters were not willing to participate in the project (Likelihood ratio chi-square = 7.86, $p < 0.01$; Phi = -0.36, $p < 0.05$). There were no differences between responses of interviewees in the park as compared to those in corridors.

In Gran Sasso, 18 out of 51 interviewees stated that stakeholders would be willing to participate in the project, 6 mentioned that certain stakeholders only would consider their participation, while 7 interviewees noted that stakeholders would not be willing to participate (Table 5.2.9). This is how an interviewee described that it was only certain stakeholders who would take part in the project:

…Those who want to promote tourism do but I think the farmers will be on the war front, because we are already exhausted by the boar. (Interviewee No 31, Stock breeder, Gran Sasso)

Cluster analysis of items in PNALM/corridors showed that conditions set for participation of stakeholders grouped together with conditions set for one's own participation (Figure 5.2.9.1).

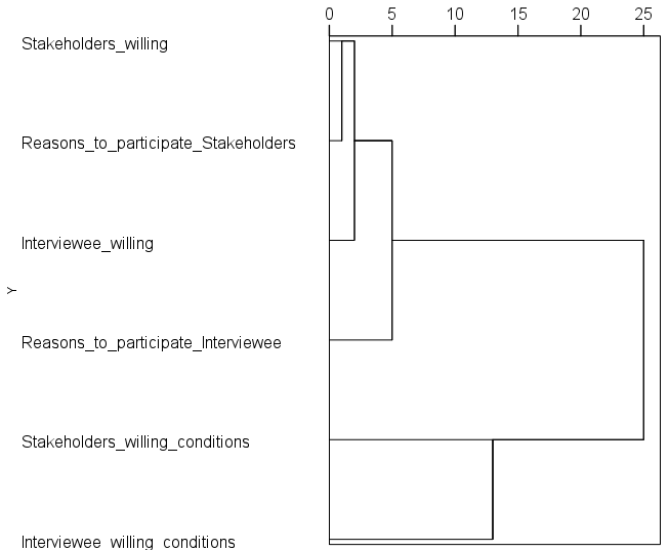

Figure 5.2.9.1. Cluster analysis of items mentioned by interviewees in the Abruzzo Lazio e Molise National Park on willingness to participate in the project (Cluster method: Between groups linkage; Interval: Squared Euclidean Distance; Measure: Dice ; Cluster distance rescaled between 0 and 25). Cluster distance rescaled between 0 and 25.

When it came to interviewees themselves, a majority of 32 respondents would be willing to participate, while 7 respondents declined participation. This sub-sample was polarized between those who thought that stakeholders would be willing to participate and were willing to participate themselves and those who believed that stakeholders would not be willing to participate and declied their own participation as well (Figure 5.2.9.2).

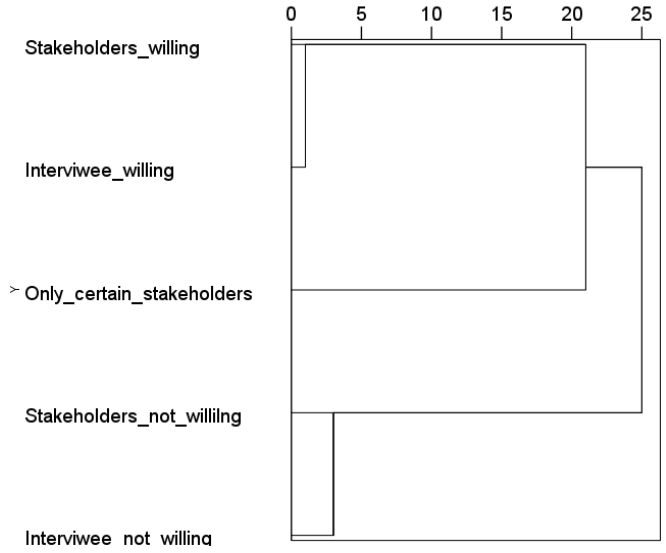

Figure 5.2.9.2. Cluster analysis of items mentioned by interviewees in the Gran Sasso e Monti della Laga National Park *on willingness to participate in the project (Cluster method: Between groups linkage; Interval: Squared Euclidean Distance; Measure: Dice ; Cluster distance rescaled between 0 and 25). Cluster distance rescaled between 0 and 25.*

5.2.10 Expectations from the project and sustainability of project outcomes

This section of the interviews involved three themes, namely, whether the bear can be an opportunity or not and for whom, the anticipated outcomes of the project and if these outcomes will last or not (sustainability). Items for all themes for interviewees in PNALM/corridors are presented in Table 5.2.10. Almost half of the sub-sample (24 out of 50 respondents) believed that the bear may be an opportunity for all, while 10 respondents believed that the bear can be an opportunity for those employed in the tourism sector only. There were 5 respondents who highlighted that the bear can be an opportunity under certain conditions and provided that some corresponding risks were addressed. This is how a tourism entrepreneur voiced that item:

The bear like the wolf is clearly an iconic animal that attracts a large number of people and very very varied interests, consequently it becomes in fact an icon also from an economic point of view… managing bear-related tourism activities is not easy, compromises have to be made, and it should somehow be taken into serious consideration by a bit of all the operators to take a step back in some aspects. (Interviewee No 22, Tourism entrepreneur, PNALM/corridors)

There were also 7 out of 50 respondents who did not believe that the bear was an opportunity.

Table 5.2.10. Items on expectations from the project and sustainability of project outcomes for the sub-sample in Abruzzo

Items	**Count**
Whether the bear is an opportunity or not	
Bear_opportunity_all	24
Bear_opportunity_tourism	10
Bear_opportunity_risks_conditions	5
Bear_not_opportunity	6
Outcomes	
Knowledge_awareness_sharing	25
Bear_conservation	9
Damage_decrease	8
Improve_coexistence	9
Revive_economy	8
Increase_collaboration	5
Sustainability	
Results_will_last	6
Results_will_last_conditions	30
Results_will_not_last	6

Note: Counts add to more than 100% of the sub-sample (N=50) because each respondent could mention more than one item; items displayed in order of decreasing frequency

With regard to the outcomes of the project, half of the sub-sample in PNALM/corridors (25 out of 50 respondents) noted knowledge, awareness and sharing of experiences as their main envisaged takeouts. Another 9 interviewees mentioned bear conservation. Other items in this theme were (Table 5.2.10): Decrease of damage caused by bears (8 out of 50 respondents); improvoing coexistence of local communities with bears (9 out of 50 respondents); reviving the local economy (8 out of 50 respondents); and increasing collaboration between stakeholder groups (5 out of 50 respondents). These were two extracts characteristic for the last two items:

…it can also generate resources to be able to grow the discourse also economically related to nature tourism, because I know that there are lots and lots of resources to invest for these projects and precisely from this one can also generate somewhat in a chain other types of investments. A bit of a give and take, in that sense it is how I understood it, it that triggers a two-way mechanism. (Interviewee No 24, Farmer, PNALM/corridors)

Then the first result that I would expect is to really see a collaboration between the entities in charge and the conservation aspects and the communication aspects of an area. So that there is somehow more relaxation and collaboration between these structures, because the moment you talk about the bear in particular you always enter a terrain that is very very complex and that seems to be strongly undermined, so sometimes actions do not go well because of the lack of collaboration. I hope that this LIFE achieves this as its first goal and then it can create foundations that don't necessarily need major economic resources to be able to be taken forward, concepts that can somehow stand on their own two feet. (Interviewee No 22, Tourism entrepreneur, PNALM/corridors)

Concerning the sustainability of the outcomes of the project, 6 out of 50 respondents believed that the outcomes will last while another 6 stated that they will not last. The majority in this theme (30 out of 50 respondents) highlighted that the results of the project can last only if some conditions are met. This is how a member of the Park staff expressed this item:

I repeat, in order to carry out actions, funds are needed, unfortunately they are not eternal, they are always given on the basis of calls for tenders that have a beginning and an end date, so in order for the actions to be able to go ahead, it would be necessary to find a way to always intercept these funds…I'm talking about actions here like fences, gates, bins so where an investment is needed anyway. In fact, even for environmental education people cannot always be volunteers, looking in depth even communication requires investment… (Interviewee No 7, Park staff, PNALM/corridors).

