



Food and Agriculture
Organization of the
United Nations



General Fisheries
Commission for
the Mediterranean
MedSea4Fish

Research programme on recreational fisheries

Research update

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MEDAC WG 4

14 April 2026

Online



Objectives

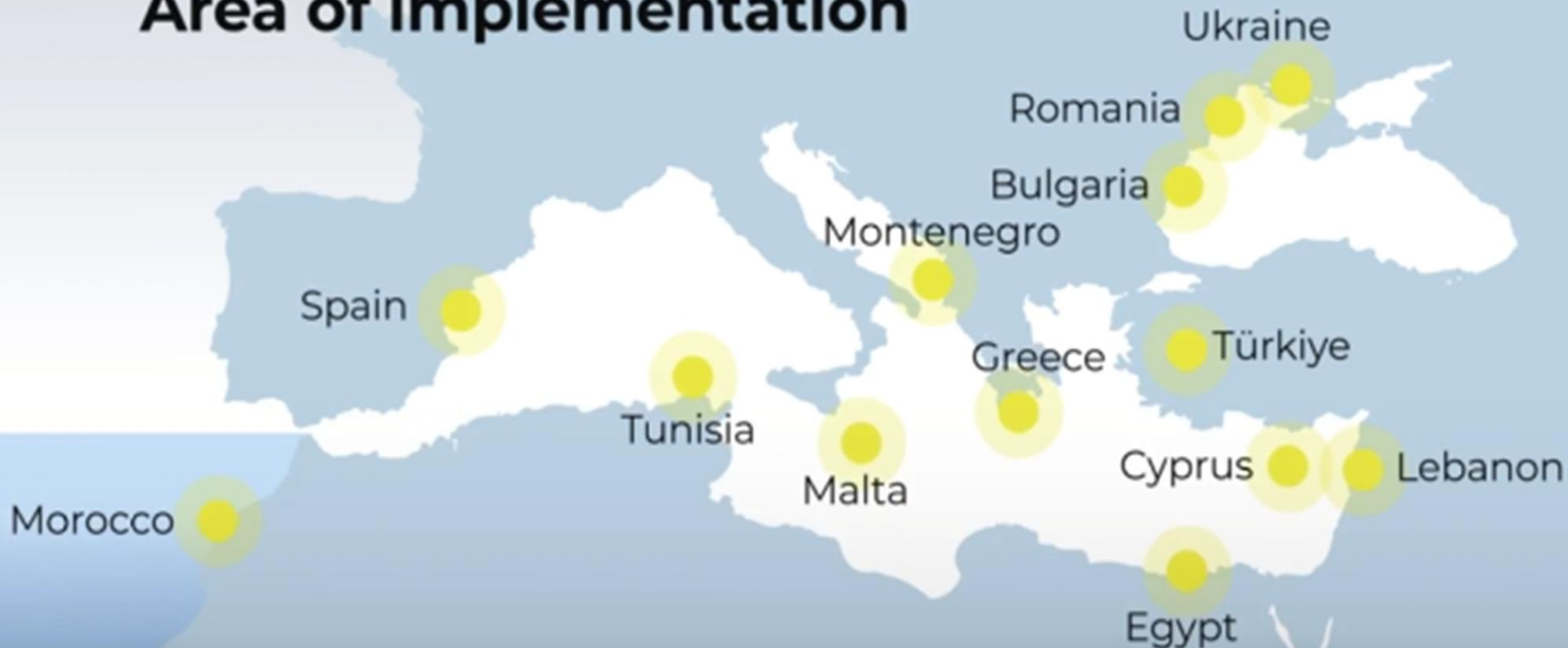
The Research Programme aims to enhance knowledge of the impact of recreational fisheries in the Mediterranean and Black Sea, supporting sustainable fisheries management

Four specific goals:

1. Initiate or improve data collection (WP1)
2. Integrate collected data into stock assessments (WP2)
3. Evaluate and improve existing management measures (WP3)
4. Foster engagement with key stakeholders (WP4)

The programme is planned for a duration of **three years (2024-2026)**

Area of implementation



The programme is rolled out
in 13 countries

Work Package 1 – Data collection

Work Package 1:
DATA COLLECTION

Objective: collect data on catches (retained + released), fishing effort and socio-economic variables following the harmonized methodology described in the GFCM handbook (Grati et al., 2021)

Method:

