“Promoting fish recovery in the Karaburun – Sazan Marine Protected Area”

Project Report

July 2016
Content

1. Introduction ........................................................................................................................................ 3
2. Background ......................................................................................................................................... 3
3. Summary of Project’s activities ........................................................................................................ 4
4. Findings from the 2015 Waitt Expedition in Albania related to the state of fish assemblages in the Karaburun – Sazan MPA .................................................................................................. 6
5. Assessment of fish catches and fishing impact in Vlora, based on current catches, collected data and analyses undertaken by the Project ..................................................................................................... 7
6. Important areas for fish stock recovery and for potential Fishery Restricted Areas in Albania........................................................................................................................................................................ 9
7. National policies related to fisheries management and control regulations for the Karaburun – Sazan MPA .................................................................................................................................................. 12
8. Fisheries monitoring, surveillance and control in the Vlora area and in the Karaburun – Sazan MPA .................................................................................................................................................. 13
9. Impact of the Project, follow up and replicability .................................................................................. 13
10. References ......................................................................................................................................... 15
Promoting fish recovery in the Karaburun – Sazan Marine Protected Area (MPA)

1. Introduction

Between January and June 2016 the Albanian Association for Protection of Aquatic Wildlife of Albania (APAWA), with the assistance of MedReAct and financial support from the Waitt Foundation, carried out the Project “Promoting fish recovery in the Karaburun – Sazan MPA”.

The Project’s overall objective was to raise public and decision-makers’ awareness of the need to enforce conservation measures in Albania, provide for the recovery of depleted fish stocks and promote sustainable fisheries, in particular by:

⇒ exposing the state of fish communities in the Karaburun-Sazan MPA, assessed by the Waitt Expedition in 2015;
⇒ disseminating the Waitt Expedition findings to decision-makers, local fishing communities, scientists, NGOs, EU institutions in Albania and the local media;
⇒ engaging with stakeholders and authorities to ensure fisheries enforcement in the MPA; and
⇒ sharing the results from an Italian no-take area to provide Albanian fishermen and fisheries managers with an example of best practice in fisheries management.

The Project engaged with the Vlora fishermen community and other relevant institutions such as the General Fisheries Directorate of the Ministry of Agriculture, the national and local branch of the Agency of Protected Areas, the Vlora Fisheries Inspectorate, the Ministry of Environment, the University of Vlora, the Agricultural University of Tirana, environmental NGOs and experts on fisheries and marine environment.

2. Background

In Vlora fishing activities include both artisanal and industrial fisheries. Recreational fishing is also commonly practiced. Marine aquaculture developed during the last 20 years with intensive floating cages for sea bream (Sparus aurata) and the sea bass (Dicentrarchus labrax), along the south-western side of the Vlora Bay, accounting for 54% of the area dedicated to this activity nationally.

Albania’s first and only MPA was established in 2010 as a National Marine Park. The MPA, with a total surface of 12,750 ha, stretches 1nm along the Western and Eastern coast of the Karaburuni Peninsula and 1nm around Sazani Island, excluding the military port (Figure 1). However, conservation measures have been poorly enforced to date. Several studies on marine habitats have documented the impacts on fish assemblages in this area, although most of these studies are not related to fish stock or fisheries assessments.
In June 2015 the Waitt Expedition assessed the ecological state of fish assemblages in Albanian coastal waters, revealing low numbers of species and low abundance. Even in the Karaburun - Sazan MPA, the fish biomass seems to be far from the average value found in other Mediterranean MPAs. The main reasons could be related to overfishing and illegal fishing compounded by scarce enforcement and controls. During the Expedition's survey, at least four or five trawlers and several other small fishing boats were found fishing illegally in the MPA and close to the protected western coast of the Karaburun Peninsula.

Figure 1. Map of the Karaburun – Sazan MPA

3. Summary of Project’s activities

3.1 Assessment of current catches around the Karaburun-Sazan MPA

The assessment was based on data collected from January to April 2016:

⇒ from the Vlora Fisheries Inspectorate;
⇒ through a questionnaire distributed to 66 fishermen, 30 of which engaged in artisanal fisheries and 36 in industrial fisheries (Annex 1);
⇒ from landing declarations;
⇒ from seven of the largest fish markets in Vlora, which are supplied with locally caught fish by both artisanal and industrial fishermen.