Compared to other stakeholder groups, stock breeders were more probable to believe that the outcomes of the peoject will not last (Likelihood ratio chi-square = 4.49, $p < 0.05$; Phi = 0.34, $p < 0.05$), while hunters were not likely at all to consider that the bear is an opportunity for all (Likelihood ratio chi-square = 5.55, $p < 0.05$; Phi = -0.28, $p < 0.05$). Beekeepers were more porbable to see opportunities in tourism (Likelihood ratio chi-square = 7.35, $p < 0.01$; Phi = 0.43, $p < 0.01$) and to expect decrease of damage caused by bears (Likelihood ratio chi-square = 4.49, $p < 0.05$; Phi = 0.34, $p < 0.05$). Tourism entrepreneurs were more probable to recognize risks in and conditions for the bear becoming an opportunity (Likelihood ratio chi-square = 7.92, $p < 0.01$; Phi = 0.49, $p < 0.001$) and they also were more likely to believe that the outcomes of the project will last (Likelihood ratio chi-square = 6.47, $p < 0.05$; Phi = 0.43, $p < 0.01$). Representatives of local authorities were more probable to state that the outcomes of the project will last if certain conditions are met (Likelihood ratio chi-square = 5.48, $p < 0.05$; Phi = 0.27, $p < 0.05$), while NGO members were more likely to state that the bear is an opportunity for all (Likelihood ratio chi-square = 7.95, $p < 0.01$; Phi = 0.35, $p < 0.05$). Given all these differences, the section of expectations from the project and sustainability of project outcomes seems to be the one with the highest heterogeneity among stakeholder and

polarization groups. Finally, there was no difference between responses of interviewees in the park as compared to those in corridors.

5.3 Results for the Greek project area of Trikala-Meteora

5.3.1 Bear numbers and trends

A considerable majority of the sample in the Greek project area of Trikala-Meteora believed that bear numbers were increasing (86.7% ; 26 out of 30 interviewees) and the rest believed they remained more or less stable. Of those who believed that bear numbers were increasing, 16.7% (5 out of 30 interviewees) though that there was a considerable increase, while another 16.7% thought that there was a slight increase. For one-third of the sample the increasing trend is different from what they can recall 5-10 years ago. Respondents gave several reasons for increasing bear numbers (Table 5.3.1). Interestingly, while all farmers in the sample believed that bear numbers had considerably increased, all tourism entrepreneurs believed that bear numbers remained stable.

A cluster analysis showed that these reasons were grouped in three main clusters (Figure 1). Most references were made to a cluster of reasons revolving around decrease of stock breeding and rural depopulation, which favored the range distribution of bears. This is a characteristic extract of that cluster from an interview with a Forester:

…I believe that there is a change in the rural countryside… Depopulation and decrease of stock breeding left space for the bear. (Interviewee No 8, Forester)

Table 5.3.1. Reasons provided by respondents for increasing bear numbers

Reasons provided by respondents for increasing bear numbers	**Count**
Stock breeding decrease	12
Range distribution	12
Conservation efforts	11
Bear habitat/ carrying capacity	7
Rural depopulation	6
Poaching decreased	5
Awareness/ attitudes	4
Sighting/signs/ footprints	3
Same with other wildlife species	3

Note: Counts add to more than 100% of the sample (N=30) because each respondent could mention more than one item; items displayed in order of decreasing frequency

Some interviewees implied that the carrying capacity of the bear habitat increased for the species and they could observe female bears with cubs as well as bear signs quite frequently. These references discussed bear trends together with analogous trends for other wildlife species, e.g., the wild boar. This is how a game warden described frequent sightings of female bears with cubs:

In the last years I see bears with three cubs from the same birth… I have seen a lot of bears with three cubs but not from the same birth. (Inteviewee No 18, Game warden)

A last cluster included conservation efforts and awareness raising of local residents which eventuated in changing local attitudes towards bears and in a considerable decrease of poaching. This is how a consultant of a local Municipality framed these reasons:

I assume that the most important factor that determined that trend [increasing trend for bear numbers in the area] were all these bear conservation projects implenented during the last decade. These projects raised awareness among local people and established the bear as part of our everyday lives... (Interviewee No2, Consultant of a local Municipality)

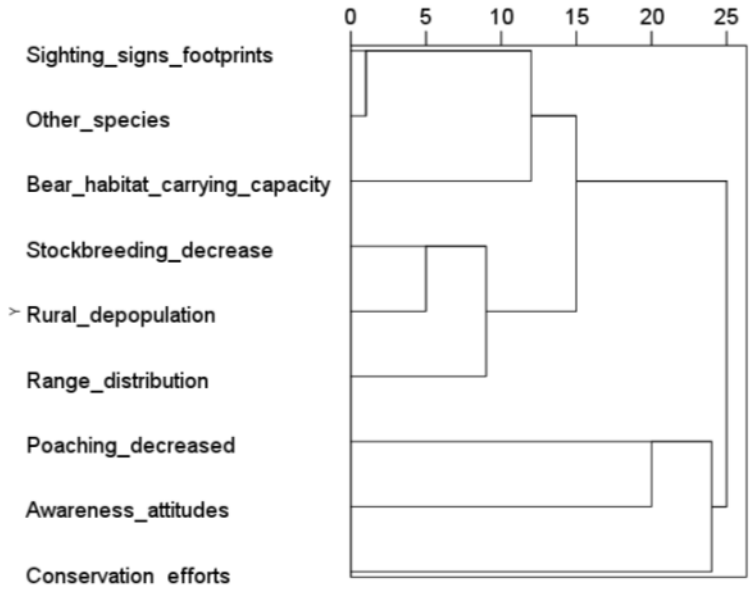

Figure 5.3.1. Cluster analysis of reasons given by interviewees for increasing bear numbers (Cluster method: Between groups linkage; Interval: Squared Euclidean Distance; Measure: Dice ; Cluster distance rescaled between 0 and 25). Cluster distance rescaled between 0 and 25.

We need to highlight that the staff of the National Park would need a thorough update for bear numbers and trends given the recent transition of all National Parks to THE Natural Environment & Climate Change Agency (NECCA) and related administrative changes.

5.3.2 Local attitudes toward bears

Local attitudes towards the bear and how they clustered in interviewee accounts are presented in Table 5.3.2 and Figure 5.3.2, respectively. Most respondents linked any negative attitudes towards bears to the damages they caused (negative_damage). There was another item linked to damages, where interviewees highlighted that stock breeders were differentiated with their negative attitudes among other segments within local communities any time there were instances of depredation. In that same cluster, however, a third and quite frequent item (voiced by 16 out of 30 respondents) distinguished the wolf as causing much more damage than the bear, and this comparison reflected an indirect tolerance towards the bear:

Stock breeders do not consider it as an enemy. Our area is almost exclusively a stock breeding area with sheep and goats. Our enemy is the wolf. A friend told me the bear took a goat which had an issue but this damage is negligible when compared to the damage caused by the wolf. And the bear does not cause much concern anymore, it is omnivorous it will not start predating goats and sheep... (Interviewee No 3, Beekeeper)

The wolf is a bloothursty animal and it will kill all livestock it wil be able to kill, which can be the entire flock. The bear takes one animal and leaves. When we discuss with each other, we say that it would be fine if all predators would take one animal and then leave...(Interviewww No 13, Stock breeder)

Table 5.3.2. Local attitudes towards bears

Local attitudes towards bears	**Count**
Negative_damage	17
Bear_vs_wolf	16
Stock breeders_differentiated	9
Positive_majority	8
Tolerant	6
One_animal	5
Beekeepers_tolerant	3
Prevention_tolerance	3
Hunters_differentiated	3
Negative_safety	3
Elders_differentiated	3

Note: Counts add to more than 100% of the sample (N=30) because each respondent could mention more than one item; items displayed in order of decreasing frequency

There was a considerable number of respondents (8 out of 30) who stated that the majority of local people had a positive attitude towards the bear. This was clustered with another item voiced by six interviewees who stated that local people would be tolerant towards the bear even if they sufferend any damage. The cluster also included a third item highlighted by 5 respondents, which concentrated on the fact that the bear usually takes one animal only and leaves without causing much more damage. This how a beekeeper and a hunter expressed their tolerant attitude:

I had several damages from bears, three or four, I cannot recall in detail. Last time it was one week ago, ten days. It damaged two beehives... We say that the bear took its share...(Interviewee No 3, Beekeeper)

The bear needs to be fed, it is out in the wild, it will necessarily eat from a bee hive or it will take a sheep or any other livestock of any kind... (Interviewee No 22, Hunter)

There were two final clusters with relatively lower frequency among respondents. In one of them, beekeepers were described as quite tolerant towards the bear and this was connected to the fact

that damage prevention in the form of electric fences favors tolerance. In the same cluster, however, hunters were presented as differentiated as a group with negative attitudes towards the bear. A beekeeper, however, had an exaclty opposite example to give for hunters, which implied that tolerance towards bears was an attitude shared by hunters as well:

Even among hunters, there was used to be this attitude that if you see a bear then you hunt it down and kill it…now we see much more respect and we are very happy to see such animals in the mountain… (Interviewee No 6, Beekeeper)

Overall, it seems that interviewee accounts are quite heterogeneous as far as hunter attitudes towards bears are concerned.

A last cluster implicated elders among local people as being quite concerned anytime a bear approached human settlements, which was strongly associated with a negative attitude towards bears related to human safety (Figure 5.4.2).

