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# The social impact of the **Scuba Diving** industry in Liguria, Italy

## The voices of the residents & dive operators

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## The voices of the residents & dive operators

This research forms part of the Green Bubbles RISE Project



# Green Bubbles

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# Contents

1. Introduction.....	1
2. Research aims.....	1
3. Method of research.....	2
3.1 Resident survey.....	2
3.2 Dive operator interviews.....	3
4. Profile of the diver social media users.....	4
4.1 Age.....	4
4.2 Residency.....	4
4.2.1 Permanent resident.....	4
4.2.2 Community name.....	5
4.2.3 Years as resident.....	5
4.3 Occupation information.....	6
4.3.1 Business part of tourism industry.....	6
4.3.2 Type of business.....	6
4.4 Level of education.....	6
4.5 Scuba diving knowledge and participation.....	7
4.5.1 Understanding of scuba diving.....	7
4.5.2 Awareness of scuba diving in area.....	7
4.5.3 Awareness of MPA.....	7
4.5.4 Respondents as scuba divers.....	8
4.5.5 Business involvement in scuba diving industry.....	8
4.6 Effect of tourism.....	8
4.6.1 Effect of tourism on personal quality of life.....	8
4.6.1 Effect of tourism on community quality of life.....	8
4.7 Effect of scuba diving.....	9
4.7.1 Effect of scuba diving on personal quality of life.....	9
4.7.2 Effect of scuba diving on community quality of life.....	9
4.8 Community attachment.....	9
4.9 The social impacts of scuba diving on the communities.....	10
4.10 Respondents' community image perceptions.....	12
4.11 State of scuba diving industry in community.....	13
4.11.1 Overall state of industry.....	13
4.11.2 Reasons for scuba diving industry's level of success.....	13
5. Results of dive operator interviews.....	16

6. Conclusions ..... 20

6.1 Summary of study results ..... 20

6.1.1 Summary of the residents ..... 20

6.1.2 Summary of interviews with dive operators ..... 21

6.2 Findings and recommendations by researchers ..... 23

6.2.1 Findings and recommendations regarding the residents of Liguria ..... 23

6.2.2 Findings and recommendations regarding the scuba dive operators ..... 25

6.2.3 Conclusion ..... 26



# 1. Introduction

*Green Bubbles is dedicated to recreational scuba diving, an activity in which millions of people worldwide engage, yet that is poorly studied within the European context. Green Bubbles aims to maximise the benefits associated with diving, while minimising its negative impacts, thereby achieving the environmental, economic and social sustainability of the system with a specific focus on the European diving industry.*

One of the world's most important diving areas is the Portofino Marine Protected Area (MPA) in Liguria District, Italy. The reason for this is because this area has a rich marine biodiversity, which stands out from most dive areas in the Mediterranean. Except for the marine attraction, this area also boasts beautiful nature, mountains, culture, entertainment and nightlife (Italia, 2016). Therefore, this area is also significantly tourism orientated. Portofino, Camogli, Santa Margherita Ligure, Rapallo and Sestri Levante form part of the main area of the MPA. Approximately 8% of this region's GDP is derived from the tourism industry, which attracted approximately 14 million visitors in 2012 (Liguria, 2013). With the size of the tourism industry in these areas, it is inevitable that this industry will have various impacts on the community, which can be economic, environmental and social in nature. The social impacts can be positive, such as infrastructure development, opportunities for local businesses and the preservation of culture, to name a few. However, social impacts can also be negative, such as causing a rise in crime, crowding and various other negative activities that might make residents antagonistic.

Various studies have shown that tourism endeavours, such as scuba diving, need the residents' support to be sustainable. It is, therefore, important to understand the social impacts that are exerted by this industry on the residents to properly plan and manage such impacts. It was therefore decided to measure Liguria residents' perceptions towards the social impacts generated by the scuba diving industry. Furthermore, to improve the understanding of the social impact perceptions, dive operators were also interviewed. The results of this study can help build a positive relationship between dive operators, residents and local businesses, which will contribute towards the sustainability of the scuba diving industry.

## 2. Research aims

This research project had the following primary aims:

- To determine the socio-demographic information of residents
- To determine residents' knowledge of and participation in scuba diving
- To determine residents' attachment and image perceptions of their community
- To determine the social impact perception generated by the scuba diving industry

- To determine residents' perceptions about the status of the scuba diving industry, as well as the aspects that contribute to the success of the industry
- To determine scuba dive operators' perceptions about cooperation with the local community

## 3. Method of research

To achieve these aims, the following approach was implemented: Firstly, a questionnaire was developed and administered by researchers from TREES at the North-West University in South Africa, as well as colleagues from UBICA and GAIA in Italy. This survey took place from 1 to 30 September 2015 as well as 1 to 30 September 2016. The areas of Santa Margherita, Rapallo and Camogli formed part of the survey; and secondly, scuba dive operators were interviewed to determine their perceptions towards communication and cooperation with the community. This was done from 20 to 25 September 2015.

### 3.1 Resident survey

Respondents were approached in shops as well as on the streets where the aims of the study were explained. There were many hurdles that hindered the success of this survey. The first and foremost was the language barrier. Fieldworkers were mostly English speaking, while the majority of residents could only speak Italian. Secondly, the community was not very receptive towards strangers. It was clear that the researchers' presence was, to an extent, unnerving. Most residents quickly asked the fieldworkers to leave. Those who provided reasons for not wanting to complete the questionnaire cited reasons such as "I am busy", "Not interested", "I am scared", or "I do not know anything about scuba diving and tourism". A very large number of residents indicated that they are not residents of this area, and only work or stay there temporarily. The residents who did, however, give their consent were handed the questionnaire for completion. The researchers scheduled times when these questionnaires could be collected to make the process as comfortable as possible for the residents. However, only approximately 60% of these questionnaires could be collected. The other 40% claimed to have "lost the questionnaires", "forgotten to complete it", they were "too busy", or they realised that they do not know anything about scuba diving.