Figure 2. Vlora fishermen responding to the Project’s questionnaire.
3.2 Comparison of current fish catches with the catches from 2013, 2014 and 2015

Catch data were extracted from the General Fisheries Directorate and the Vlora Fisheries Inspectorate fisheries records. These data include the lists of fish species with the corresponding monthly catches in 2013-2015.

3.3 Analysis of Albanian fisheries management and control regulations with a focus on the Karaburun – Sazan MPA

We compared current catch levels around the Karaburun-Sazan MPA with 2013-2015 catches, the findings of the Waitt Expedition and the empirical knowledge of local fishermen. Then we analysed how existing regulations address fish depletion in the MPA and if they are compatible with the MPA Management Plan.

3.4 Workshop in Vlora

On 13 May 2016 the Waitt Expedition and the Project’s preliminary findings were presented at a workshop organised in Vlora, attended by fisheries and MPA managers, NGOs, local fishermen, and experts from academic institutions. Speakers included international experts from IUCN-Med and the Centre d’Estudis Avançat de Blanes (CEAB) of Girona, Spain.

![Figure 3. Vlora workshop, 13 May 2016](image)

The workshop opened with a video showing the work of the Waitt Expedition, followed by presentations by Prof Enrique Ballesteros (CEAB) on the Expedition’s activities and findings, Prof. Sajmir Beqiraj (University of Tirana) on the Project activities and results, and the national authorities on fisheries policy and controls. Additional presentations featured the recovery area for spiny lobster in Sardinia and the benefits of fisheries reserves across the Mediterranean (IUCN-

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1 Originally the Project intended to provide a comparison with fish catches recorded prior to 1990 when fisheries were strictly controlled and illegal fishing almost non-existent. However, this was not possible as records were either missing from the national archives or did not specifically indicate catches from the Vlora area.
The workshop concluded with the preliminary identification of potential fishery restricted areas in Albanian waters that could support the recovery of fish stocks and of marine habitats.

4. Findings from the 2015 Waitt Expedition in Albania related to the state of fish assemblages in the Karaburun – Sazan MPA

Findings from the Waitt Expedition indicate a degraded situation in fish communities along most of the Albanian coast, including within the Karaburun – Sazan MPA.

A total of 71 fish species were reported from the all the investigated areas (9), where the predominant families were *Labridae* and *Sparidae*, respectively with 13 and 12 species. Karaburun showed the highest species number (together with Porto Palermo, Ceka e Lukoves and Kepi i Stillos), while Sazan was among the areas with the lowest number (together with Kepi i Rodonit and Kepi i Lagjit).

Fish biomass in Karaburun was found to be low (lower than Porto Palermo, Ceka e Lukoves and Kepi i Stillos), while Sazan was the second lowest (just before Kepi i Rodonit). Even in seagrass meadows (*Posidonia oceanica*) the fish biomass was low in Karaburun and very low in Sazan. The high fish biomass found in Kepi i Lagjit and Ceka e Lukovës may be related to the presence of seamounts, and in Porto Palermo and Kepi i Stillos to the presence of fish farms. However, the fish biomass in the Karaburun - Sazan MPA is lower than the average fish biomass found in many MPAs around the Mediterranean.\(^2\)

The high species number in Karaburun, compared to many Mediterranean MPAs\(^3\), could be related to the presence of some relatively well preserved habitats, especially those of *Cystoseira* “forests”. However, the low fish biomass, even in these preserved habitats and seagrass meadows, may well be related to fishing pressure. Other impact factors may be the increased erosion (as is true of most of the Albanian coast), changes in the sedimentation regime of Vlora Bay, climate changes (increased water temperature in the Vlora area), pollution from uncontrolled urban and touristic developments during the past 25 years, and increased presence of invasive alien species along the Albanian coast and in the Vlora area.

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\(^2\) Comparison done after Sala *et al.*, 2012

\(^3\) Comparison done after Guidetti *et al.*, 2014
5. Assessment of fish catches and fishing impact in Vlora, based on current catches, collected data and analyses undertaken by the Project

The Project’s assessment of current catches around the Karaburun-Sazan MPA in the period January-April 2016 shows that about 92% of catches in Vlora are from industrial fisheries (including the sardine fishery). The highest catch quantities were recorded for mackerel, squids and shrimps from both industrial and artisanal fisheries, while tuna was the largest catch in the industrial fishery.