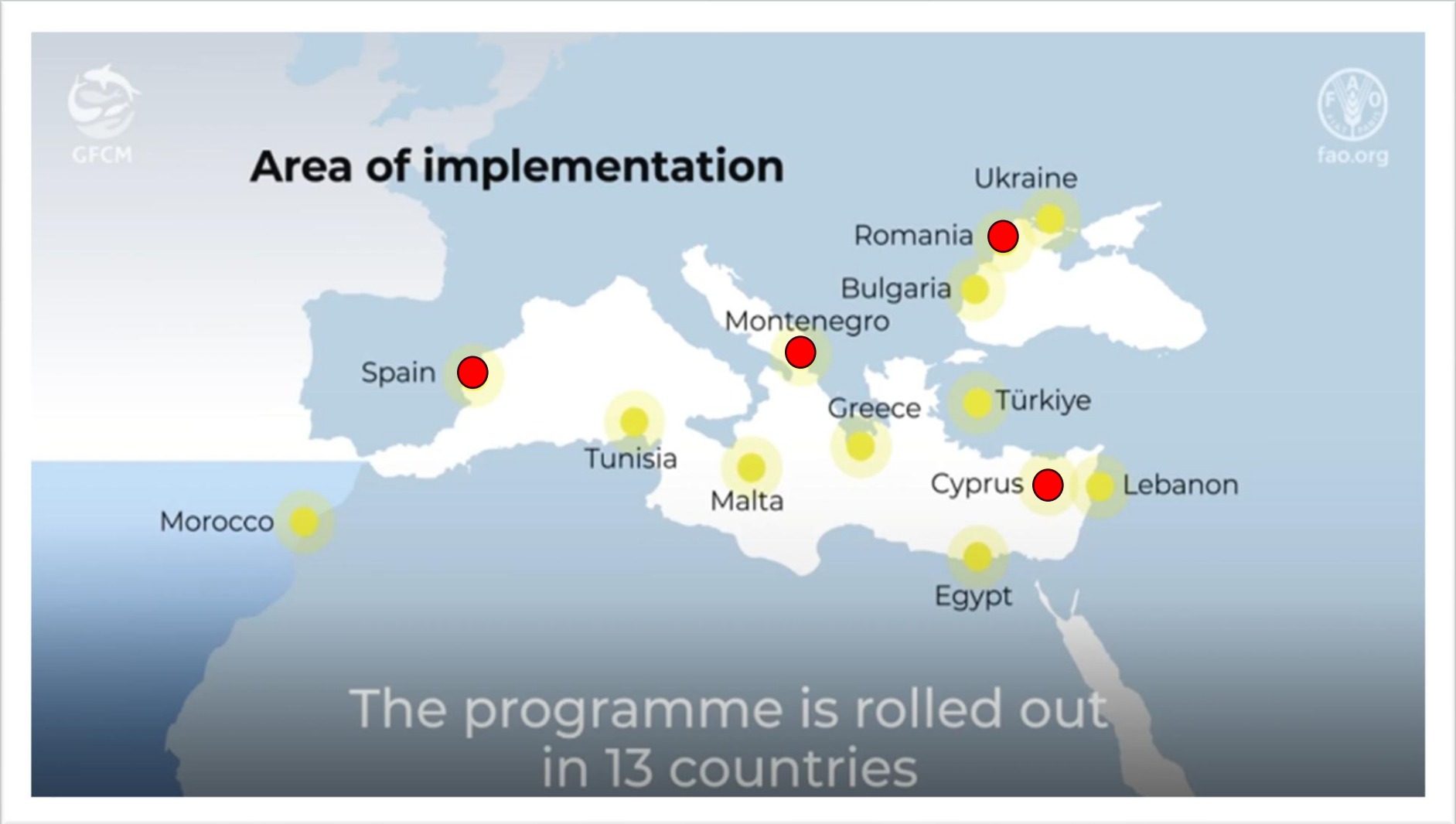
- Phase 1: Identification of the target population and a probabilistic panel
- Phase 2a: Recall survey on a probabilistic panel of fishers
- Phase 2b: Onsite survey
- Data submission and storage in 123 Survey

Deliverables:

- Number of fishers per country, fishing effort, number and weight of retained and released species, expenditures, recreational value of different fishing spots (travel cost)
- Advice on potential future needs for data submission requirements (DCRF)