As a result, only 68 questionnaires were collected during the first survey in 2015 and 38 in 2016. The questionnaires were distributed using convenience sampling within stratified sampling. The strata consisted of residents living in areas close to tourist areas, while questionnaires were handed to anyone who answered yes to the screening question "Are you a resident of this area?". The data from these two years' samples were pooled together to get a final sample of 106 (n). When examining the spread of respondents, 48% of respondents were Santa Margherita residents, 26% were from Rapallo, 18% from Camogli and 8% were from other communities within the MPA region. When taking into consideration the total population size of approximately 45 800 (N), which includes the main sample areas of Santa

Margherita Ligure (n=9 639), Rapallo (n=30 742) and Camogli (n=5 455), one can say that the 106 collected questionnaires provide a 95% confidence level with a 9.5% margin of error (5% error or lower is preferred) (SurveyMonkey, 2016).

### 3.2 Dive operator interviews

This part of the data collection was qualitative in nature, meaning that the researchers conducted interviews with the scuba dive operators. Because most of the operators are based in Santa Margherita Ligure, it was decided that the majority of interviews would be based there. These interviews made use of semi-structured questions, which allowed for followed-up questions. The purpose of this questionnaire was to obtain the dive operators' opinions on the how the residents perceive the scuba diving industry, as well as the state of communication among the industry and the residents, cooperation among these two entities as well as their ideas on how to improve interactions with the residents. Seven dive operators and one dive instructor were interviewed. Two respondents were from Rapallo, one from Camogli and five from Santa Margherita Ligure.

The appointments were scheduled with the respondents. The researcher was accompanied by an interpreter who translated the researcher's questions into Italian to which the respondents could provide their reply in Italian. Afterwards, the interpreter translated the interviews into English from which the information was transcribed. The information was interpreted, and ideas or themes were identified from the respondents' replies and used in an integrated manner.

The results of this survey are discussed in the next section.





## 4. Profile of the diver social media users

### Section A: Socio-demographic information

#### 4.1 Age

The largest category of respondents was in the 40 to 49 years age range (22%), followed by those in the 20 to 29 years (31%) age range. Seventeen percent (17%), respectively, were between the ages of 30 and 39 or between 50 to 59 years. On average, respondents were 41 years of age.

Age	%
>19 years	2%
20 to 29 years	31%
30 to 39 years	17%
40 to 49 years	22%
50 to 59 years	17%
60 to 69 years	6%
70+ years	5%
Average age	40.52 years

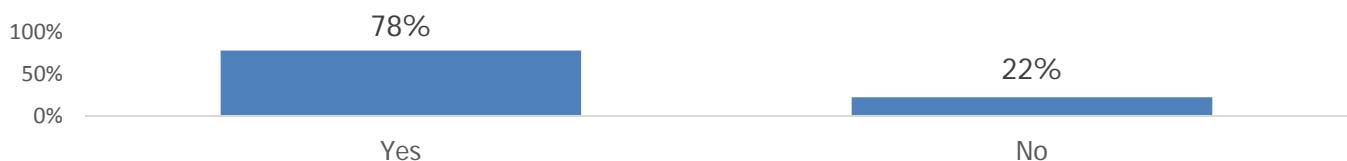
#### DID YOU KNOW?

The average respondent was **41 years of age**

#### 4.2 Residency

##### 4.2.1 Permanent resident

The majority of respondents (78%) indicated that they were permanent residents of the respective communities, while 22% were not permanent.



#### 4.2.2 Community name

When asked what communities the respondents live in, 30% indicated Santa Margherita, followed by Rapallo (21%), Camogli (10%), and Genova (7%). Twenty-three percent (23%) did not indicate where they are from.

Community names	%
Santa Margherita Ligure	30%
Rapallo	21%
Camogli	10%
Genova	7%
Other	9%
Unspecified	23%

#### 4.2.3 Years as resident

Respondents had been staying in their respective communities for between 21 and 30 years (26%), 11 to 20 years (17%) or between 31 and 40 years (14%). On average, respondents had been residents of their respective communities for 25 years.

Number of years	%
< 1 year	1%
1 to 2 years	9%
3 to 5 years	5%
6 to 10 years	7%
11 to 20 years	17%
21 to 30 years	26%
31 to 40 years	14%
41 to 50 years	12%
51+ years	9%
Average years	25.48 years

**DID YOU KNOW?**  
Residents had been staying in these communities for an average of **25 years**

## 4.3 Occupation information

### 4.3.1 Business part of tourism industry

The majority of respondents (78%) indicated that they were permanent residents of the respective communities, while 22% were not permanent.



### 4.3.2 Type of business

Of those who indicated that they are working at/own a tourism-related business (82%), the largest percentage indicated that they worked in hospitality (34%), which mostly included hotels. Secondly, 17% respectively, indicated that they work at/own a bar or restaurant or they work as part of a tour/travel company.

Occupation types	%
Hospitality	34%
Restaurant/bar	17%
Travel agent/transport	17%
Clothing	11%
Retail	6%
Real estate	4%
Diving centre	3%
Other	8%

**DID YOU KNOW?**  
More than half of the respondents were directly involved in the tourism industry

## 4.4 Level of education

When examining the residents' level of education, it is clear that only 32% had obtained some form of tertiary education with 25% who had obtained a degree and 7% a postgraduate qualification. The majority of respondents (60%), however, had only finished high school.