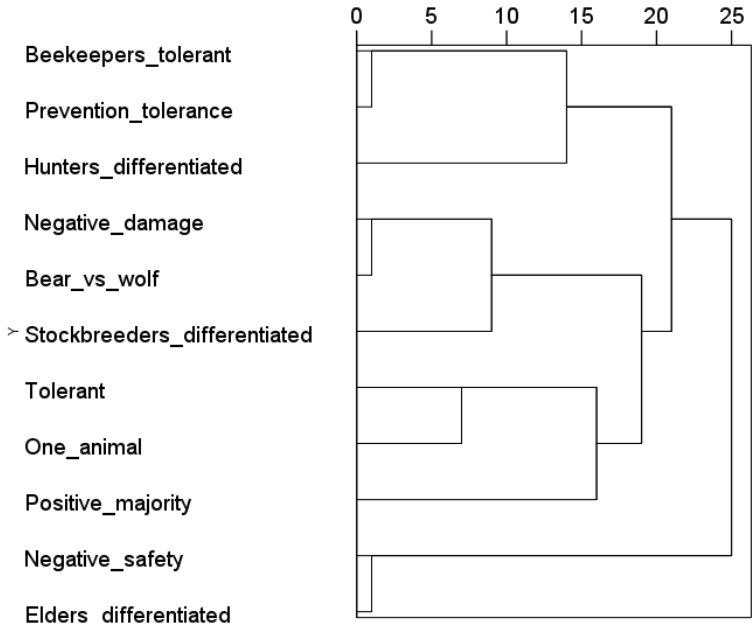

Figure 5.3.2. Cluster analysis of local attitudes towards bears (Cluster method: Between groups linkage; Interval: Squared Euclidean Distance; Measure: Dice ; Cluster distance rescaled between 0 and 25). Cluster distance rescaled between 0 and 25.

There were too few trends across stakeholder groups in the topic of attitudes. For instance, park rangers tended to single out stock breeders in terms of their attitudes towards bears, while foresters tended to highlight that the bear takes one animal only and does not cause extensive damage to livestock.

5.3.3 Bear behavior

There were four interviewees who referred to an old habit practiced by Roma people, who captivated bears and used them as dancing bears (tamed bears) for performance and gathering money from spectators in villages and small towns. The fact that this practice has stopped signifies the shift to the current paradigm of bear conservation and management. Two respondents

highlighted that the bear has been used as an inspiration for informing logos of local businesses (i.e., the logo of a farm and another logo of a forest cooperative), which implies that the bear can symbolize and represent the local area, overall. Another two interviewees stressed that bears do not hibernate anymore, linking perceived bear behavior to perceived impact of climate change. There was a quite interesting reference of a beekeeper to how smart the bear is, focusing on the fact that the bear has a way of weigting beehives to find out how much honey they contain :

The bear uses to weigh the beehive to choose the best… it touches the beehive and it leans to the side and from the counterweight it feels it gets an impression of how much honey is inside. (Interviewee No 3, Beekeeper)

5.3.4 Damages caused by bears and damage prevention methods

Damage caused by bears was discussed by interviewees in close connection to damage prevention methods. Tables 5.3.4.1 and 5.3.4.2 summarise the main items and their frequency for damage caused by bears and damage prevention methods, respectively. Figure 5.4.4 shows how all these items were clustered. Most respondents (13 out of 30) believed that damage caused by bears was relatively confined (Table 5.3.4.1). Another 11 interviewees referred to damage without any further characterisation. There were 5 respondents who claimed that damage was considerable. Finally, 5 interviewees highlighted damage caused by bears when livestock animals were not gathered in enclosures during the night.

Table 5.3.4.1. Damage caused by bears

Damage caused by bears	**Count**
confined_damage	13
damage	11
much_damage	5
not_enclosed	5

Note: Counts add to more than 100% of the sample (N=30) because each respondent could mention more than one item; items displayed in order of decreasing frequency

With regard to damage prevention methods, fences were mentioned by 28 out of 30 respondents and half of the sample believed that fences were effective. This is how a beekeeper described the electric fence as part of good practice in beekeeping:

I have three electric fences… to prevent bears from damaging my beehives. We believe that this expense is part of the expenses of a beekeeping enterprise. We do not curse that there is the bear, nor do we mind to invest workload for establishing the fence. We consider it as a given. There are bees and there are bears. (Interviewee No 6, Beekeeper)

Quite interestingly, a beekeeper showcased how the bear tries to find ways to circumvent or bypass the eletric fence in its effort to reach the beehives:

The bear finds ways to deal with the electric fence, for instance, it can through branches over…Then the elecrtic current loses its strength…I also heard from a fellow beekeeper that once a bear took a

beehive outside the fenced area from the space between two cables… Or another case when it dug underneath…It tries to find any way to avoid the cable… (Interviewee No 3, Beekeeper)

Another 14 interviewees referred to livestock guarding dogs, with 10 of them evaluating them as effective. This is how a stock breeder commented on this issue:

From my flock, and since there are bears in the area and I did not suffer any damage, then I understand that the role of [livestock guarding] dogs is important. From what my uncle has narrated to me, and from my grandfather previously, anytime we heard dogs howling in the night, they told me, this howling…is because they have traced a bear. They could distinguish how dog howling differed. (Interviewee No 10, Stock breeder)

A theme closely related to livestock guarding dogs was the use of illegal poisoned baits, which was highlighted in some scattered and few interviewee accounts as a major issue for intergroup relations between stock breeders and hunters:

…the last six years I am running my stock breeding unit, from 2016 when I took over… until now in 2022, I have had instances with poisoned baits at least four times. I do not know who this is, I assume it can be hunters because these instances are happening always in June or July, just before the hunting season begins…I have lost too many dogs…And I also see this problem existing for other stock breeders as well. (Interviewee No 10, Stock breeder)

Fewer numbers of respondents stated that either fences (5 out of 30) or livestock guarding dogs (4 out of 30) were not effective as damage prevention methods.

Table 5.3.4.2. Damage prevention methods

Damage prevention methods	**Count**
fences	28
fences_effective	15
LGDs*	14
LGDs_effective	10
fences_not_effective	5
LGDs_not_effective	4

Note: Counts add to more than 100% of the sample (N=30) because each respondent could mention more than one item; items displayed in order of decreasing frequency

*LGDs = Livestock Guarding dogs.

There were some scattered and few in number references to starter beekeepers, non registered beekeepers or beekeepers who move their beehives from one area to another, who tend not to install an electric fence. These cases were singled out as much more prone for damage by bears as other cases of beekeeping:

Usually damage is done to starter beekeepers who either do not have an effective fence or who do not have a fence at all… Not only those who do have any prior experience. For instance, I am now in a region with oak trees. If beekeepers come here for their first time from other areas, Karditsa, Euritania, Athens, they place their beehives in this new area but they do not know anything about bear presence. (Interviewee No 3, Beekeeper)

There was another type of scattered and few in number references to the extent of damage caused to beekeepers being related to the amount of honey contained within beehives:

The bear will cause much damage if it does not find enough honey to feed on, do you understand? If it finds honey then it will only need a beehive and it will be satisfied. If it does not find honey, it will cause much damage… (Interviewee No 3, Beekeeper)

Do you know what the issue is? Let me tell you what the bear does. If it does not find enough honey… a beehive with honey can be enough for a bear, if it contains 15 to 20kg of honey. But if the bees did not yet produce honey… and the beehive has a very small quantity of honey, let us say 100, 200, 500gr, then this is not enough for the bear and it may damage 10 or 15 or 20 beehives. (Interviewee No 6, Beekeeper)

It is quite interesting how items on damage and damage prevention methods were clustered in interviewee accounts (Figure 5.4.4). In the central cluster of Figure 5.4.4, we can observe that references to the effectiveness of fences were accompanied by preceptions of damage as confined. Instead, references to the effectiveness of livestock guarding dogs were accompanied by perceptions of damage without further characterization and by the item highlighting damage caused by bears when livestock animals were not gathered in enclosures during the night. Taken together, the items in this cluster tend to attribute responsibility of damage to livestock to livestock practices followed by stock breeders. In the last cluster, however, perception of damage as considerable was linked to believing that fences and livestock guarding dogs were ineffective as damage prevention methods. In this case, the overall approach seems to be that there is not much to do to avoid damage caused by bears.

Compared to other stakeholder groups, stock breeders and farmers as well as representatives of local authorities tended to hold more reservations concerning the effectiveness of electric fences, while stock breeders and foresters held more reservations about livestock guarding dogs. We need to underline that any reservation should not negate or contradict the general disposition of the sample that the two damage prevention methods discussed were effective in addressing most damage. Instead, reservations wish to express the concern that damage caused by bears cannot be singled out in the project area no matter how effective damage prevention methods could be. On the other hand, park rangers were unanimous in endorsing the effectiveness of both electric fences and livestock guarding dogs.