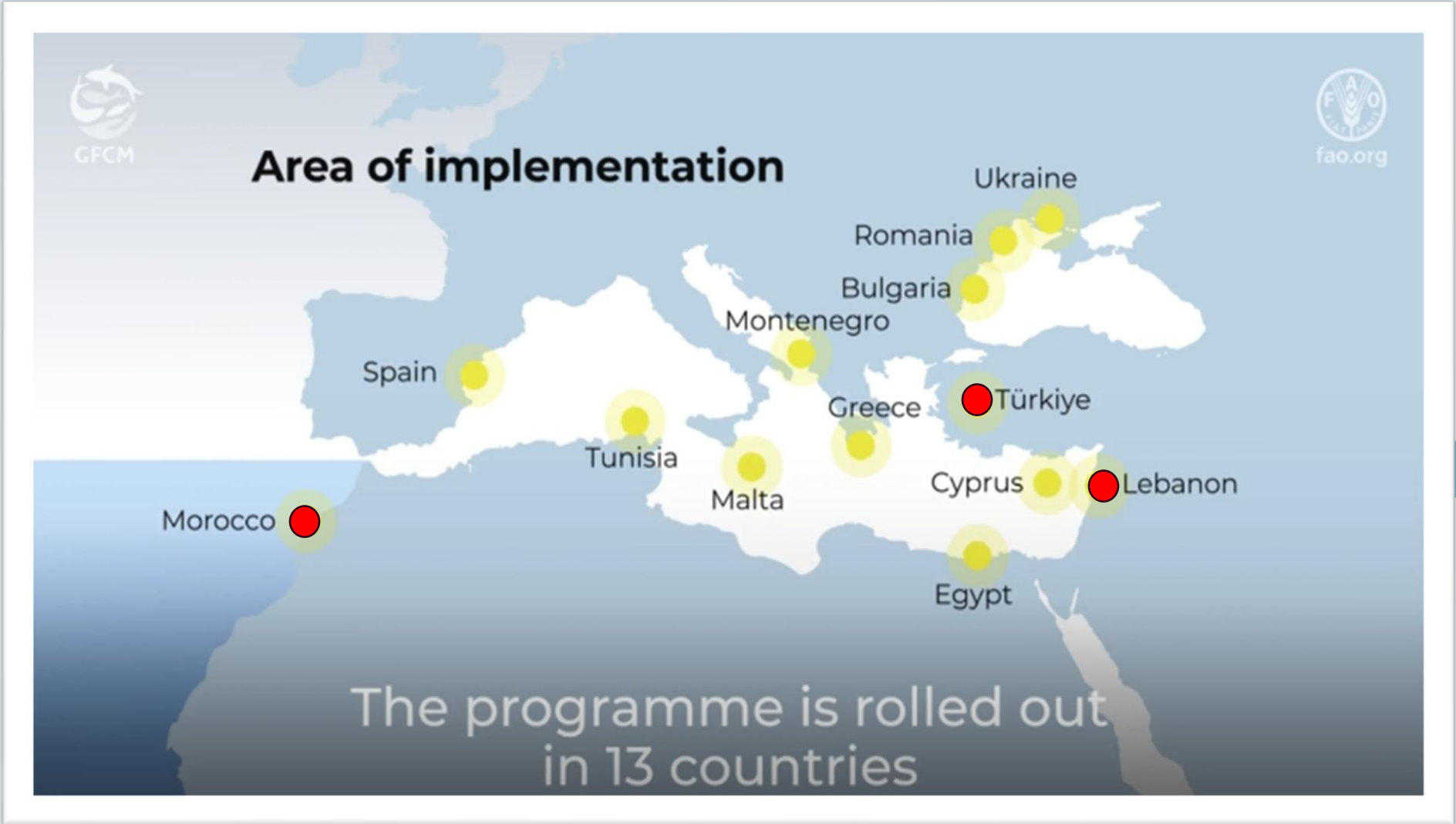
Work Package 1 – License system list of fishers