In 2015 the official statistics reported a sharp decrease in catches compared to 2013 and 2014. Species with the greatest decrease were those most commonly found in fish markets, like mackerel, hake, shrimp, squid, bogue, sole, red mullet, sardine and octopus. According to the fishermen contacted by the Project, 56% of these catches are from industrial fishing and 44% from artisanal fishing.

Unsurprisingly 83% of all the interviewed fishermen reported that they fish in the proximity of the MPA, either inside or outside the Vlora Bay while 13.6% of them reported fishing inside the MPA. Fishing pressure in the area is high, as 97% of the interviewed fishermen fish every month of the year, 62% fish from 11 to 20 days per month and about 10% fish from 21 to 25 days per month.

The fishing gear most used is the trawl net, employed by 41% of the interviewed fishermen, followed by longlines (22%), sardine nets (19%), and trammel nets (11%); the remaining 7% use artisanal pelagic hand nets and basket nets.

Fishermen are well aware of the critical state of fish stocks: 97% of those interviewed stated that a decline in catches became evident in recent years and 74% consider that the rate of decrease is high to very high.

In the Vlora area, the number of fishermen employed by fishery organisations is relatively small, which means that the number of families relying on income from fisheries is low. Within the group of interviewed fishermen 36% belong to an organisation with only three members, 24% to an organisation with two and four members, 9% with seven members and 6% with six members.

None of them is fully satisfied with their catch levels: 56% are not satisfied with the quantity of fish caught in recent years, while the remaining 44% are sufficiently satisfied. The majority do not
declare monthly income from fishing activities. Based on the 14% who are actually declaring income, it looks as if their revenues from fishing, particularly from the artisanal fishing, are insufficient to provide for their family economies.

Regarding fisheries measures, 38% of those interviewed reported that they have a good knowledge of the measures, 38% a sufficient knowledge, 13% a little knowledge and 11% a very little knowledge. Only 21% think that the existing fisheries measures are effective, 19% believe they are sufficiently effective, while 60% consider them ineffective.

As many as 29% of the fishermen interviewed do not declare catches, which raises questions about the reliability of the official catch statistics. Sixty percent stated that illegal fishing occurs in the area, and 63% indicated that illegal fishing also occurs inside the Karaburun – Sazan MPA. Fishing with explosives was reported to be the main concern for 66% of the interviewed fishermen. Other illegal fishing methods mentioned were fishing with lights at night (18%), trawling in shallow water (at a shallower depth than allowed) (18%) and collection of date mussels (16%).

![Figure 6. Collecting data from the fish market in Vlora.](image)

The questionnaire also tried to obtain the views of the fishermen on sustainable fishing practices and suggestions for improving fisheries management but these questions were not always understood and the answers were not very clear at times. In the following tables the frequency of responses is ranked from the highest to the lowest.

**Question 23. What fishing practices do you think are less harmful to fish populations and to the environment and should be promoted to ensure sustainable fishing in your area.**

<table>
<thead>
<tr>
<th>Answers</th>
<th>%</th>
<th>Freq.</th>
<th>% / 66</th>
</tr>
</thead>
<tbody>
<tr>
<td>No trawling in prohibited depth limit.</td>
<td>22.5</td>
<td>32</td>
<td>48.5</td>
</tr>
<tr>
<td>No fishing with explosives.</td>
<td>16.9</td>
<td>24</td>
<td>36.4</td>
</tr>
<tr>
<td>Use of nets with big mesh size.</td>
<td>15.5</td>
<td>22</td>
<td>33.3</td>
</tr>
<tr>
<td>No fishing during fish spawning season.</td>
<td>14.1</td>
<td>20</td>
<td>30.3</td>
</tr>
<tr>
<td>No fishing with lights at night.</td>
<td>14.1</td>
<td>20</td>
<td>30.3</td>
</tr>
<tr>
<td>Release of juveniles for which there is no market and that have a high survival rate.</td>
<td>9.2</td>
<td>13</td>
<td>19.7</td>
</tr>
<tr>
<td>Switch from trawling to longline fishing.</td>
<td>7.7</td>
<td>11</td>
<td>16.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0</td>
<td>142</td>
<td>215.2</td>
</tr>
</tbody>
</table>
Question 24. What are your suggestions for improving fisheries legislation and regulations, as well as for practices of fisheries management and control, in order to support sustainable fishing in your area?