Occupation types	%
None	-
Primary school diploma	-
Middle school license	8%
High school diploma or equivalent	60%

Degree (e.g. three-year, specialised)	25%
Postgraduate education (e.g. PhD)	7%
Professional qualification	-
Other	-

## Section B: Scuba diving knowledge

### 4.5 Scuba diving knowledge and participation

#### 4.5.1 Understanding of scuba diving

Respondents were asked to indicate whether they know what scuba diving is. Only half of the respondents (52%) indicated that they knew what it is, while 48% did not. Of those who do not know what it is, or are unsure about what it is, they mostly indicated that they were not interested, followed by those who have a fear of diving or are, in general, not accustomed to it.



#### 4.5.2 Awareness of scuba diving in area

Of the 52% of respondents who know what scuba diving is, 80% were aware of scuba diving activities in their area, while 20% were not.



#### 4.5.3 Awareness of MPA

The majority of respondents indicated that they were aware that they were living in a marine protected area (MPA).



#### 4.5.4 Respondents as scuba divers

Sixteen percent (16%) of respondents indicated that they do scuba dive, while 84% do not. Those who indicated that they do not scuba dive gave the following popular answers: “It does not interest me”, “It scares me”, “Health reasons”, and “Just never tried it”.



#### 4.5.5 Business involvement in scuba diving industry

Thirty-two percent (32%) of business owners indicated that their businesses are directly involved in the scuba diving industry.



## Section C: Effect of tourism and scuba diving

### 4.6 Effect of tourism

#### 4.6.1 Effect of tourism on personal quality of life

The majority of respondents (75%) felt that tourism had a positive to very positive effect on their personal lives.

Very negative			No effect				Very positive
-3	-2	-1	0	1	2	3	
3%	-	-	3%	20%	31%	44%	

#### 4.6.1 Effect of tourism on community quality of life

Eighty-four percent (88%) of respondents felt that tourism had a positive to very positive effect on the quality of life of the community as a whole.

Very negative			No effect			Very positive
-3	-2	-1	0	1	2	3
1%	1%	1%	2%	7%	41%	47%

## 4.7 Effect of scuba diving

### 4.7.1 Effect of scuba diving on personal quality of life

The majority of respondents (55%) felt that scuba diving had no effect on their personal lives, while 28% perceived a slightly positive effect. A total of 24% of respondents preferred to not answer this question; this can perhaps be ascribed to them feeling unsure about the effects of scuba diving and the activity in general.

Very negative			No effect			Very positive
-3	-2	-1	0	1	2	3
2%	-	1%	55%	28%	5%	9%

### 4.7.2 Effect of scuba diving on community quality of life

Forty-six percent (46%) of respondents felt that scuba diving had a positive to very positive effect on the community as a whole, while 37% felt that it had a slight effect. A total of 23% of respondents did not answer this question.

Very negative			No effect			Very positive
-3	-2	-1	0	1	2	3
1%	1%	1%	13%	37%	35%	11%

## 4.8 Community attachment

In this question, respondents were asked to indicate their level of community attachment. The majority (61%) indicated that they like living in their community, but they would also enjoy living somewhere else. This is followed by 24% who love their community, and 15% who would like to move, but have to stay in their community due to circumstances.

Community attachment statements	%
I love it; I cannot think of anywhere else I would rather live	24%
I enjoy living in my community, but I can think of other places I would equally enjoy staying	61%
I stay here only because circumstances do not allow me to leave	15%

## Section D: Specific social impacts

### 4.9 The social impacts of scuba diving on the communities

Respondents were asked to indicate to what extent they agree with a list of social impact perception statements that they perceived as a result of the scuba diving industry. This was done on a five-point Likert scale (where '1' = strongly disagree and '5' fully agree). The following statements about the social impact perceptions created by the scuba diving industry obtained the highest mean values:

1. There are more opportunities for local businesses (3.85);
2. I have developed a greater appreciation for the marine environment (3.67);
3. My environment is noisier (3.67);
4. The lives of the residents are disrupted (3.64);
5. My community had become more environmentally friendly (3.57); and
6. There are more leisure opportunities for residents (3.57).

On the other hand, respondents indicated that they disagree with the following statements:

1. There has been a rise in crime levels (1.83);
2. Vandalism has increased in my community (2.04);
3. My community's cultural traditions are fading (2.16);
4. There is more pollution in my community (2.20); and
5. My community's natural surroundings are fading (2.31).

Respondents did feel that as a result of the scuba diving industry that there were more business opportunities and they had developed a greater appreciation for the marine environment, that their community has become more environmentally friendly and that they have more leisure opportunities. However, they feel that their community is noisier and that their lives are disrupted by the industry. More serious negative impacts such as crime, vandalism, pollution, cultural traditions fading and natural surroundings fading, were not experienced.