Work Package 1:
DATA COLLECTION



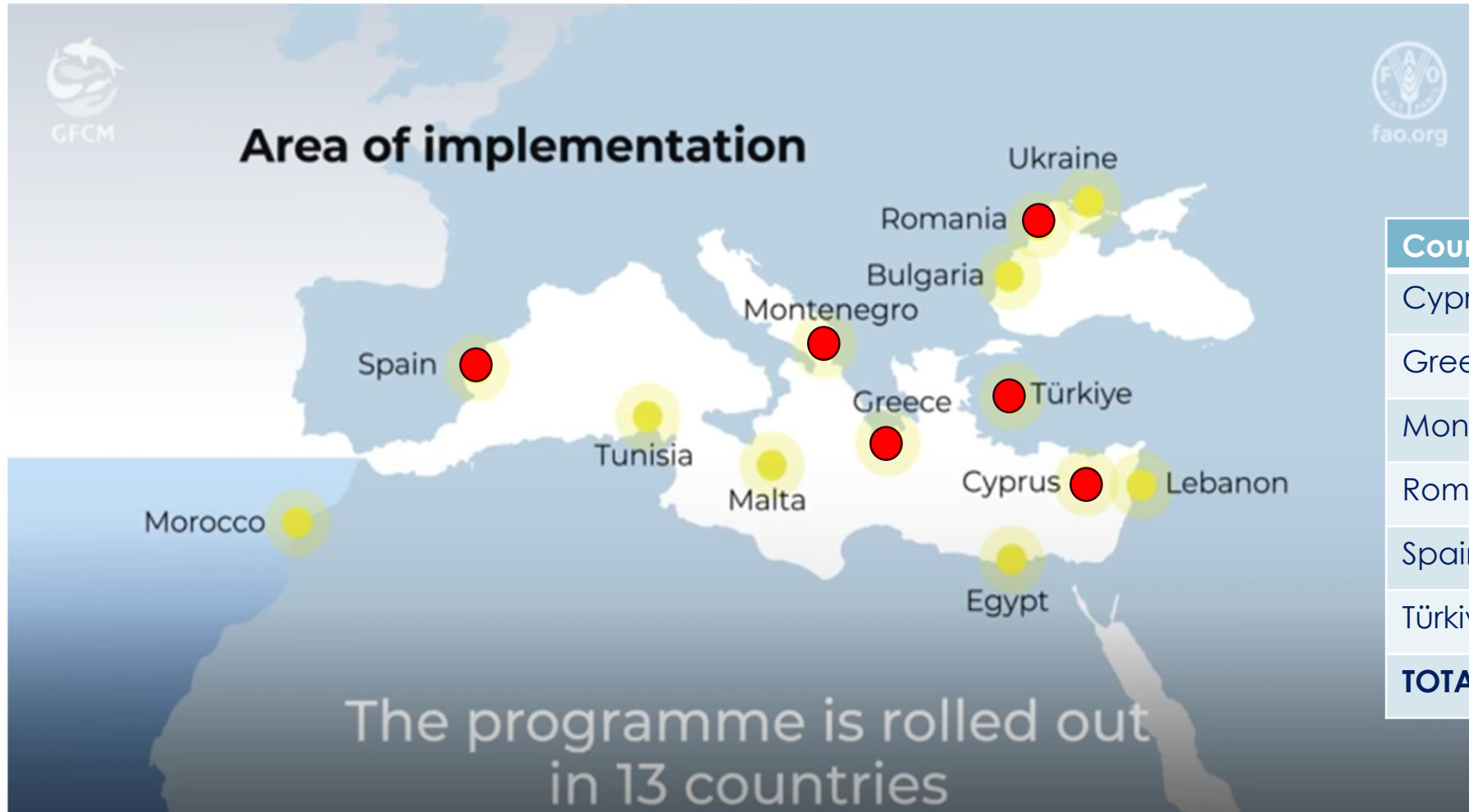
Work Package 1 – Screening survey

Work Package 1:
DATA COLLECTION



Work Package 1 – Recall survey

Work Package 1:
DATA COLLECTION



Country	Fishers	Total
Cyprus	200	2,400
Greece	310	3,720
Montenegro	260	3,120
Romania	300	3,600
Spain (Med)	500	6,000
Türkiye	290	3,480
TOTAL	1,860	22,320

Work Package 1 – Data collection

Work Package 1:
DATA COLLECTION

Phase 2a: Recall survey on a probabilistic panel: to be carried out every month for 12 months in row

1.4 Residence location (fisher's home)

Trova indirizzo o luogo

Esri Community Maps Contributors, Esri, TomTom, Garmin, Foursquare, GeoTechnologi... Powered by Esri

Lat: 43,612700 Lon: 13,492700

2. Fishing Log

2.1 Reference year

-Selezionare-

2.2 Reference month

-Selezionare-

2.3 N° of Fishing days in a month

13

Work Package 1 – Data collection

Work Package 1:
DATA COLLECTION

Phase 2a: Recall survey on a probabilistic panel: to be carried out every month for 12 months in row

2.3.1 Location

Trova indirizzo o luogo

Esri Community Maps Contributors, Esri, TomTom, Garmin, Foursquare, GeoTechnolo... Powered by Esri

Lat: 43,612700 Lon: 13,492700

2.3.2 Fishing modality

Shore

Boat

Underwater

2.3.3 Gear

Scoop net

Collection by hand

Knives, harpoons

Cast net

Beach seines

Hooks (rod and/or handline)