<table>
<thead>
<tr>
<th>Answers</th>
<th>%</th>
<th>Freq.</th>
<th>% / 66</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation of facilities for artisanal fishermen.</td>
<td>18.9</td>
<td>23</td>
<td>34.8</td>
</tr>
<tr>
<td>Fishing areas should be managed normally, not like a border area controlled by police.</td>
<td>16.4</td>
<td>20</td>
<td>30.3</td>
</tr>
<tr>
<td>Stricter and continuous controls on fishing with explosives.</td>
<td>15.6</td>
<td>19</td>
<td>28.8</td>
</tr>
<tr>
<td>Stricter controls on landings.</td>
<td>14.8</td>
<td>18</td>
<td>27.3</td>
</tr>
<tr>
<td>Make a clear separation between fishing areas for industrial fisheries and those for artisanal fisheries, avoiding overlaps.</td>
<td>12.3</td>
<td>15</td>
<td>22.7</td>
</tr>
<tr>
<td>Strengthen controls and sanctions for illegal fishing at prohibited depths.</td>
<td>11.5</td>
<td>14</td>
<td>21.2</td>
</tr>
<tr>
<td>Allow fishing at night.</td>
<td>10.7</td>
<td>13</td>
<td>19.7</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>122</td>
<td>184</td>
</tr>
</tbody>
</table>

Fishermen’s main concerns can therefore be summarised as follows:

- Industrial fishing and trawling are exerting a considerable pressure in the Vlora area.
- Illegal fishing activities are widespread and occur inside the Karaburun – Sazan MPA.
- In 2015 fishermen noted a significant decrease in catches in the Vlora area, particularly of the most commercial species such as mackerel, hake, shrimp, squid, bogue, sole, red mullet, sardine and octopus.
- Fishing pressure is high throughout the year.
- Local fishermen in general are not satisfied with the level of catches in the past few years.
- Incomes from fishing activities, especially from artisanal fisheries, are insufficient to support the fishermen’s families economically.
- Fisheries management measures are considered poorly effective.
- A considerable part of the catches is unreported.
- Illegal fishing is a main concern.
- Fisheries management measures and facilities for artisanal fishermen should be improved.

6. Important areas for fish stock recovery and for potential Fishery Restricted Areas in Albania

During the Project special attention was given to highlighting important areas for fish stock recovery and for potential Fishery Restricted Areas (FRA) and/or MPAs in Albania, with a focus on “Essential Fish Habitats” (EFH), which include all types of aquatic habitats, where fish spawn, breed, feed, and grow to maturity. These are considered essential habitats because without these fish would not be able to survive. Other important habitats, called Sensitive Habitats (SH), are broader fish habitats linked to fish assemblages and benthic communities where the fish are sheltered and feed on. Sensitive Habitats (SH) and Essential Fish Habitats (EFH) should be
considered for protection in the management of fishery resources. EFHs are also important for those individual species with commercial value. In Albanian coastal waters there are several habitats important for fish stock recovery, which were identified by previous studies and by the Waitt Expedition, such as meadows of the seagrass *Posidonia oceanica*, of *Cymodocea nodosa* and of *Zostera noltii*; fucal forests of the *Cystoseira* and *Sargassum* species and Coraligenous biocenosis (organogenic formations in Circalittoral).

These habitats are found in most of Albania’s proposed list of MPAs which was assessed by the Waitt Expedition in Albania. The Expedition concluded that, based on benthos and fish assemblages as well as other environmental features, the priority areas for the establishment of new FRA or MPAs are Porto Palermo, Ceka e Lukovës and Kepi i Stillos.

Regarding other areas identified as potential MPAs - that is, Kepi i Rodonit, Kepi i Lagjit and Ksamil - although they still have some important benthic habitats, their high degradation scarcely fulfills the ecological and biodiversity criteria generally required for the establishment of MPAs and fishery reserves. However, if management and controls in these three areas improve through, for example, the rapid implementation of Priority Action Programmes, their natural values could be recovered in the near future.