Because of the scuba diving industry	Mean value out of 5	Level of agreement
1. There are more leisure opportunities for residents	3,57	Strongly agree
2. There are opportunities for me to learn more about my community	2,97	Agree
3. There is more pollution in my community	2,20	Disagree somewhat
4. There are more traffic problems	2,58	Agree
5. The prices of properties and homes have increased	2,53	Agree

6. The total cost of living has increased	2,69	Agree
7. Residents earn more money	3,01	Agree
8. There has been a rise in crime levels	1,83	Disagree somewhat
9. My community's cultural traditions are fading	2,16	Disagree somewhat
10. Vandalism has increased in my community	2,04	Disagree somewhat
11. My everyday lifestyle has improved	2,81	Agree
12. My community's natural surroundings are fading	2,31	Disagree somewhat
13. There are, at times, too many visitors in the area	2,80	Agree
14. I feel proud to be associated with my community	3,34	Agree
15. My community has developed a positive image	3,46	Agree
16. The environment looks worse	2,91	Agree
17. There are more opportunities for residents to partake in tourism planning	2,73	Agree
18. My environment is noisier	3,67	Strongly agree
19. I get to learn more about other visiting cultures	2,99	Agree
20. New infrastructure is developed	3,35	Agree
21. My community has become famous	2,67	Agree
22. Local areas, services and infrastructure (such as roads) are maintained	3,40	Agree
23. More job opportunities are created in my community	3,44	Agree
24. There are more opportunities for local businesses	3,85	Strongly agree
25. Businesses are only doing good at certain times of the year	3,38	Agree
26. There are more tourist developments in the area	2,89	Agree
27. The local culture has become too commercialised	3,09	Agree
28. The local cultures are protected	3,36	Agree
29. I developed respect and understanding for visitors	2,49	Disagree somewhat
30. The lives of the residents are disrupted	3,64	Strongly agree
31. I have developed a greater appreciation for the marine environment	3,67	Strongly agree
32. I have developed respect for the tourism industry	3,24	Agree
33. A sense of greater value is felt in my community	3,47	Agree
34. I have become more knowledgeable about marine life	3,14	Agree
35. My community had become more environmentally friendly	3,57	Strongly agree



## Section E: Community image perceptions

### 4.10 Respondents' community image perceptions

In this question, the respondents were asked to share their perceptions of their community's image. This was done on a five point Likert scale (where '1' = strongly disagree and '5' fully agree). The following statements about the image perceptions of the community obtained the highest mean values:

My community...

1. Has beautiful landscapes (4.62);
2. Offers a variety of fauna and flora (4.20);
3. Offers beautiful marine life (4.00);
4. Is a safe tourism destination (3.90);
5. Offers good restaurants (3.89); and
6. Has a good name and reputation (3.79).

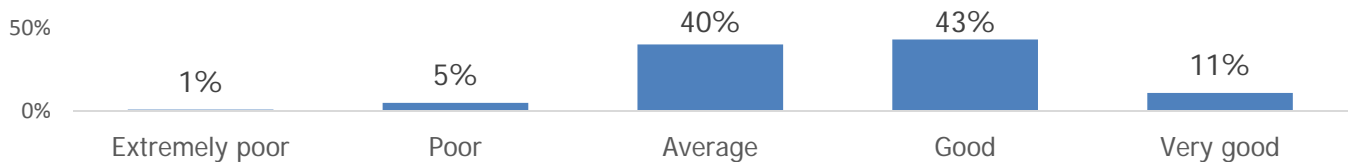
My community	Mean value out of 5	Level of agreement
1. Offers a variety of fauna and flora	4,20	Somewhat agree
2. Offers various historical and cultural attractions	3,62	Somewhat agree
3. Has beautiful landscapes	4.62	Fully agree
4. Offers interesting cultural activities	3,22	Neutral
5. Has good shopping facilities	3,34	Neutral
6. Offers great nightlife activities	2,92	Neutral
7. Offers good restaurants	3,89	Somewhat agree
8. Offers good sport facilities	2,77	Neutral
9. Has well-developed infrastructure	2,69	Neutral
10. Can be seen as a luxury destination	3,31	Neutral
11. Can be seen as a fashionable destination to visit	3,20	Neutral
12. Has a good name and reputation	3,79	Somewhat agree
13. Offers a good quality of life for residents	3,53	Somewhat agree
14. Is a safe tourism destination	3,90	Somewhat agree
15. Is clean	3,02	Neutral
16. Has friendly residents	2,86	Neutral
17. Has good tourism infrastructure	3,07	Neutral
18. Is tourism friendly	3,12	Neutral
19. Offers beautiful marine life	4,00	Somewhat agree

## Section F: Value of scuba diving industry

### 4.11 State of scuba diving industry in community

#### 4.11.1 Overall state of industry

When asked about the state of the scuba diving industry in the communities, 43% felt that it was in a good state, followed by 43% who thought that it was average and 11% who felt that it was very good.



#### 4.11.2 Reasons for scuba diving industry's level of success

In this question, respondents were asked to indicate which aspects contribute to the success of the scuba diving industry in these communities as was indicated in 4.9.1. This was measured on a five-point Likert scale (where '1' = strongly disagree and '5' = fully agree). The following were, in the respondents' opinions, the main contributors to a successful scuba diving industry:

1. The presence of a marine protected area (4.12);
2. The presence of a regional park (3.97);
3. The diversity of underwater fish and plants (3.90);
4. Good ocean water quality (3.81);
5. There are good quality coral and coralliferous formations (3.80);
6. Ideal living conditions (3.78); and
7. The area offering access to good dive charters (3.72).

Respondents felt neutral about the following aspects:

1. Government plays an active role in the sustainability of the tourism industry (2.88);
2. The residents participate actively in the tourism industry (2.93);
3. Residents' general positive attitude towards the local scuba diving industry (2.93);
4. It being the "heartbeat" of my community (2.99);
5. There is an effective flow of information among all stakeholders (3.05);
6. There is a good understanding between community members and the scuba diving industry (3.06);
7. Residents understand the importance of the scuba diving industry (3.11); and
8. There is cooperation among community members and those working in the scuba diving industry (3.13)

It becomes clear that respondents are under the impression that the scuba diving industry is doing well as a result of the MPA's physical features and good dive charters. However, they feel that the government does not play a significant role in the tourism industry, and residents' participation and positive attitudes will not improve the industry. They also feel that an understanding of the scuba diving industry is needed or that cooperation is needed between the community and the industry. This is worrying because literature has shown that residents' understanding and support are vital for the sustainability of the tourism industry.