Traps

Work Package 1 – Data collection

Work Package 1:
DATA COLLECTION

Phase 2a: Recall survey (monthly) on a probabilistic panel

2.3.4 Insert here CATCHES details (1)

Species

Alosa fallax

Compile individual Size and Weight OR Total number and Weight

Size
in cm

Weight
in grams

Total number of specimens

Total species weight
in grams

2.3.5 Insert here RELEASES details (1)

Species

Atherina boyeri

Compile individual Size and Weight OR Total number and Weight

Size
in cm

Weight
in grams

Total number of specimens

Total species weight
in grams

Work Package 1 – Data collection

Work Package 1:
DATA COLLECTION

Phase 2a: Recall survey (monthly) on a probabilistic panel

3.1 Equipment per month (rods, hooks, reels, cast nets, speargun, fins, mask, etc.)

3.2 Artificial baits per month (jigs, lures, spinner baits, etc.)

3.3 Natural baits per month (worms, sardines, anchovies, shrimps, etc.)

3.4 Travel and accommodation per month (train, plane, car, hotels, etc.)

3.5 License fee per month

3.6 Boat rental per month

3.7 Charter per month

3.8 Fuel per month

3.9 Electronics per month

3.10 Boat maintenance per month

Work Package 1 – Onsite survey

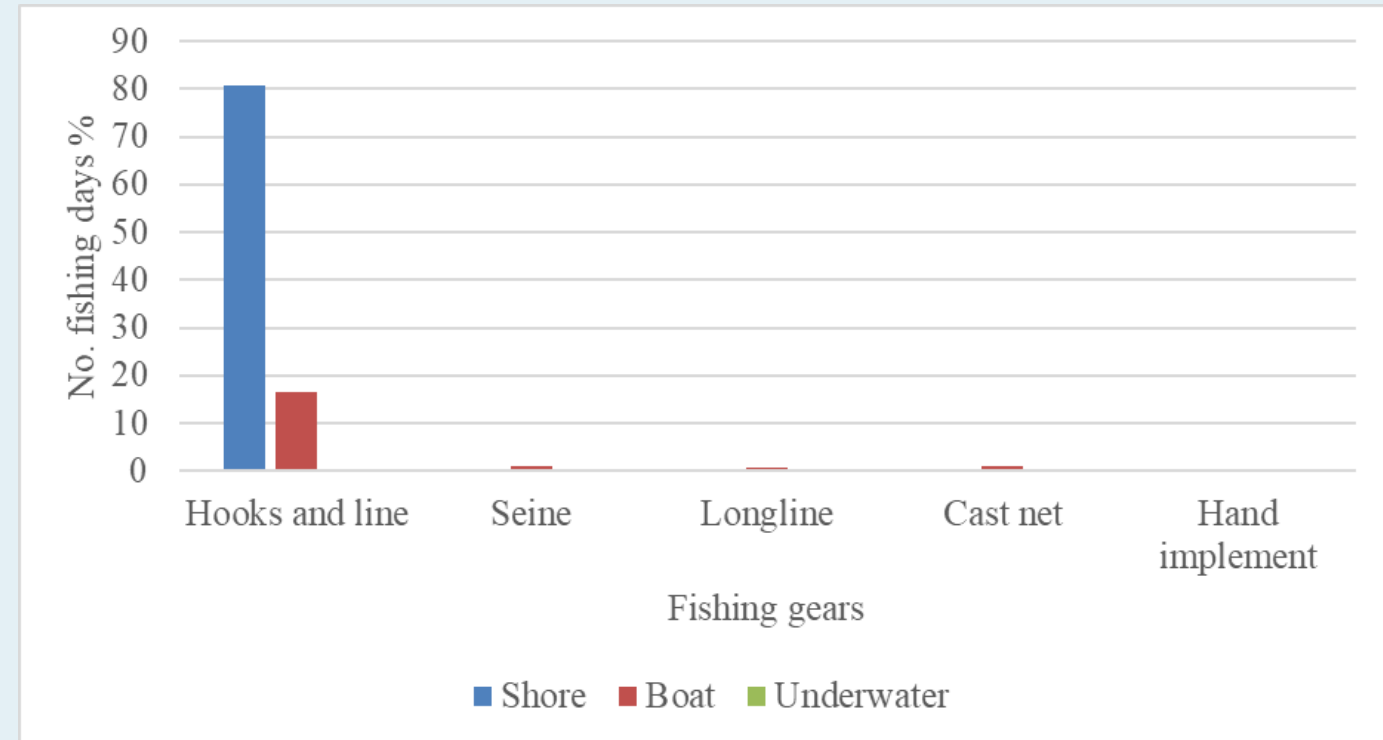
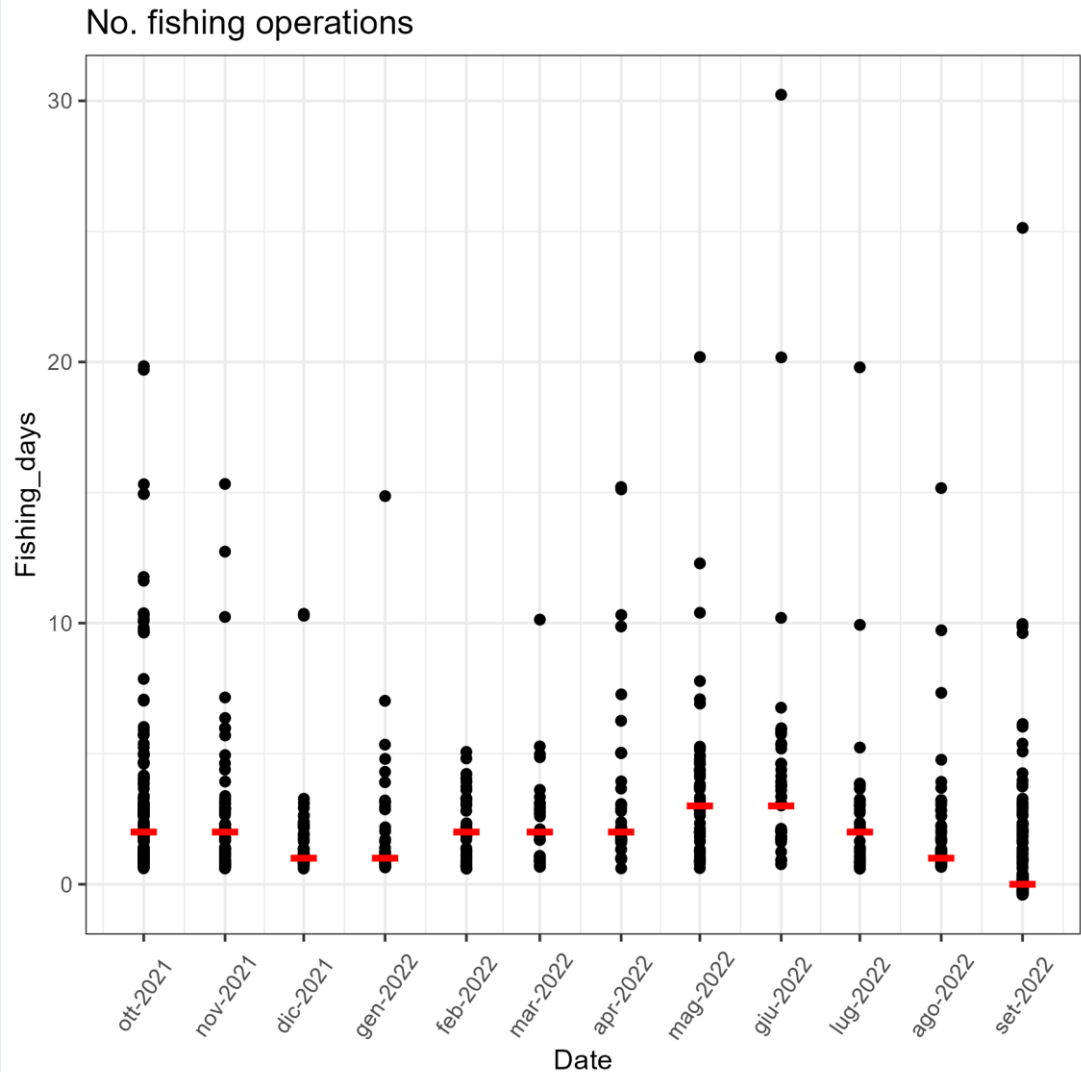
Work Package 1:
DATA COLLECTION