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4 GFCM / RAC-SPA 2007  
5 NEA/AKM 1999 and INCA *et al.* 2013
Figure 8. Important areas for fish stock recovery along the Albanian coast that may be considered as potential FRA or MPAs based on the findings of the Waitt Expedition (June 2015).
7. National policies related to fisheries management and control regulations for the Karaburun – Sazan MPA

Vlora is one of the four main fishing ports of Albania with 190 registered fishing vessels, of which 121 engaged in small-scale fisheries and 61 trawlers above 12 meters in length. It should be noted, though, that according to the national authorities, only 30-40% of small scale artisanal fishing vessels are registered in the National Fishing Fleet, with 90% of the industrial fishing vessels regularly licensed.

<table>
<thead>
<tr>
<th>Vessel type</th>
<th>Total</th>
<th>Trawlers &gt;12m</th>
<th>Purse seiners &gt;12m</th>
<th>Other &gt;12m</th>
<th>Gillnetters &lt;12m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of licensed vessels</td>
<td>190</td>
<td>61</td>
<td>2</td>
<td>6</td>
<td>121</td>
</tr>
<tr>
<td>Total number of active vessels</td>
<td>132</td>
<td>30</td>
<td>2</td>
<td>6</td>
<td>94</td>
</tr>
<tr>
<td>Percentage of fleet active</td>
<td>69%</td>
<td>49%</td>
<td>100%</td>
<td>100%</td>
<td>78%</td>
</tr>
<tr>
<td>Total number of fishing days</td>
<td>21960</td>
<td>3900</td>
<td>240</td>
<td>900</td>
<td>16920</td>
</tr>
<tr>
<td>Total non-fishing days</td>
<td>26220</td>
<td>7050</td>
<td>490</td>
<td>1290</td>
<td>17390</td>
</tr>
<tr>
<td>Average fishing days/active vessel</td>
<td>166</td>
<td>130</td>
<td>120</td>
<td>150</td>
<td>180</td>
</tr>
<tr>
<td>Nr. of fishermen</td>
<td>318</td>
<td>120</td>
<td>18</td>
<td>20</td>
<td>160</td>
</tr>
<tr>
<td>Part time</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTE (full time equivalent)</td>
<td>326</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Fisheries Directorate, Tirana).

Since 1995, Albania has banned all fishing within 1 nautical mile of Sazani Island and the Karaburuni Peninsula, from Kepi i Gjuhëzes till Rrugët e Bardha (Palasë). In addition Vlora Bay was closed to trawling. The existing fishery legislation and regulations can be considered fairly compatible with the management and conservation principles of the MPA and its Management Plan.

However, there is a lack of cooperation between the relevant institutions, i.e between the Environment and Agriculture Ministries, which manages fisheries. This disconnection at the institutional level has prevented political backing for the enforcement of fish conservation measures in the MPA as well as enhanced fisheries monitoring and controls. Although the Management Plan of the Karaburun-Sazan MPA includes two fisheries management organisations and two fisheries inspectors as stakeholders, it does not include the Fisheries Directorate as one of the institutions to be consulted in managing the MPA.

As mentioned above, illegal fishing in the Vlora area is rampant, with illegal bottom trawling activities inside and outside of Vlora Bay, not only by Albanian but also by Italian fishing vessels. Some are reported and prosecuted but then seldom sanctioned.

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6 Law n° 7908 “On fishery and Aquaculture”, based on Law Nr 64 of 31.05.2012 and on Regulation n° 1/2014.
Illegal fishing activities also include fishing without license/authorisation, fishing in prohibited areas or using prohibited fishing gears, or nets with smaller mesh size, or using explosives or damaging the coastal lagoons. Another significant illegal fishing activity is the catch of prohibited species such as sea mussels, corals, sponges and sea cucumbers.

8. Fisheries monitoring, surveillance and control in the Vlora area and in the Karaburun – Sazan MPA

The Inspectorate of Fisheries Control and Monitoring of Vlora, is under the administration of the Directorate of Fisheries and Aquaculture Services, at the Ministry of Agriculture. The Inspectorate has three fisheries inspectors and collaborates with other government bodies or agencies such as the Inter-institutional Operational Marine Centre, the Vlora Coast Guard, the Port authorities of Vlora and Himara, and others. The inspectors’ main tasks are to control gears, fishing documentation, fishing capacity, catch data, fish products export certificates, fish transport, processing, storing and marketing.

In addition, inspectors are expected to verify compliance with fisheries measures such as those regarding trawling inside the Vlora Bay, fishing at less than 3 nautical miles from the coastline, fishing inside the Karaburun – Sazan MPA, fishing at less than 300 m from the coastline, fishing at less than 1 km from the river mouths and lagoon outlet channels; fishing from February 10th to April 10th in Narta Lagoon and from March 15th to June 15th in Orikum Lagoon.