The scuba diving industry is popular/successful in this area because	Mean value out of 5	Level of agreement
1. There is a good understanding between community members and the scuba diving industry	3,06	Neutral
2. Government plays an active role in the sustainability of the tourism industry	2,88	Neutral
3. There is cooperation among community members and those working in the scuba diving industry	3,13	Neutral
4. There is an effective flow of information among all stakeholders	3,05	Neutral
5. The scuba diving industry is well organised	3,40	Neutral
6. The residents understand the value of the scuba diving industry	3,20	Neutral
7. Residents understand the importance for the scuba diving industry	3,11	Neutral
8. There is quality marine life in the area	3,68	Somewhat agree
9. There are good quality coral and coralliferous formations	3,80	Somewhat agree
10. The scuba diving charters offer value-for-money experiences	3,34	Neutral
11. The offering of overall excellent service quality	3,24	Neutral
12. The residents participate actively in the tourism industry	2,93	Neutral
13. The area offers good accommodation facilities	3,42	Neutral
14. The area offers access to good dive charters	3,72	Somewhat agree
15. Easy accessibility to the site	3,44	Neutral
16. Fair prices being charged	3,15	Neutral
17. Continuous development of new initiatives in this industry	3,28	Neutral
18. Good marketing efforts	3,17	Neutral
19. Residents' general positive attitude towards the local scuba diving industry	2,93	Neutral
20. The positive impacts created by the scuba diving industry in my community	3,26	Neutral
21. It being the "heartbeat" of my community	2,99	Neutral
22. Environmentally friendly diving practices being enforced	3,70	Somewhat agree
23. A good worldwide image	3,53	Somewhat agree
24. Good ocean water quality	3,81	Somewhat agree
25. Ideal living conditions	3,78	Somewhat agree
26. The diversity of underwater fish and plants	3,90	Somewhat agree
27. The presence of a marine protected area	4,12	Somewhat agree
28. The presence of a regional park	3,97	Somewhat agree

In this section, the researcher examined the perceptions of the residents of Liguria to create a better understanding of their knowledge, perceptions and feelings towards the scuba diving industry. This, however, only provides one side of the social impact opinions. Therefore, the dive operators were interviewed to obtain their views and understanding of the community, which will assist in bridging communication and understanding gaps that may exist between the two parties.



## 5. Results of dive operator interviews

To better understand the interactions among the residents of Liguria and the scuba diving industry, it was decided to interview eight dive operators in the Liguria area using semi-structured interviews. These interviews helped improve our understanding of the social impact perceptions created by the scuba diving industry, as well as where the possible communication gaps lie between the scuba diving industry and the community. A series of six questions were asked to each operator, with follow-up questions were applicable to obtain the largest amount of information possible. During the semi-structured interviews, the following main questions were asked:

**Question 1:** To what extent do the residents of this area take part in scuba diving?

**Question 2:** How would you rate the current communication and understanding between the residents of Liguria and the scuba diving industry?

**Question 3:** What do you think needs to happen to create a better cooperation/understanding between local industries and the scuba diving industry?

**Question 4:** Do you think the residents benefit from the scuba diving industry? Please justify your answer.

**Question 5:** Do you think that the local community values this industry and the income it generates for the area? Please justify your answer.

**Question 6:** Do you think it is important that the community should support the scuba diving industry? Please justify your answer.

The next sections provides a discussion on the answers provided by the dive operators.

### **Residents' participation in the scuba diving industry**

Seventy-five percent (75%) of the dive operators indicated that local people do not dive at all and that this situation has always existed. Most visitors are from outside the Liguria District. One operator claimed that residents are not even aware that they live in an MPA, while another operator attempted to teach at local schools about scuba diving and the scuba diving industry, but the children were not interested. The reason, provided by one operator, as to why locals do not dive, is because they find it a too expensive activity, while another operator feels that residents perceive the sea as a place for swimming or bathing, when for recreational purposes, and nothing else. Another operator observed some younger local people beginning to show interest as the younger people see the monetary value of attracting scuba divers to the community.

## **Level of communication and understanding between residents and the scuba diving industry**

Most respondents answered this question with negative responses. Some operators feel that the residents see scuba divers as a nuisance and therefore there is not much communication among them. The one operator said that he found it difficult when he first arrived in the community. The operator had to “deal with everyone” (referring to making friends and creating understanding from residents) before establishing the dive centre. Even when establishing the dive centre, it had to be done in the streets behind the beach as not to bother the locals. According to this operator, location is key because scuba divers are seen as “dirty and noisy” and the only way to control divers is to “keep quiet and hide away from everyone”. Another operator indicated that there is no communication with the residents, but rather with some hotels. However, these hotels prefer not to allow divers as divers are “cheap, dirty and messy” and that rooms are rather left for clients who “spend more and stay longer”. Another operator states that operators only communicate with people working in the tourism industry such as restaurant and hotel owners. Most operators have developed some form of cooperation with hotels.

## **Steps needed to improve cooperation/understanding between local industries and the scuba diving industry**

When asked how cooperation among local industries and the scuba diving industry can perhaps be improved, the one diver operator strongly felt that such cooperation should be created at the government level. The operator felt that the government should “create proper recognition of scuba industry” as it will make the residents more aware and understanding. The industry is currently not regulated, “anyone can go and buy a tank and dive”. The operator furthermore feels that government should better define what scuba diving is so that certain measures could be put in place. Aspects such as designated spaces for the use of boarding boats, noisy air compressors and zoning for certain activities, could help establish a better relationship. The operator recommends one area where all divers can stop to fill their tanks with air as it would reduce impacts on the community as well as the operators’ costs. Another diver feels that residents are friendlier towards him as he is not local. The operator studied the area’s history and music and as a result feels more resident appreciation. “Liguria is not easy, but if you respect the local practices, if you respect the local space... If you show that you are working...” then it becomes easier to communicate. “I have good communication with people of the marina, but it takes time. Never cross the space”.