Work Package 1 – Data collection

Work Package 1:
DATA COLLECTION

Expected results – recall survey (fishing effort)



Source: Erbay et al., 2024

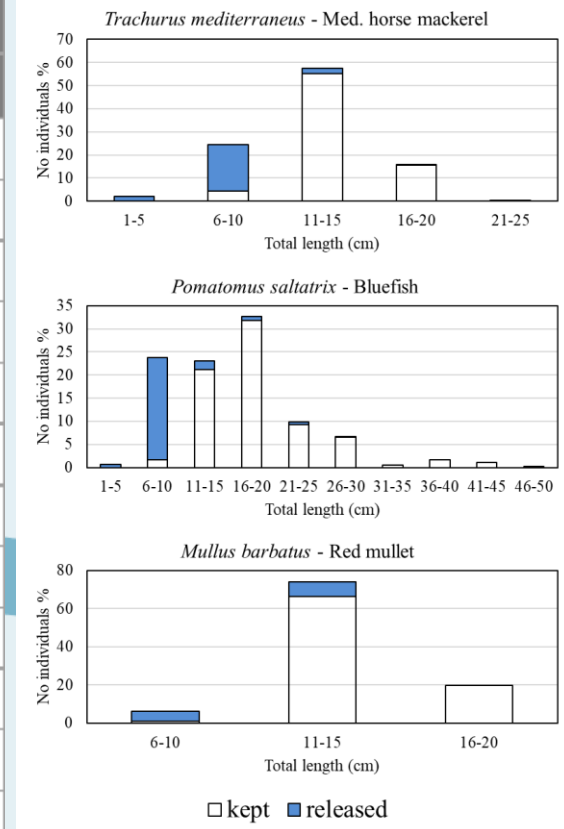
<https://doi.org/10.3389/fmars.2024.1386911>