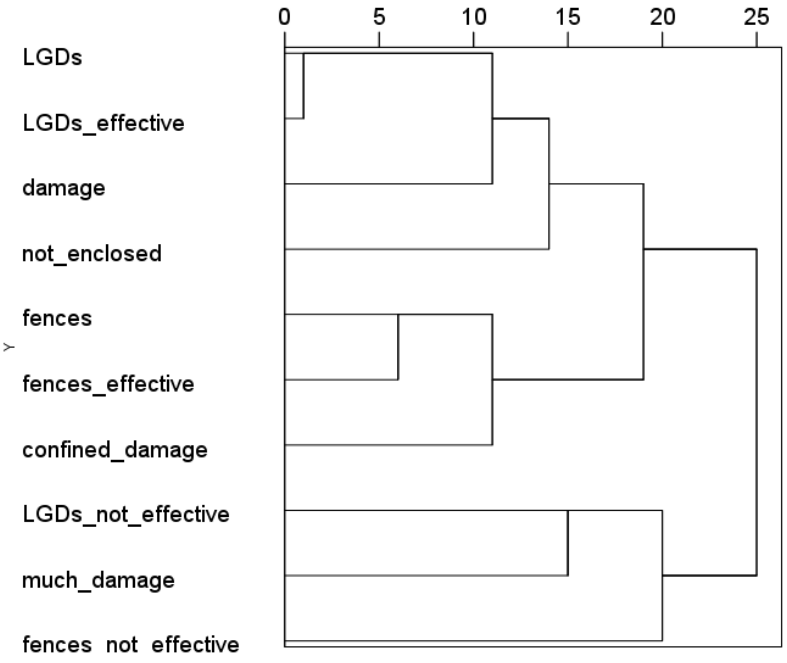

Figure 5.3.2. Cluster analysis of items on damage and damage prevention methods (Cluster method: Between groups linkage; Interval: Squared Euclidean Distance; Measure: Dice ; Cluster distance rescaled between 0 and 25). LGDs = livestock guarding dogs. Cluster distance rescaled between 0 and 25.

5.3.5 Compensation of damage caused by bears

Interviewee accounts on compensation of damage are summarised in Table 5.3.5 and their clustering is depicted in Figure 5.3.5. The majority of interviewees noted that not all damage caused by the bear was compensated, which was backed by references to the threshold used by the Greek Agricultural Insurance Organization (ELGA) to compensate registered stock breeders (4 sheep or goats previously and 2 animals after a recent change in the regulations). They also referred to collateral damage not recognized, e.g., loss of offspring and milk production or loss of honey production.

If the bear takes a goat then I get around 90Euros I believe… I will take these 90Euros and replace the goat… but the damage is not properly covered because if the goat is taken at the beginning of the production period, I will loose 300kg milk and offspring and if you also count the food and veterinarian care and other costs, then 90Euros is a ridiculous amount… (Interviewee No 25, Stock breeder)

It should be noted that such accounts were not only voiced by local producers themselves but by other stakeholders as well. For instance, this is how a game warden pictured collateral damage not recognized by current compensation systems and how it added to the hardship of local producers under the current financial circumstrances:

The big problem is with farmers and stock breeders. Let me give you an example. Let us say I am a stock breeder and the bear comes and takes an animal or two or three, I do not know how many. That is not the issue. The problem is… that livestock is stressed, it undergoes a shock, and it can take days to restore it to the previous state. This is a quite considerable burden for the stock breeder and the

farmer given the harsh financial circumstances we experience currently (Interviewee No 18, Game warden)

Table 5.3.5. Interviewee accounts on compensation of damage

Interviewee accounts on compensation of damage	**Count**
not_all_damage	16
documentation_ELGA*	8
documentation_carcasses	8
park_documentation	6
BET**_documentation	3
subsidies	3

Note: Counts add to more than 100% of the sample (N=30) because each respondent could mention more than one item; items displayed in order of decreasing frequency

*ELGA = Greek Agricultural Insurance Organization

**BET = Bear Emergency Team

The item of unrecognized/uncovered damaged was clustered with complaints for ELGA in the case of delayed inspection or not proper inspection of damage (Figure 5.4.5), which created a considerable problem in documentation of damage, and which then eventuated in an inability to compensate damage suffered by local producers. There was also a concern that inspectors of ELGA may wish to downplay damage so that the cost of compensation paid to local producers drops accordingly:

If you just count the beehive construction, wood and wax and shutter… this is a minimum of 50Euros. The bee sawrm costs around 100Euros… And you should also estimate around 20kilos of honey for each beehive on average. It can be more or less but let us use this average for the calculation. Plus one new bee swarm that you can take…There is a sum of about 300Euros for each beehive…But if you have 10beehives damaged you should hope to just get 500-600Euros the most. Because they [inspectors of ELGA] will say that not all beehives were damaged, etc., they try to cut down the cost… (Interviewee No 3, Beekeeper)

A second cluster included instances of livestock carcasses depredated but not found by stock breeders, which again would not allow for documentation of damage. This item was linked with an option for park rangers and other staff being trained to support documentation of damage. It should be noted that all park staff interviewed agreed that this was feasible:

I believe this should be implemented as a good practice [park staff supporting documentation of damages caused by bears]. This is why the park exists, the staff, the park rangers. However, it is a self-evident prerequisite that park staff should be trained to undertake that role…(Interviewee No 15, Park ranger)

Two items not related with the rest referred to members of Bear Emergency Teams (BETs) supporting documentation of damage and concerns that local producers perceiving compensation as a kind of subsidy and declaring more damage than suffered (Figure 5.4.5).

Compared to other stakeholder groups, stock breeders stressed more problems in documentation when not finding carcasses and due to delays or not proper inspection of damage by ELGA. The later was corroborated by park rangers. In addition, beekeepers insisted more than other stakeholder groups that not all damage caused by bears was compensated.

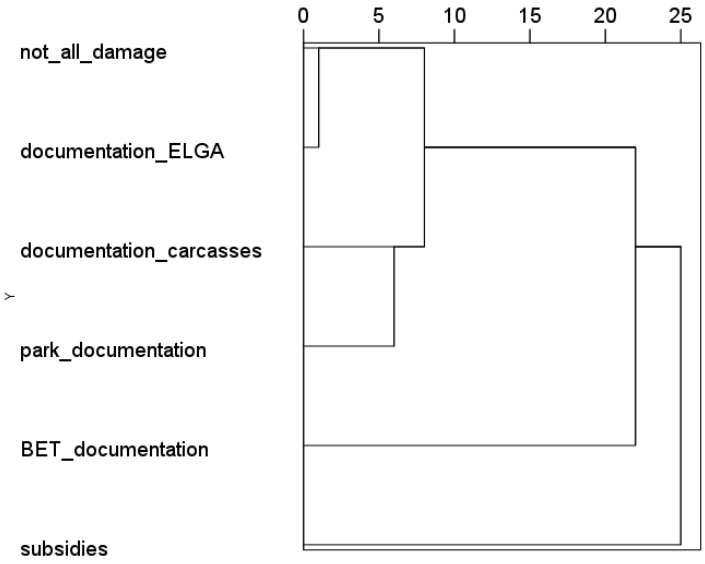

Figure 5.3.5. Cluster analysis of interviewee accounts on compensation of damage caused by bears (Cluster method: Between groups linkage; Interval: Squared Euclidean Distance; Measure: Dice ; Cluster distance rescaled between 0 and 25). ELGA = Greek Agricultural Insurance Organization ; BET = Bear Emergency Team. Cluster distance rescaled between 0 and 25.

5.4.6 Safety issues linked with bear presence

A considerable majority of respondents stated that there were no safety issues related to bear presence in the area (17 out of 30 interviewees). However, interviewee accounts for safety proved to be quite inconsistent, and this was validated by cluster analysis. For instance, the item denying any safety issues was clustered with another item which implied that there could be some safety issues with tourists and visitors in certain areas (Figure 3). This pattern, with reassuring statements clustered with more or less alarming statements can be observed multiple times in Figure 3. Another example was that respondents who claimed to have had one or more encounters with bears, where there was supposedly no safety issue, at the same time tended to admit that there may be safety issues with hunters. Indeed, descriptions of unexpected encounters with bears revealed that there could be, indeed, danger for human safety:

I can give you an example…I was with my wife and there was a bear on a cherry tree and ate cherries with two cubs. It was 11:30 in the evening, they told me come to see a bear. I arrived at the scene with some friends of mine, we were 5-6 people. Me and my wife dared to step out of the car to take a video of the bears. The adult bear climbed down the tree and one of the two cubs followed...The other

cub…held on to the trunk and begun howling. Out of instinct, I rushed to help it…That was my mistake…because the mother bear could then attack me to defend the cub… When I was just ten meters away the second cub climbed down and followed the other bears. (Interviewee No 17, Farmer).