Another operator stated that “it is paradoxical that the MPA promotes itself elsewhere, but not at the local level such as schools”. This operator feels that the hospitality sector is happy when dive operators send them clients, but that this understanding does not always work as a result of seasonality. In the low season, hotels rather close down instead of lowering prices. Accommodation is important for scuba divers as scuba diving is an activity that takes place the whole year round. Another problem, according to the operator, is that “hotels are much uglier in comparison to what you find overseas” yet similar prices are charged. The operator furthermore states “more or less, we manage to find good deals at restaurants”.

This operator recommends that scuba divers should not cancel accommodation bookings at the last moment; hotels should be guaranteed a percentage of the operators' profits (although they cannot afford to do so). Greater awareness should be created among locals about the benefits that the scuba diving industry generates.

### **Views regarding residents as scuba diving industry beneficiaries**

Most operators felt that the scuba diving industry benefits the residents. They feel that the industry attracts revenue, especially when divers also have their families accompanying them. This means that more people are staying at the hotels, more are eating at restaurants, and other shops are being supported as well as other tourism activities. One operator felt that residents do not acknowledge the value of the industry as Liguria attracted a different type of tourists during the '60s and '70s. During this period, the area was reserved for rich people who wanted to enjoy holidays and breaks in an "upper class" place where they would "spend lots of money". According to this operator, scuba diving has become a main stream of revenue, but residents do not want to accept it. One operator stated, "we actually perceive hostility from the community...looking at scuba divers walking on Esplanade is ugly, which is true...but they do not realise that it is these very scuba divers that bring money to the restaurants".

Only one operator felt that the residents do not benefit from the scuba diving industry, but only the hotels and restaurants. Other people "work in factories and live in small apartments" and therefore do not benefit.

### **Perceptions of residents appreciation for the scuba diving industry and its possible benefits**

Some operators were under the impression that only the residents who are involved in hospitality value the scuba diving industry and that the rest of the community does not. Those who are not involved "are disturbed by the activity". They feel that the residents are not as welcoming to visitors as other parts of Italy may be, so they try to avoid visitors. One operator felt that support should not come from the residents, but rather from the local council. This same operator feels that most residents are not even aware that many visitors are scuba divers.

One operator strongly felt that residents do not value the industry as scuba divers, for instance, will rather bring their food instead of paying high restaurant prices. Furthermore, some divers will rather travel home the same day than stay over in the area because of the high accommodation costs involved.

### **Perceptions regarding the community's support for the scuba diving industry**

Operators do feel that it is important that the community should support the scuba diving industry. "There needs to be a synergy. Industry cannot work without hospitality and other sectors". One operator explained that residents' support is needed, especially when at the docks with the clients. "There are no local laws. We are tolerated at the docks; we have no permission to stay there". Another operator said that

resident support is very important, but that some residents only support them during peak seasons (June, July and August), but not at all during the other times.





## 6. Conclusions

### 6.1 Summary of study results

#### 6.1.1 Summary of the residents

The results of this study are summarised in the table below.

Aspects	Results
<b>Section A: Socio-demographic information</b>	
Age	40.52 years (average)
Permanent resident	Yes (78%)
Communities that respondents are residents of	Santa Margherita Ligure (30%), Rapallo (21%)
Years as resident	25.48 years
Business as part of tourism	Yes (82%)
Type of business	Hospitality (34%), Restaurant/bar (17%), Travel agent/transport (17%)
Level of education	High school diploma or equivalent (60%)
<b>Section B: Scuba diving knowledge</b>	
Do respondents know what scuba diving is?	Yes (52%)
Awareness of scuba diving in the area?	Yes (80%)
Awareness of MPA	Yes (98%)
Respondent as scuba diver	No (84%)
Business involvement in scuba diving industry	No (68%)
<b>Section C: Effect of tourism and scuba diving</b>	
Effect of tourism on personal quality of life	Positive to very positive (75%)
Effect of tourism on community quality of life	Positive to very positive (88%)
Effect of scuba diving on personal quality of life	No effect (55%)
Effect of scuba diving on community quality of life	Slightly positive to positive (72%)
Community attachment	I enjoy living in my community, but I can think of other places I would equally enjoy staying (61%)
<b>Section D: Specific social impacts</b>	

#### **Respondents agreed with the following:**

1. There are more opportunities for local businesses;
2. I have developed a greater appreciation for the marine environment;
3. My environment is noisier;
4. The lives of the residents are disrupted;
5. My community had become more environmentally friendly; and
6. There are more leisure opportunities for residents.

**Respondents disagreed with the following:**

1. There has been a rise in crime levels;
2. Vandalism has increased in my community;
3. My community's cultural traditions are fading;
4. There is more pollution in my community;
5. My community's natural surroundings are fading.

**Section E: Community image perceptions****My community...**

1. Has beautiful landscapes;
2. Offers a variety of fauna and flora;
3. Offers beautiful marine life;
4. Is a safe tourism destination;
5. Offers good restaurants; and
6. Has a good name and reputation.