However, proper functioning of the Vlora Fisheries Inspectorate is impaired by a shortage of human resources and limited infrastructure and logistic capacity.

Collection of catch data

This is one of the most important tasks of the Fisheries Inspectorate. The data are collected every month and include a list of fish species with the corresponding catch quantity for each of them. These data are regularly registered and reported to the Fisheries Directorate and are used for analysing the trend in fish catches.

9. Impact of the Project, follow up and replicability

The Project results were delivered to the main Project stakeholders, either in individual meetings or during the Vlora workshop, along with the findings of the Waitt Expedition in Albania.

One of the main target groups engaged by the Project was the community of local fishermen, both from industrial and artisanal fisheries of the main fishing port of Vlora and of smaller ones in Radhimë, Orikum, Nartë and Zvërnec.

Fish markets were a second focus of the Project, which established a working cooperation with the seven largest fish markets in Vlora that are supplied by a large number of local fishermen.

Two of the main Project stakeholders with whom communication and consultation have been continuous were the General Fisheries Directorate and the local Fisheries Inspectorate in Vlora. Communication was not limited to data collection but also included discussion of Project development, sharing and analysis of the Project findings, proposals and recommendations for
improving fisheries controls and management as well as for the conservation of fish resources in Vlora area and the Karaburun – Sazan MPA.

Other important stakeholders included the Biodiversity Directorate under the Ministry of Environment, the National Agency of Protected Areas and the local Agency of Protected Areas in Vlora. Project findings were also shared with them in order to define priorities for potential fishery reserves or MPAs in Albania.

Other Project stakeholders included the University of Vlora, the Agricultural University of Tirana, local environmental NGOs, fisheries and marine environment experts. Communication and collaboration with them was intended to increase the dissemination of the project findings through their networks.

Through these collaborations, the Project’s impact could be described as follows:
- Raised stakeholder awareness and engagement to improve fishing compliance in the Vlora area and in the Karaburun – Sazan MPA.
- Addressed the quality of fisheries control, monitoring and enforcement in the project area.
- Contributed to framing the discussion on fishery reserves and MPAs as a priority for Albania.
- Increased the attention of national and international institutions, relevant to marine conservation, such as the Ministry of Agriculture, the Ministry of Environment, USAID, the United Nations Development Programme (UNDP), the European Union Delegation to Albania, the World Bank, the IUCN, the German international development agency (GIZ) in order to support local stakeholders and the national authorities to implement adequate marine conservation measures for the recovery of Albanian marine biodiversity.

As Project follow-up a synthetic briefing with the main Project findings and a set of recommendations will be distributed to relevant local and national authorities to promote the establishment of fisheries reserves and/or MPAs in Albania.

The working methodologies adopted for this Project can be applicable to other important sites such as the priority areas identified by the Waitt Expedition for marine conservation.
10. References


Annex 1

Fishermen Questionnaire

1. What is the area / zone of your usual fishing activity?

2. Do you sometimes fish near Karaburun, or Sazan? a) Yes □ b) No □ If yes, at what distance from the coast?

3. What is the period / months when you usually fish?

4. Is there any period / month when you don’t fish? a) Yes □ b) No □ If yes, when?

5. How often do you fish (how many days)? a) per week: _______ b) per month

6. What kind of fishing infrastructure / tools / methods do you use?
   a) trawler □ b) gillnet □ c) trammel net □ d) purse seine □ e) drift net □ f) fish trap □
   g) longlines □ h) other (specify):

7. How many people are involved in your fishing activity / business?

8. What is your average monthly income from your fishing activity?

9. How satisfied are you with the fish catch in your area?
   a) very much □ b) sufficient □ c) a little □ d) very little □ e) not at all □

10. Do you think the fish catches have decreased in your fishing area? a) Yes □ b) No □ If yes, what is the decreasing scale? a) very high □ b) high □ c) moderate □ d) low □

11. What are the fish species, the catches of which have decreased the most?

<table>
<thead>
<tr>
<th>1)</th>
<th>2)</th>
<th>3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4)</td>
<td>5)</td>
<td>6)</td>
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<td>7)</td>
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<td>9)</td>
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<td>10)</td>
<td>11)</td>
<td>12)</td>
</tr>
<tr>
<td>13)</td>
<td>14)</td>
<td>15)</td>
</tr>
</tbody>
</table>