Work Package 1 – Data collection

Expected results – recall survey (catches)

Work Package 1:
DATA COLLECTION

Species		Retained		Released	
		No	W (kg)	No	W (kg)
Mediterranean horse mackerel	<i>Trachurus mediterraneus</i> (Steindachner, 1868)	138,571	2,770.45	44,328	248.35
Red mullet	<i>Mullus barbatus</i> Linnaeus, 1758	7,622	191.03	1,116	8.37
Bluefish	<i>Pomatomus saltatrix</i> (Linnaeus, 1766)	5,531	634.88	1,952	54.66
European anchovy	<i>Engraulis encrasicolus</i> (Linnaeus, 1758)	2,465	24.60	15	0.08
Whiting	<i>Merlangius merlangus</i> (Linnaeus, 1758)	1,652	87.55	613	3.71
Black scorpionfish	<i>Scorpaena porcus</i> Linnaeus, 1758	1,108	246.13	55	3.77
Atlantic bonito	<i>Sarda sarda</i> (Bloch, 1793)	824	426.57	213	10.12
Garfish	<i>Belone belone</i> (Linnaeus, 1761)	656	108.01	277	1.83
Flathead grey mullet	<i>Mugil cephalus</i> Linnaeus, 1758	627	87.55	43	1.12
European pilchard	<i>Sardina pilchardus</i> (Walbaum, 1792)	220	11.00	800	16.00
European seabass	<i>Dicentrarchus labrax</i> (Linnaeus, 1758)	156	42.90	11	0.35
Twaite shad	<i>Alosa fallax</i> (Lacepède, 1803)	136	14.00	0	0.00
Blotched picarel	<i>Spicara maena</i> (Linnaeus, 1758)	120	11.57	61	1.04
Common two-banded seabream	<i>Diplodus vulgaris</i> (Geoffroy Saint-Hilaire, 1817)	115	6.30	0	0.00
Round goby	<i>Neogobius melanostomus</i> (Pallas, 1814)	50	2.00	65	0.33
Brown meagre	<i>Sciaena umbra</i> Linnaeus, 1758	45	13.98	3	0.15