Female bears with cubs were singled out as potentially dangerous for humans by six out of 30 respondents. These accounts, however, were clustered with items stating that bears tend to avoid humans and that there was no deliberate attack initiated by any bear to any human. A more consistent cluster included two concerning instances, when bear approached human settlements and, in the case of unexpected encounters, when there was no way out for the bear. These are two characteristic extracts for the second case:

Our area is not easy to pass though [due to the increase of the forest cover]…When you go on a trail and you meet a bear… it may knock you down to pass through… There were a couple of instances where the bear got angry, this has also happened to me a couple of times. But it did not escalate any further. (Interviewee No 18, Hunter)

I had many encounters with the bear; it left except for one case..I did not have people with me luckily, I was with a friend… the bear moved toward us, not threatening us but because it had no other way out. On the one side of the trail there was a steep cliff, on the other the slope was also too steep and the bear moved towards our side. We waited to se if the bear could move back. When we saw that from 500meters it reached a distance of 100meters from us without changing its direction…we moved back. We did not run but we walked backwards (Interviewee No 26, Tourism entrepreneur)

Table 5.3.6. Safety issues linked with bear presence

Safety issues linked with bear presence	**Count**
No_safety_issues	17
Bears_approaching_settltments	13
Bears_avoid_humans	11
No_attack_ recorded	8
Encounter_no_safety	7
Female_with_cubs	6
Safety_issues_hunters	4
Safety_issues_tourists	3
No_way_out	3

Note: Counts add to more than 100% of the sample (N=30) because each respondent could mention more than one item; items displayed in order of decreasing frequency

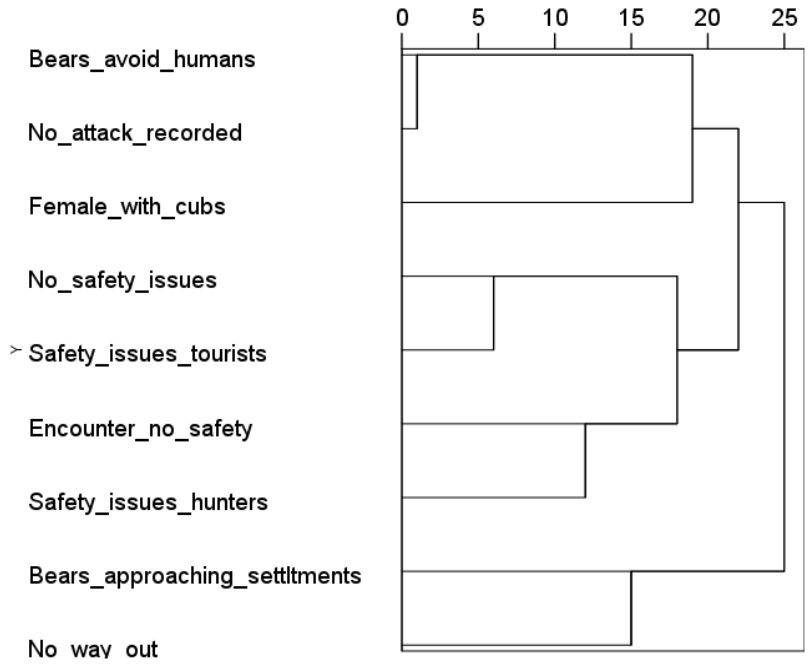

Figure 5.3.6. Cluster analysis of safety issues linked with bear presence (Cluster method: Between groups linkage; Interval: Squared Euclidean Distance; Measure: Dice ; Cluster distance rescaled between 0 and 25). Cluster distance rescaled between 0 and 25.

Compared to other stakeholder groups, representatives of local authorities tended to express more concerns for safety issues with hunters, while no park ranger had any safety concerns or reported any safety issue related to bear presence in the project area.

5.3.7 Human-bear conflict

Interviewee accounts on human-bear conflict focused predominantly on bear poaching, which was discussed by half of the sample (15 out of 30 interviewees). These references involved retaliatory killing of bears mainly by using illegal poisoned baits after repeated damage caused by bears (9 references). Interviewees were able to discern these instances indirectly or implicitly, given that bears are protected animals not to be hunted and social norms have adapted accordingly:

A shepherd told me once, during a discussion that was not relevant at all, I did not ask any relevant questions, that the bear sounds like a woman when you killed it, it cries. He should have had some experience of that kind to make such a reference...He is quite old, he must have spent all his life up in the mountain (Interviewee No 21, Park ranger)

There were also concerns that bears may be deliberately hunted within a frame of a peculiar trophy hunting practice, which also includes eating its meat (6 references). Although this practice is not frequent, it presents a major threat for the bear population in the area:

There are some hunters who hunt it for its meat, this is what I hear from hunters…I believe this is true. First I could not grasp it but then I cross-checked it… (Interviewee No 3, Be keeper)

It is true [deliberate bear hunting aiming to eat the bear]. I have information that it is mostly concentrated around two villages… the bear as a game is considered to be a gourmet dish, they may call their friends to come a join them on such an occasion… There is a kind of a tradition of this type there… (Interviewee No 24, NGO member)

Compared to other stakeholder groups, poaching was much more pronounced by park rangers, while trophy hunting was more salient in the accounts of beekeepers.

5.3.8 Intergroup relations between stakeholders

Most interviewees (18 out of 30; see Table 5.3.8) believed that the relations between stakeholders have improved in time, especially between stakeholders who are usually contrasted in bear conservation and management, i.e., stock breeders and hunters on the one side and environmental non-governmental organizations on the other. Indeed, all hunters in the sample highlighted that intergroup relations had improved. This item was clustered with a shift in stakeholder positions highlighted by another 8 respondents, which eventuated in a considerable closing of the gap between these same stakeholders (see Figure 5.4.8). This is how a stock breeder voiced these items:

I believe that the relations [between stock breeders and eNGOs] are improved as compared to previous years… The mentality of stock breeders is also improved. In addition, there is a succession of generations, society progresses, overall…This helps us stock breeders to get closer to animal care (Interviewee No 10, Stock breeder)

There was another cluster combining intergroup tension with a narrative still existent among local residents, according to which, members of environmental non-governmental organizations, aided by oher stakeholders in a pro-carnivore coalition (e.g., park authorities), were supposed to breed large carnivores and release them in the wild (reintroduction narrative). It was this narrative which still fueled tension between stakeholders and blocked their communication and interaction to some extent:

There is a percentage of stock breeders would would never cooperate, who would never sit on the same table with eNGOs (Interviewee No 10, Stock breeder)

Table 5.3.8. Items on intergroup relations between stakeholders

Items on intergroup relations between stakeholders	**Count**
relations_improved	18
shift_in_positions	8
reintroduction_narrative	7
intergroup_tension	7

Note: Counts add to more than 100% of the sample (N=30) because each respondent could mention more than one item; items displayed in order of decreasing frequency

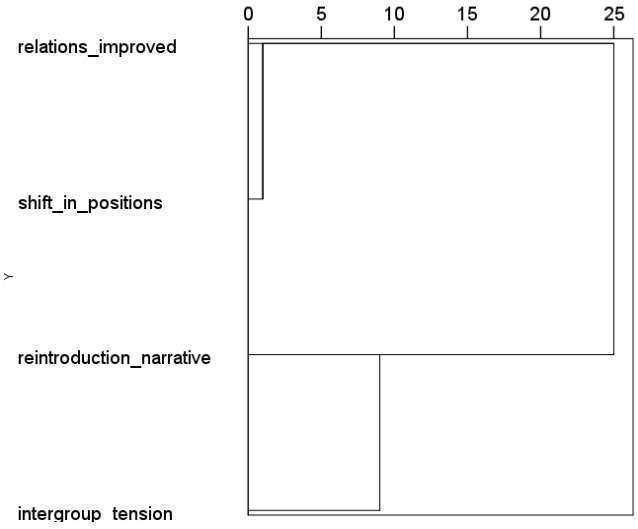

Figure 5.3.8. Cluster analysis of items on intergroup relations between stakeholders (Cluster method: Between groups linkage; Interval: Squared Euclidean Distance; Measure: Dice ; Cluster distance rescaled between 0 and 25). Cluster distance rescaled between 0 and 25.

5.3.9 Willngness to participate in the project

The majority of interviewees (20 out of 30) were willing to take part in participatory processes within the frame of the project. A considerable number also believed that their stakeholder group would endorse such participatory processes (13 out of 30), while 4 respondents had concerns if other groups would be willing to take part. Interestingly, belief that one's own group would participate was accompanied by concerns about other groups' participation.

5.3.10 Expectations from the project and sustainability of project outcomes

Almost all respondents agreed that the project would facilitate the development of alternative forms of tourism based on the presence of the bear in the project area (29 out of 30) and that it would also promote the certification of bear-friendly products and services (27 out of 30). More details on these two themes will be given in the next paragraph of this section.

A minority of respondents highlighted damage prevention (5 interviewees) and compensation (7 interviewees). There were also three interviewees who stressed that local technicians who manufacture electric fences should be certified for doing so in order for local producers being guaranteed the quality of the electric fence which they would be able to obtain from these local technicians and also in order for the price of purchasing electric fences to decrease when compared to imported electric fences.