12. How familiar are you with the existing fisheries law and regulations?
   a) very much □ b) sufficient □ c) a little □ d) very little □ e) not at all □

13. How effective is the existing legislation on fisheries management and control in your area?
   a) very much □ b) sufficient □ c) a little □ d) very little □ e) not at all □
14. Do you think there is illegal fishing occurring in the area where you usually fish?  a) Yes □   b) No □

15. Do you think there is illegal fishing occurring in the area of Karaburun - Sazan?  a) Yes □   b) No □

16. If there is illegal fishing, what exactly are the illegal activities occurring in the area?

17. How do you evaluate the level of fishery control and management in your area by the responsible government institutions?  a) very good □   b) good □   c) moderate □   d) bad □   d) very bad □

18. Do you declare the quantity of fish catches to the fishery authorities?  a) Yes □   b) No □ If yes, how often? a) every month □   b) every 2 months □   c) every 3 months □   d) other (specify)

19. Do you think there are undeclared catches?  a) Yes □   b) No □ If yes, what is the percentage of undeclared catches? __________ %.

20. Are you a member of the local Fishery Management Organization (FMO)?  a) Yes □   b) No □

21. What is the percentage of active fishermen in the area with membership in the local FMO? _______%

22. How do you evaluate the role and efficiency of the local FMO for fisheries management and control in your area? a) very high □   b) high □   c) moderate □   d) low □   e) very low □ f) inexistent □

23. What fishing practices do you think are less harmful to fish populations and to the environment, and do you think they should be promoted for sustainable fishing in your area?

24. What are your suggestions about improving the legislation and regulations of fisheries, as well as practices of fisheries management and control, in order to support sustainable fishing for your benefit in your area?

25. What is your fish catch quantity for each species during the last month?

<table>
<thead>
<tr>
<th>Species</th>
<th>kg/kv</th>
<th>Species</th>
<th>kg/kv</th>
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19
**Annex 2**  
**Project Workshop Program**

**“Promoting fish recovery in Karaburun – Sazan MPA”**  
13th May 2016

Hotel Partner. Vlorë

09:30 - 10.00 Registration and welcoming of participants.

10:00 - 10:10 Greetings from local authorities.

10:10 - 10:20 Video: “The WAITT Institute Marine Expedition in Albania”.

10:20 - 10:40 Presentation of the Project “Promoting fish recovery in the MPA Karaburun – Sazan”.  
*Sajmir Beqiraj, APAWA, Albania; Domitilla Senni, MedReAct.*

10:40 - 11.00 The WAITT Institute Marine Expedition in Albania.  
*Sajmir Beqiraj, University of Tirana.*

11:00 - 11:15 Main findings on fish population assessments from the WAITT Expedition in Albania.  
*Enrique Ballesteros, Center for Advanced Studies of Blanes (CEAB), Spain.*

11:15 - 11:30 Coffee break.

11:30 - 11:45 National policies for the development of sustainable fisheries and fish stock recovery in Albania.  
*Lauresha Gredza/Mimosa Cobani, General Fishery Directorate, Tirana.*

11:45 - 12:00 Fisheries monitoring in the Vlorë region and in the MPA Karaburun – Sazan.  
*Reshat Xhelilaj, Fishery Inspectorate, Vlorë.*

12:00 - 12:30 Data analysis on fish catches and fisheries impact assessment in the Vlorë region, from the project “Promoting fish recovery in the MPA Karaburun – Sazan”.  
*Sajmir Beqiraj, APAWA, Albania.*

12:30 - 13:00 Discussions

14:00 - 14:30 Video: “Little lobsters”.

14:30 - 14:45 The recovery of spiny lobster in Sardinia (Italy), a successful example of fishermen engagement with no-take areas.  
*Domitilla Senni, MedReAct.*

14:45 - 15:15 Benefits from Fishery Reserves. Experiences from the Mediterranean.  
*Alain Jeudy, IUCN Mediterranean.*

15:15 - 15:30 Important areas for fish stock recovery and for potential fishery reserves in Albania.  
*Lefter Kashta, University of Tirana; Enrique Ballesteros, CEAB, Mimosa Cobani General Fishery Directorate, Tirana.*

15:30 - 16:00 Discussion and conclusions.