**Section F: Value of scuba diving industry**

Overall state of the scuba diving industry	Good (43%); Average (40%)
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**Reasons for scuba diving industry's level of success:**

1. The presence of a marine protected area;
2. The presence of a regional park;
3. The diversity of underwater fish and plants;
4. Good ocean water quality;
5. There are good quality coral and coralliferous formations;
6. Ideal living conditions; and
7. The area offering access to good dive charters.

**Respondents felt neutral about the following:**

1. Government plays an active role in the sustainability of the tourism industry;
2. The residents participate actively in the tourism industry;
3. Residents' general positive attitude towards the local scuba diving industry;
4. It being the "heart beat" of my community;
5. There is an effective flow of information among all stakeholders;
6. There is a good understanding between community members and the scuba diving industry;
7. Residents understand the importance for the scuba diving industry; and
8. There is cooperation among community members and those working in the scuba diving industry.

**6.1.2 Summary of interviews with dive operators**

The results of the scuba dive operators are discussed in this section.

- Most scuba dive operators strongly felt that the scuba diving industry generates various benefits for the residents, especially regarding generating revenue for the local hospitality industry (hotels and restaurants) and other types of shops in the area. The operators feel that the community should be thankful that they attract so many tourists.

- The dive operators, however, indicated that they mostly experience various degrees of hostility from the residents. Some operators noted that they do enjoy support from certain individuals and establishments that function within the hospitality industry, but not other residents.
- The main reasons why scuba dive operators feel that the residents do not support them were as follows:
  - In the 1960s and 1970s, Liguria attracted more affluent, high-class visitors who gave the area a classy atmosphere. Currently, the area attracts a larger variety of tourists, including scuba divers, who spend less than what the previous market spent – residents do not want to accept these changes.
  - Scuba divers are not always well dressed, especially on the Esplanade where they sometimes are not properly clothed.
  - Some hotels do not welcome scuba divers as they might cancel their booking at the last minute due to poor weather. Furthermore, scuba divers are seen as loud and untidy, which might influence hotels' images negatively.
  - Scuba divers already spend a large amount on scuba diving, so they do not want to spend extra funds at restaurants with high prices. They then rather pack their own lunches, meaning that they do not always support restaurants.
- The majority of operators indicated that they want the residents to support the diving industry as residents play an important part in creating a functional scuba diving environment.
- When asked what should be done to create a better understanding and cooperation among scuba dive operators and the residents, the following were indicated:
  - The local council and government need to manage the interactions between the two parties, which can be done by creating awareness of the importance of the scuba diving industry to the residents; by creating a better definition of scuba diving so that it can be properly regulated; local government should acknowledge the importance of scuba divers. Furthermore, local government should firstly promote scuba diving at the local level such as at schools in Liguria, instead of solely focusing marketing on areas further away.
  - There should be designated areas where scuba diving tours can begin from, in order to minimise disruptions.
  - Equipment used to fill tanks should be placed at a specific spot in the area where all operators can go to fill their tanks, which will also minimise noise.
  - Scuba dive operations should not take place in main streets, in order to preserve aesthetics.
  - It is also recommended that hotels remain open during off-peak seasons and simply reduce their room charges so that scuba divers will have places to stay. This might keep the industry going during winter months.
  - Restaurants and hotels should provide special deals for scuba divers who bring clients to them regularly.

## 6.2 Findings and recommendations by researchers

To improve the sustainability of the scuba diving industry in Liguria, the researchers provide the following recommendations:

- The government in the area of Liguria should recognise scuba diving as an important activity in the area. They should work together with scuba dive operators to put measures in place that will streamline the industry. This means that an official guideline for interactions among the community members, scuba dive operators and government should be developed to take all parties' issues and preferences into consideration. Some guidelines may include:
  - Meetings between representatives of all three parties so that all may express their grievances and develop new plans for cooperation. Such talks will assist in minimising misunderstandings among the parties.
  - It is important to educate both residents and dive operators. Residents should be educated on what scuba diving is, and why it is important for the sustainability of Liguria as a tourism attraction. Dive operators should, on the other hand, try to better understand residents' grievances and adjust their practices when and where possible.

### *6.2.1 Findings and recommendations regarding the residents of Liguria*

#### **Scuba diving awareness**

- The results revealed that the residents are fully aware that they live in an MPA, and that scuba diving practices take place in their area, yet only half of them truly feel that they know what scuba diving entails. Furthermore, the majority have never tried to scuba dive, and they feel that their business has nothing to do with the scuba diving industry. It is important that the residents understand the industry and what it means for them to better understand and support it. This can be done by educating and creating awareness within communities about the scuba dive industry by visiting schools, holding town meetings, exhibitions at the regular festivals as well as local media. Residents need to understand the importance of the scuba dive industry for the sustainability of their region and that it affects them more than what they might expect. Although many shops, for instance, do not cater for the scuba dive industry, scuba divers might still buy from their shops or make use of their services. Furthermore, some other patrons to their shops might only be able to buy there because they receive part of their salary as a result of the dive industry.

#### **Effect of scuba diving and tourism**

- Residents feel that the tourism industry has a positive to very positive impact on their personal as well as community quality of life. However, when looking at the effect of the

scuba diving industry on their personal lives, they felt that it had no effect on them. They do, however, acknowledge a slightly positive to positive effect of the industry on the community as a whole. It appears that residents do not recognise the scuba diving industry as an important part of the tourism industry of Liguria. Approximately 82% of respondents, furthermore, indicated that the businesses that they own or work at form part of the tourism industry, with most businesses focused on hospitality, restaurants and bars, as well as travel agencies and transport. This enhances the chances of residents being influenced by the scuba diving industry much more than what they realise. Education and awareness will also create understanding about how the scuba diving industry could contribute towards their personal quality of life without them, perhaps, realising it. Respondents should be made aware that a large part of their patrons could be scuba divers. This will foster a greater appreciation for the industry.