With regard to interviewee responses on the development of alternative forms of tourism based on the presence of the bear in the project area (Table 5.3.10.1; Figure 5.3.10.1), references to previous attempts to develop trails in the area were clustered with expectations that the project would enrich the tourist product currently offered in the project area and would increase overnight stay:

During the last two years, I am a member of a social cooperative aiming to develop a trail…to pass through the entire Pindos Mountain Range, Pindos Trail… It passes from one village to the next… The

objective is to let the trekker overnight each night to a different village...In each village there is a grocery which can offer something to eat. (Interviewee No 26, Tourism entrepreneur)

Table 5.3.10.1 Items on the development of alternative forms of tourism based on the presence of the bear in the project area

Items on the development of alternative forms of tourism based on the presence of the bear in the project area	**Count**
previous_trails	15
Safety	11
overnight_stay	10
marketing	8
Enrich	5
maintenance	5
diffusion_benefits	3
time_constraints	3

Note: Counts add to more than 100% of the sample (N=30) because each respondent could mention more than one item; items displayed in order of decreasing frequency

The same cluster included a frequent concern about the safety of visitors related to the possibility of an unplanned encounter with bears:

I will now describe my personal experience… there were [university] students riding horses. When horses recognized the footprints of the bear they run wild and as long as we rode uphill then it was OK but when we turned downhill… a friend of mine fell from the horse...he could have been killed. The horses would not stop...the bear should have been very close, the footprints were fresh (Interviewee No 16, Forester)

There was another cluster with concerns that tourism benefits should be much more evenly distributed all over the project area than now and that local producers may not have the time to engage in tourism related to bear presence.

Two items linked to the sustainability of project outcomes, namely, maintenance of trails and marketing of the enriched tourist product were losely related to the first and second cluster, respectively. This is how a tourism entrepreneur described the need for marketing:

For this to be prepared properly, one issue is the bear trail, the basic infrastructure which you can take over. Another issue which I would weight to 50% is the marketing of this product… Audiovisual material is crucial here… To achieve this, you need to take into account that the most important part for making a tourist product attractive, for it to be bought and have success, is proper audiovisual material. (Interviewee No 11, Tourism entrepreneur)

We need to underline that most references to marketing were accompanied by a concern that this cannot be taken over by tourism entrepreneurs themselves only.

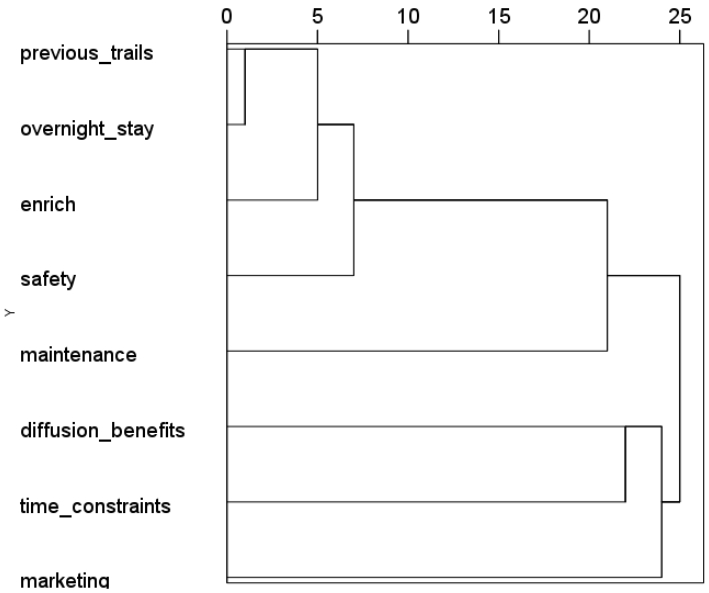

Figure 5.3.10.1 Cluster analysis of items on the development of alternative forms of tourism based on the presenmce of the bear in the project area (Cluster method: Between groups linkage; Interval: Squared Euclidean Distance; Measure: Dice ; Cluster distance rescaled between 0 and 25). Cluster distance rescaled between 0 and 25.

With regard to interviewee responses on certification of bear friendly products and services (Table 5.3.10.2; Figure 5.3.10.2), one third of the sample (10 out of 30) underlined the need for packaigng in order for certification to be possible in the first place, highlighting what the project may help achieve on the supply side and this item was clustered with anticipated synergies between the primary sector and tourism (mentioned by 13 out of 30 respondents), which may help sustain the outcomes of the project. Another cluster involved a prioritization of products to be certified ("which_products") linked with the need to realize the added value implied by certification in the market ("market"). This is how a beekeeper voiced this last item:

It would be quite important to find a market where this [certified] honey could be sold, this would help, this honey would be sold at a higher price, since it is produced under certain circumstances, it takes more resources to have an electric fence…and taking into account that we need to support both the bear and the beekeeper. So, the consumer could say I would pay 0.5 or 1 Euros more for a kilo of that honey..beacuse I would like to buy this honey with the bear label since this money is invested in bear conservation (Interviewee No 6, Beekeeper)

Several interviewees (7 out of 30) also referred to previous attemps for certification most of which were not sustained in time.

With regard to trends among stakeholder groups, it should be highlighted that all representatives of local authorities believed that bear presence can enrich the tourist product currently offered in the project area and that this can increase overnight stay. Moreover, all tourism entrepreuners referred to previous trails and the need for marketing any new tourist product. Finally, all farmers noted that the added value of certified products should be realized in the market.

Table 5.3.10.2 Items on certification of bear friendly products and services

Items on certification of bear friendly products and services	**Count**
synergies	13
market	12
packaging	10
previous_ certification	7
which_products	4

Note: Counts add to more than 100% of the sample (N=30) because each respondent could mention more than one item; items displayed in order of decreasing frequency

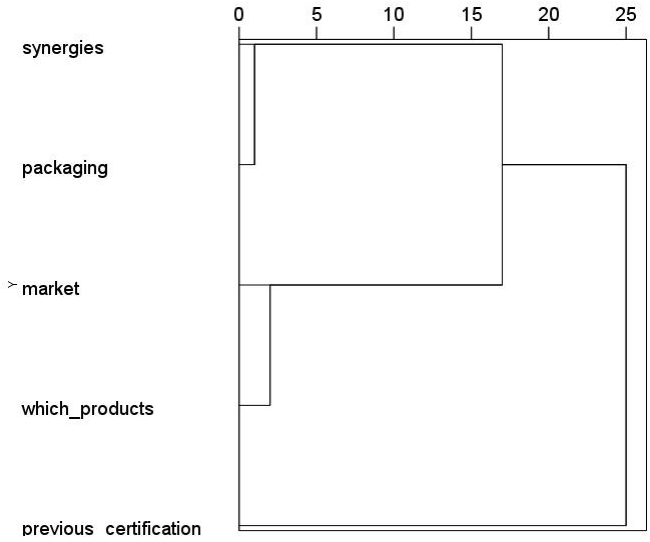

Figure 5.3.10.2 Cluster analysis of items on certification of bear friendly products and services (Cluster method: Between groups linkage; Interval: Squared Euclidean Distance; Measure: Dice; Cluster distance rescaled between 0 and 25). Cluster distance rescaled between 0 and 25.

6. DISCUSSION/CONCLUSIONS

6.1 Adapted Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis

Taking into account stakeholder input across items, an adapted Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis template was populated for PNALM/corridors (Table 6.2) and Trikala-Meteora (Table 6.3). In this template, we singled out ingroup and intergroup aspects which would favor either the accoplishment of the project's objectives or participation of stakeholder in project actions or the adoption of good practice in bear conservation and management, overall, in each area. The SWOT template summarizes key findings to guide the consortium in Actions C1 (Development and operation of Bear Smart Communities), D.1 (Monitoring the development of the Bear Smart Communities; Task D1.2), E1 (Raising awareness about bear conservation) and E3 (Local, regional and national media activities). The SWOT template can also be used to inform the development of the instrument to be used in Task A4.2

(questionnaire for quantitative survey) and as a reference level for our qualitative approach in Action D3 (Monitoring the project's impact on the local community and stakeholders), Task D3.1. In the following sections we will refer to cells of Table 6.2 and Table 6.3, highlighting how the content of the SWOT template may inform the other actions of the project. We need to highlight that the template was populated with stakeholder input, specifically, across items where interviewees for each stakeholder group were unanimous or converged. In some cases we also included references targeting specific stakeholders made by other stakeholder groups or interviewees, in general. Finally, we would like to stress that the SWOT template does not exhaust all potential issues and concerns in the project area but it certainly outlines the major takeouts as expressed by the sample.

6.2 Discussion and conclusions based on the adapted SWOT analysis for the Italian area of Abruzzo Lazio and Molise National Park and corridors

6.2.1 Bear numbers and local attitudes

- The majority of respondents perceived bear numbers as increasing, which was explained with reference to either conservation efforts and awareness raising or habitat expansion.
- Tolerance towards bears was widespread and it was reinforced by a comparison of bears with wolves in the extent and severity of damage caused.
- Negative attitudes towards bears were linked to damage caused by bears and to bears accoustomed to human presence. With regard to the reasons for certain bear behavior (e.g. bears accoustomed to human presence) respondents were rather confused; the consortium should take the chance to clarify these reasons, in particular through actions E1 and C6.