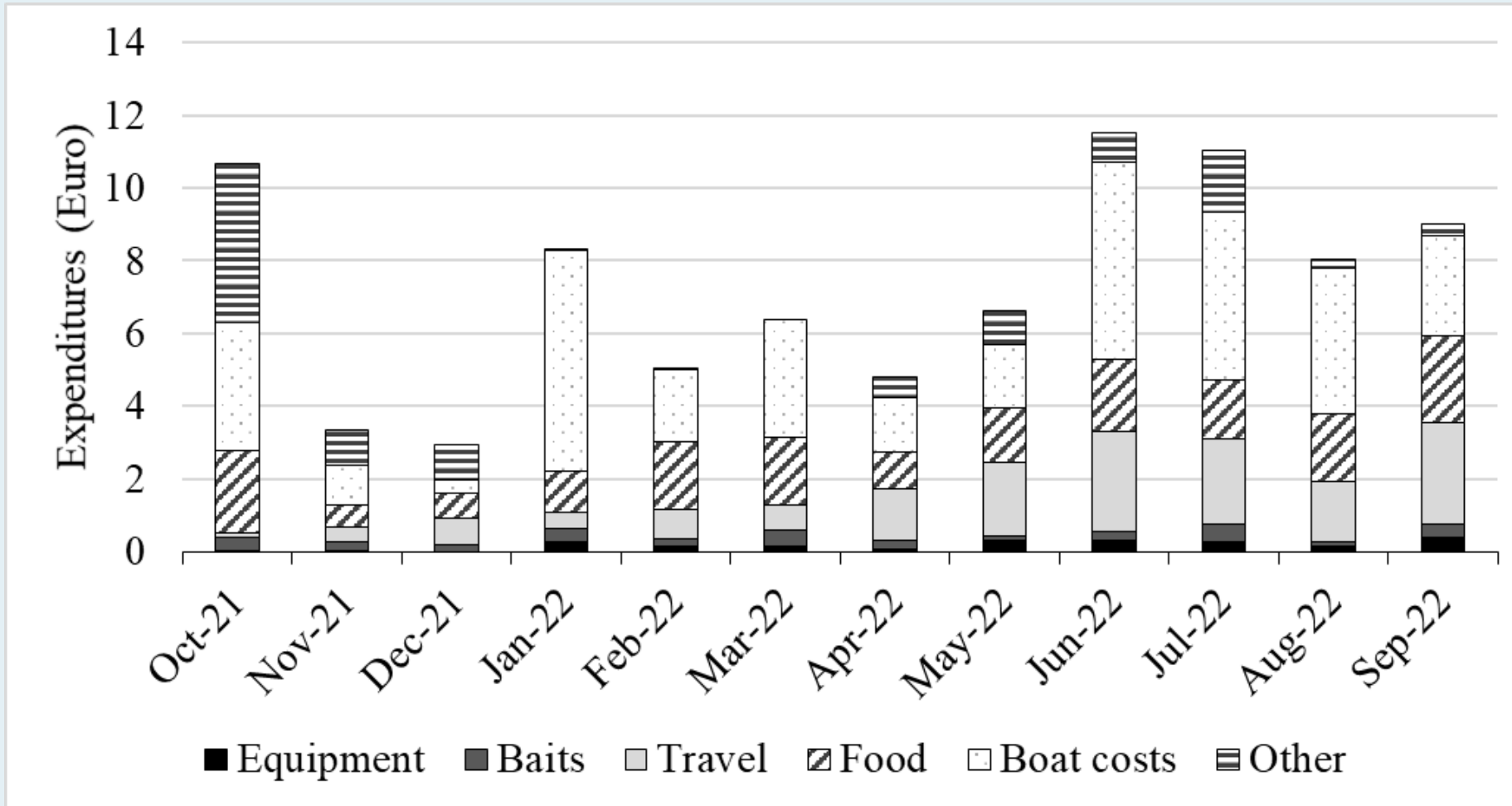


Source: Erbay et al., 2024
<https://doi.org/10.3389/fmars.2024.1386911>

Work Package 1 – Data collection

Work Package 1:
DATA COLLECTION

Expected results – recall survey (expenditures)



Source: Erbay et al., 2024

<https://doi.org/10.3389/fmars.2024.1386911>

Work Package 1 – Data collection

Work Package 1:
DATA COLLECTION

Expected results – recall survey (travel cost)

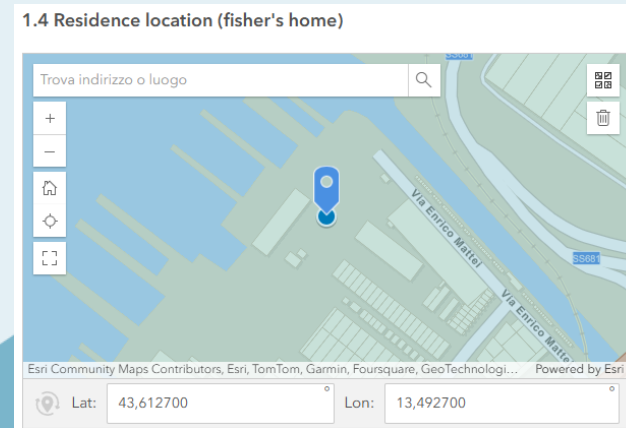
It is the most commonly used method to **estimate the direct use value of natural areas** such as parks, rivers, lakes, etc. (Freeman et al. 2014; Lupi et al. 2020)

It is based on the **direct observation** of individuals' behavior

Willingness to pay for the good is a function of the travel cost to reach it

Main objective: assess the recreational value of marine areas utilized by recreational fishers

Residence location



Distance to the Fishing spots



Work Package 2 – Framework for stock assessment

Work Package 2:
FRAMEWORK FOR STOCK
ASSESSMENT

General remarks:

- Data collected in WP1 will provide insights into the key species targeted by recreational fisheries and help assess the necessity of evaluating their stocks status
- This may involve **integrating these data into existing stock assessments** or **initiating additional assessments** specifically for key recreational fishing stocks
- These assessments could be conducted independently or **complemented by data from small-scale fisheries** (i.e., priority species for recreational fishing often overlap with those targeted by SSF), which are not yet used in stock assessments

Work Package 3 – Management measures

Table including

1) Management Measures categories:

- Conservation;
- Monitoring Control and Surveillance;
- Participation to Governance and Promotion of Best practices;
- Data collection, scientific monitoring and stock assessment.

2) Potential issues.

3) Suggested implementation.

4) Comment.

5) Key Aspects.

Thank you for
your attention

Any questions?

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