### **Community attachment**

- Although residents had been staying in this community for an average of 25 years, they still do not have a strong attachment towards their community. Most respondents indicated that they enjoy staying in their community, but they would easily move somewhere else if the opportunity presented itself. Marketing, especially in the form of branding, might help respondents become more attached to their community. Dive operators indicated that marketing does take place to an extent, but not in Liguria self. This means that Ligurians might be less aware of their environment than those from other areas and countries. Marketing messages should place more significant emphases on the uniqueness of Liguria regarding the MPA, its diversity and importance, and the world-class diving opportunities it provides. These messages should be displayed on information boards around the region, in regional media and it should be communicated to residents at town meetings.

### **Scuba diving social impact perceptions**

- When examining the respondents' social impact perceptions pertaining to the scuba diving industry, it was clear that they did perceive some positive impacts such as more opportunities for local businesses; they have developed a greater appreciation for the marine environment; they did not perceive a rise in crime, vandalism, or pollution; they did not observe degradation of the natural environment; or experience degradation of their natural surroundings. The only truly negative impacts, according to the respondents, were the environment was noisier and that residents' lives are disrupted by the scuba dive industry. These negative impacts might create negative resident sentiment towards the scuba dive industry, which might be expressed as irritation and impatience towards scuba divers. It is validated by dive operators who reported such expressions from the residents. It is recommended that the dive operators and community representatives meet and discuss what should be done or changed to minimise disruptions and noise levels. One dive operator suggested that there should be one central docking area for scuba divers so that they do not operate all over the area.

## The value of the scuba diving industry

- Less than half of the respondents were under the impression that the scuba dive industry was in a good state. According to them, the following do not contribute towards the success of the scuba dive industry: government does not play an active role in the industry; residents do not participate in the industry; residents, in general, do not have positive attitudes towards the industry; residents do not feel that scuba diving forms an important part of the region; there is not an effective flow of information among stakeholders; there is not a good understanding between residents and the members of the scuba diving industry; residents do not understand the importance of the industry. These aspects would, in fact, contribute towards an improved scuba dive industry. Respondents feel that the only aspects that contribute towards the scuba dive industry are the MPA with its diversity of life, clean water and good dive charters. Residents need to understand that their perceptions and government's level of influence would also strongly contribute to the industry. This should also be discussed in meetings between residents and scuba dive operators as well as marketing messages.

### *6.2.2 Findings and recommendations regarding the scuba dive operators*

- Dive operators feel that the residents do not realise the positive impacts that the industry generates in their community. The contributions of this industry should be revealed to residents during town meetings and in marketing to grow a greater appreciation for the industry and to make it easier for dive operators to conduct their businesses. Understanding and appreciation are needed, as literature shows that one needs residents' backing for the sustainability of tourism ventures in a region.
- Dive operators should listen to the residents' grievances, which include higher noise levels and disruptions. Dive operators should discuss this during town meetings (with government representatives present) to gain a better understanding of why residents feel the way they do. The operators can then put measures in place to minimise the negative impacts perceived by residents. The government should play a central role in mediating such discussions.
- Dive operators should implement rules to make the industry seem more orderly by perhaps having a special area near the docks where scuba divers can wait before they dive, or not allowing clients to walk around in inappropriate attire.
- Some hotels do not want to allow scuba divers to stay at their establishments due to possible disturbances and cancellations due to poor weather conditions. Scuba dive operators and individuals from the accommodation industry need to meet and discuss possible solutions. The dive operators can perhaps ask a larger fee to pay as a non-refundable deposit for their clients' stay at the hotel, which might make hotels more open towards scuba divers. The dive operators could also discuss with one or two hotels to stay open during the low-season to provide accommodation to scuba divers. Instead of keeping the whole hotel open, hotel operators could perhaps make fewer rooms available and have fewer staff on duty. This might benefit both dive operators and the hotel operators.

- The dive operators should also meet with restaurants close to them to organise special prices for scuba divers to have lunch or dinner. This can perhaps be worked into the dive operators' clients' total scuba dive price. If scuba divers do not want to eat at the restaurant, then the restaurant will still receive their payment.
- The government has to become active in streamlining the scuba dive industry. Local government could perhaps play the most significant role in educating the residents on scuba diving, and they can develop special guidelines to make the industry more sustainable. Such guidelines can, for instance, include rules against inappropriately dressed scuba divers, or docking where other tourists are relaxing and rules against unruly behaviour. As the one dive operator suggested, the local government could perhaps construct a specific docking area, as well as central areas where dive operators can fill their air tanks. Currently, various scuba dive operators leave for diving excursions right in front of restaurants, which might make restaurant owners unhappy.

### *6.2.3 Conclusion*

In conclusion, the only manner in which the scuba dive industry will be successful is if there is proper communication among all parties – scuba dive operators, the residents and local government. The researcher realised during the survey and operator interviews that all parties want the best outcome for Liguria, but that there is a misunderstanding between the two parties. Not all residents are against the industry; they simply do not understand it. Furthermore, dive operators feel that most residents are negative and they can pinpoint the aspects that residents dislike (such as clients being inappropriately dressed), yet they do not attempt to control this.

Local government is perhaps the main reason for the misunderstandings. It is the role of government to manage tourism in Liguria, of which interactions between the tourism industry and residents form part of. It is suggested that the local government should put together a task team that will communicate with all parties and do research on the scuba diving industry to construct guidelines for managing an industry with such high importance. In the end, if the tourism industry in Liguria begins to fail, it will be due to mismanagement by government.

In Liguria. 2013. Liguria: A region of excellences to be discovered.

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