6.2.2 Damages caused by bears, damage prevention methods and compensation of damage

- Electric fences seem to have been established as an effective damage prevention method, especially for beekeepers (Table 6.2, Beekeepers, Strenghts), and stock breeders (Table 6.2 Stock Breeders Strengths), which has diffused within local communities and was voiced by park rangers (Table 6.2, Park authorities, Strengths) and NGOs as well (Table 6.2, eNGOs, Strengths).
- At the same time, beekeepers tend to need strong support in order to implement prevention measures (Table 6.2, Beekeepers, Weaknesses).
- There were many complaints about compensation of damage caused by bears voiced by stock breeders (Table 6.2, Stock breeders, Threats) and beekeepers (Table 6.2, Beekeepers, Threats). These complaints referred to documentation of damage and differences in compensation protocols inside/outside the National Parks or in different regions. An harmonization of these protocols could substantially improve attitudes towards bears.

6.2.3 Safety issues linked with bear presence

- Accordingly to the majority of informants, safety issues related to bears were linked to the fact that those were wild animals. Bears accoustomed to human presence were a concern particularly for Local Authorities (Table 6.2 Local Authorities, Threats), Foresters (Table 6.2 Local Authorities, Threats) and NGOs (Table 6.2 eNGOs, Threats).
- Respondents in the tourism sector highlighted risks in particular related to tourists that do not respect basic safety rules both in wilderness and in urban centers (table 6.2 Tourism entrepreneurs, Weaknesses).

6.2.4 Human-bear conflict and intergroup relations between stakeholders

- Intergroup relations seem to be improving, as recognized by stock breeders (Table 6.2, Stock breeders, Opportunities). NGOs are able to mobilize important networks (Table 6.2, NGOs, Opportunities), which can set the stage for a quite successful stakeholder interaction during the project.
- Hunters are less open to cooperate than other stakeholders, and this was related to mutual distrust to other stakeholder groups (Table 6.2, Hunters, Threats).
- Tourism was seen as a potential source of conflict with bears, particularly by park authorities (Table 6.2, Park Authorities, Weaknesses) and Local Authorities (Table 6.2., Local Authorities, Weaknesses).
- Tourism was seen as being in contrast with particular stakeholder interests, especially by stock breeders (Table 6.2 stock breeders, Weaknesses). This was in part due to difficulties of the tourism sector to manage tourist flow (Table 6.2, Tourism entrepreneurs, Weaknesses).
- In the case of farmers, damage caused by other wildlife (roe deer, wild boar, red deer) can affect the relationship with park staff and NGOs (Table 6.2, Farmers, Weaknesses).
- Communication and outreach actions should take into account the latent narrative about "fake" and "real" bears, shared between different stakeholders.
- Communication and outreach actions should take into account the latent narrative about bears depending on human food sources.

6.2.5 Willngness to participate in the project, expectations from the project and sustainability of project outcomes

- The majority of respondents are willing to participate in the actions of the project, which was especially pronounced among farmers (Table 6.2, Farmers, Opportunities) and park staff (Table 6.2, Park staff, Opportunities).
- Bear smart communities are seen as an opportunity for community regeneration, particularly by Local Authorities (Table 6.2, Local Authoriries, Opportunities), and to attract tourism, particularly by Foresters (Table 6.2, Foresters, Opportunities)
- Foresters showed a high level of tolerance toward bears (Table 6.2 Foresters, Strenghts), but since they do not feel directly affected, they also showed low interest in participating to the project (Table 6.2 Foresters, Weaknesses)
- The time needed to see a real change was a major concern, particularly for eNGOs representatives (Table 6.2, eNGOs Weaknesses).

6.3 Discussion and conclusions based on the adapted SWOT analysis for the Greek area of Trikala-Meteora

6.3.1 Bear numbers and local attitudes

- A substantial majority of respondents perceived bear numbers as increasing, which was explained with reference to either land-use changes driven predominantly by decrease of stock breeding and rural depopulation or conservation efforts and awareness raising.
- Farmers were especially concerned about increasing bear numbers (Table 6.3, Farmers, Weaknesses).

Table 6.3. Adapted Strengths, Weaknesses, Opportunities and Threats Analysis template for the Italian project area of Abruzzo

	Stock breeders	Farmers	Beekeepers	Local Authorities	Park authorities	Foresters	eNGOs	Hunters	Tourism entrepreneurs
Strengths	Electric fences as an established damage prevention method	High level of tolerance toward bears	Electric fences as an established damage prevention method	Wolf-attitudes Improved (according to interviewees)	Damage prevention methods are effective	High level of tolerance toward bears	Experience in damage prevention and compensation	High level of tolerance toward bears	Bears' importance for the ecosystem
Weaknesses	Bears as a tourist attraction (according to interviewees)	Human-wildlife conflict	Need strong support to start using fences	Tourists as potential drivers for conflicts	Tourists as potential drivers for conflicts	Low interest towards the project	Amount of time needed to see positive changes	Grey zones hunters/poachers	Not always able to manage "low quality" tourism
Opportunities	Improved stakeholder relations	Willingness to support the project	Locally produced honey widely appreciated	BSC would favour community regeneration	Willingness to support the project	Bears as a tourist attraction	Create networks with other stakeholders	Improved stakeholder relations	Environmental tourism as a chance to educate people
Threats	Differences in compensation protocols	Not bear-specific electric fences	Differences in compensation protocols	Bears accustomed to human presence	Suboptimal use of compensation/damage prevention	Bears accustomed to human presence	Bears accustomed to human presence	Mutual distrust with other stakeholders	Low awareness about other stakeholders difficulties

- Park authorities would need a thorough update on bear numbers and trends (Table 6.3, Park authorities, Weaknesses).
- Tolerance towards bears was widespread and was reinforced by a comparison of bears with wolves in the extent and severity of damage caused.
- The fact that logos informed by bear signs were adopted by farmers (Table 6.3, Farmers, Strengths) denotes that the bear can be used as a symbol of the area and local production, overall, with significant implications for developmental options based on bear presence (e.g., certification of bear-friendly products and services, bear trails and bear tourism).
- Negative attitudes towards bears were linked to damage caused by bears.
- There was an implicit reference (not mentioned by members of stakeholder groups themselves but by other interviewees) to minorities in local communities who are differentiated from the majority of the local population in terms of their negative attitudes towards bears, namely, stock breeders who suffer damage (especially those with cattle which cannot be enclosed during the night and remains vulnerable to bear attacks), hunters (see Table 6.3, Hunters, Weaknesses), and elder residents concerned when bears approach human settlements.

6.3.2 Damages caused by bears, damage prevention methods and compensation of damage

- Electric fences seem to have been established as an effective damage prevention method, especially for beekeepers (Table 6.3, Beekeepers, Strengths), which has diffused within local communities and was voiced by park rangers (Table 6.3, Park authorities, Strengths) and foresters as well (Table 6.3, Foresters, Strengths).
- At the same time, there are concerns about damage prevention methods voiced by stock breeders (Table 6.3, Stock breeders, Weaknesses) and echoed by representatives of local authorities (Table 6.3, Local authorities, Weaknesses) and foresters (Table 6.3, Foresters, Weaknesses).
- Given that negative attitudes towards bears were linked to damage caused by bears (see previous section), it is crucial to monitor damage prevention methods; this could be taken over by eNGOs (Table 6.3, eNGOs, Weaknesses), who have an accumulating experience in damage prevention and compensation (Table 6.3, eNGOs, Strengths).
- Another important issue that needs to be addressed is that some local producers may not use damage prevention methods at all; this can be true for starter beekeepers or not-registered beekeepers (Table 6.3, Beekeepers, Weaknesses) who will be then vulnerable to bear attacks.
- There were many complaints about compensation of damage caused by bears voiced by stock breeders (Table 6.3, Stock breeders, Threats) and beekeepers (Table 6.3, Beekeepers, Threats) who suffer most damage caused by bears; these complaints referred to documentation of damage as well as to the fact that not all damage caused by bears is compensated.
- Complaints about compensation have been classified as "Threats" in the SWOT template, since they may fuel human-bear conflict and human-human conflict, especially under harsh economic conditions.
- The consortium should exploit the option that park rangers assist in documentation of damage caused by bears (Table 6.3, Park authorities, Opportunities).

6.3.3 Safety issues linked with bear presence

- Although the majority of the sample believed that there were not any safety issues linked ot bear presence in the area, cluster analysis revealed that in each cluster with items in this topic there was at least one reference to such safety issues.

Table 6.3. Adapted Strengths, Weaknesses, Opportunities and Threats Analysis template for the Greek project area of Trikala-Kalampaka

	Stock breeders	Farmers	Beekeepers	Local authorities	Park authorities	Foresters	eNGOs	Hunters	Tourism entrepreneurs
Strengths	Shift in positions (according to interviewees)	Bear symbols used in farm logos	Electric fences as an established damage prevention method	Several trails in the project area with bear signs	Damage prevention methods are effective	Electric fences as an established damage prevention method	Experience in damage prevention and compensation	Shift in positions (according to interviewees)	Several trails in the project area with bear signs
Weaknesses	Reservations for damage prevention methods	Concerned about increasing bear numbers	Starter/non-registered beekeepers do not use an electric fence	Reservations for electric fences	Would need a thorough update for bear numbers & trends	Reservations for livestock guarding dogs	Need to better monitor damage prevention methods	Some hunters differ in bear attitudes (according to interviewees)	They cannot take over marketing themselves only
Opportunities	Improved stakeholder relations	Willing to support the project	Willing to certify their honey as a bear-friendly product	Endorsed bear trails & product certification	Willing to support documentation of damage	Endorsed bear trails & product certification	Can moiblize additoonal resourses for trails & certification	Improved stakeholder relations	Bear trails may increase overnight stay
Threats	Problems in documenting damage caused by bears	Added value of certified products may not be realized	Not all damage caused by bears compoensated	Seemed to undervalue safety concerns	Bear poaching still present	Safety concerns for bear trails & bears approaching human settlements	Concerns about bear poaching & illegal poisoned baits	Safety issues (according to representatives of local authorities)	Safety issues with tourists (according to interviewees)

- This implies that there are indeed, safety issues, and park authorities together with local authorities need to be informed in detail about these issues (Table 6.3, Local authorities, Threats).
- The consortium needs to further elaborate on safety issues with regard to hunters (Table 6.3, Hunters, Threats) and visitors (Table 6.3, Tourism entrepreneurs, Threats) in the project area.

6.3.4 Human-bear conflict and intergroup relations between stakeholders

- There were clear indications for bear poaching (Table 6.3, Park Authorities, Threats), which were also accompanied by accounts that trophy hunting targeting bears may be possible in the project area and by the illegal use of poisoned baits (Table 6.3, eNGOs, Threats).
- On the other hand, however, the belief that intergroup relations improved was widespread (Table 6.3, Stock breeders, Opportunities; Table 6.3, Hunters, Opportunities), which can set the stage for a most successful stakeholder interaction during the project; this improvement was enabled by a shift in positions of stock breeders (Table 6.3, Stock breeders, Strengths) and hunters (Table 6.3, Hunters, Strengths)
- Communication and outreach actions should take into account the latent but still existent re-introduction narrative (i.e., eNGOs are supposed to breed large carnivores in captivity and then release them in the wild)

6.3.5 Willngness to participate in the project, expectations from the project and sustainability of project outcomes

- The majority of respondents are willing to participate in the actions of the project, which was especially pronounced among farmers (Table 6.3, Farmers, Opportunities) and beekeepers (Table 6.3, Beekeepers, Opportunities).
- Local authorities (Table 6.3, Local authorities, Opportunities) and foresters (Table 6.3, Foresters, Opportunities) endorsed widely both the develoment of bear trails as well as the certification of bear-friendly products and services.
- Representatives of local authorites (Table 6.3, Local authorities, Strengths) and tourism entrepreneurs (Table 6.3, Tourism entrepreneurs, Strengths) frequently mentioned several trails in the project area with bear signs, which can be exploited.
- Tourism entrepreneurs believed that bear trails may increase overnight stay of visitors in the project area, which has been a major goal of all stakeholders involved in the tourism sector (Table 6.3, Tourism entrepreneurs, Opportunities).
- eNGOs may mobilize additonal resources for bear trails and certification of bear-friendly products and services, which can add significantly in the sustainability of the outcomes of the project (Table 6.3, eNGOs,).
- Farmers expressed a concern that the added value of certified products may not materialize in the market, which has been discussed in the frame of other LIFE projects as well (Table 6.3, Farmers, Threats).
- Foresters voiced safety concerns for any new bear trails to be developed, which should be added to safety concerns for bears approaching human steelements and other analogous concerns presented in previous sections (Table 6.3, Foresters, Threats).
- Tourism entrepreneurs were finally concerned about the marketing of bear trails and the enriched tourist product to be offered in the project area, which they could not take over themeslves (Table 6.3, Tourism entrepreneurs, Weaknesses).

ANNEX – INTERVIEW PROTOCOL

A. Opening part of the interview and informed consent

1. My name is …, and I am the Human Dimensions Expert of …, contracted within the frame of the LIFE Bear-Smart Corridors project to conduct interviews with members of key stakeholder groups.
2. The main aims of the interviews are to collect baseline data on bear attitudes of key stakeholder groups, understand the main drivers of human-bear conflict and elaborate on stakeholder expectations from the project.
3. I would like to inform you in detail for all specifics of interview data collection, analysis and management so that you can provide your informed consent.
4. Interview data will be used within the frame of this project only, according to the aims presented above, and for informing any scientific publication that will describe the results of the project's actions.
5. The Coordinator of Action A4 (Ex-ante survey of public attitudes and stakeholder opinions), Dr. Tasos Hovardas, will be responsible for the management of interview data.
6. Access to these data will be provided to partners of LBSC, only, and only for pursuing the objectives of the project (data analysis for project deliverables and scientific publications).
7. Your participation in this interview is voluntary and anonymous.
8. You have the right to withdraw your participation at any time, without being obliged to provide any reason, by sending an email message to Dr. Tasos Hovardas: hovardas@ucy.ac.cy.
9. The results of interview data analysis, but not the raw interviews data, will be presented in the deliverables of Action A4 and any scientific publication based on these deliverables.
10. Our commitment for respondent anonymity will be strictly applied, since the presentation of results will focus on general trends and comparisons and not on responses of individual participants.
11. Please let us know if we have your consent for this interview as well as for data collection, storage and management based on the above information.
12. No change on any of the aspects we have presented will be made without having previously informed you timely and without having renewed your consent.

RECORDING STARTS AFTER THE INTERVIEWEE HAS GRANTED THEIR INFORMED CONSENT

B. Interview questions

B1. Bear perceptions, representations and attitudes

Main questions	Prompts
Are bear numbers in the area increasing or decreasing or remaining stable in time?	If "increasing" or "decreasing": What are the main reasons for the current trends in bear numbers?
Are bear numbers and trends different from what you can recall from the previous 5 or 10 years?	If "yes": What do you believe are the main causes of long-term change in bear numbers and trends?
Do you believe that bear numbers and trends influence local attitudes towards bears?	If "yes': Can you please explain in what way you believe bear numbers and trends influence local attitudes towards bears? If "yes": Are there any differences between segments in the local population/between key stakeholder groups in bear attitudes?

Are there any specific aspects in bear behavior which you believe are worth discussing?	If "yes": Do you believe that bear behavior is different now than it was in the past? If "yes": Are there any myths/narratives in the area where bears are featuring? Which aspects of bear behavior do you believe are characteristic in these myths/narratives?

B2. Human-bear conflict

Main questions	Prompts
Are there any damages caused by bears to livestock/crops?	If "yes": Are these damages increasing or decreasing or remaining stable in time?
Do local people use damage prevention methods to prevent these damages?	If "yes": Do you believe that these methods are effective? If "yes": Can you recall if it has been necessary at any time to adapt any damage prevention method to optimize its operation?
Are there any compensation systems in place for local people who suffer damages from bears?	If "yes": Do you believe that these compensation systems are fair?
Are there issues with human safety related to bear trends?	If "yes": Is there any measure taken by local or regional authorities for these safety issues? If "yes": Do you believe that any specific bear behavior is related to issues of human safety?

B3. Human-bear coexistence

Main questions	Prompts
Is human-bear conflict increasing or decreasing or remaining stable in time in the area?	If "increasing": How can human-bear conflict be addressed effectively?
Do you believe that local people and key stakeholder groups can collaborate to promote human-bear coexistence?	If "no": Are there tensions/conflicts between stakeholder groups related to bears?
Have there been any initiatives for stakeholder collaboration to promote human-bear coexistence in the area?	If "yes": Do you believe that these initiatives have been successful?
Do you believe that bear presence can offer some developmental opportunities for the area?	If "yes": Can you please explain what these developmental opportunities can be?

B4. Stakeholder expectations from the LBSC project

Main questions	Prompts

Do you believe that local people and the main stakeholder groups would be willing to participate in a project like LBSC?	If "yes" or "no": What do you believe will be the reasons for participating/not participating?
Would you be willing to take part in actions, meetings or events of this project?	If "yes" or "no": What are the reasons for you to participate/not to participate?
What do you believe a European project of that type can deliver as main outcomes?	If no reply/idea is provided: (1) Collect info/increase scientific knowledge base on bears; (2) decrease damage caused by bears/improve compensation; (3) decrease frequency of bear approaches to human infrastructure/address issues related to human safety; (4) improve stakeholder collaboration; (5) offer developmental opportunities based on bear presence
Do you believe that these outcomes can be sustained in time?	If "yes": Do you believe that things will change back to business-as-usual when this project will end?