

The socio-economic situation of the community fleet operating in the Strait of Sicily

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MEDAC - FG meeting on Strait of Sicily

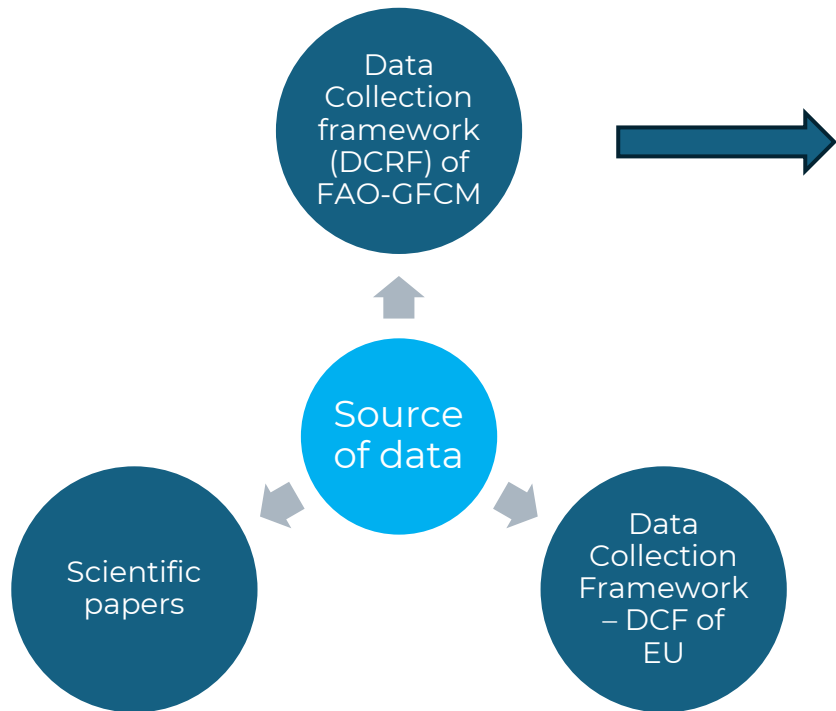
27th February 2024

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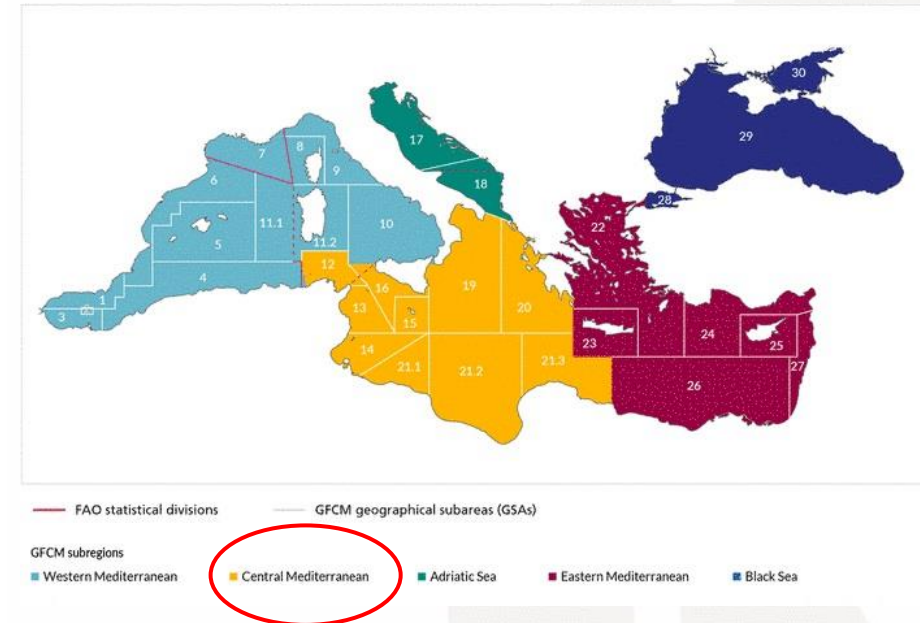
- Description of the main socioeconomic data
- Focus on Italian demersal trawlers in GSA 16: a socio-economic evaluation of the sustainability of the fleet
- Opportunities and threats of the fleet operating in the area



Main socioeconomic data



FAO. 2023. The State of Mediterranean and Black Sea Fisheries 2023 – Special edition. General Fisheries Commission for the Mediterranean. Rome.



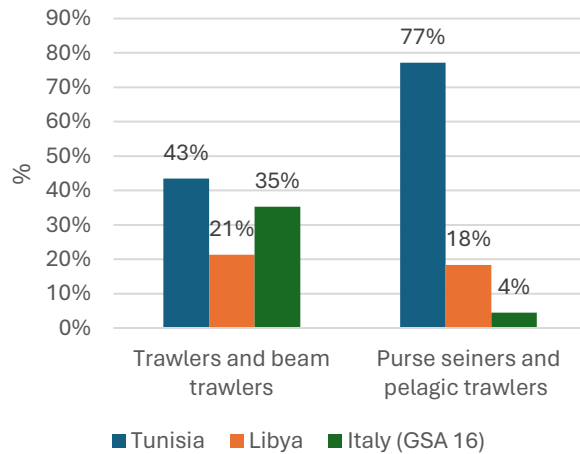
Fishing fleet

Number of operating fishing vessels by GFCM contracting party

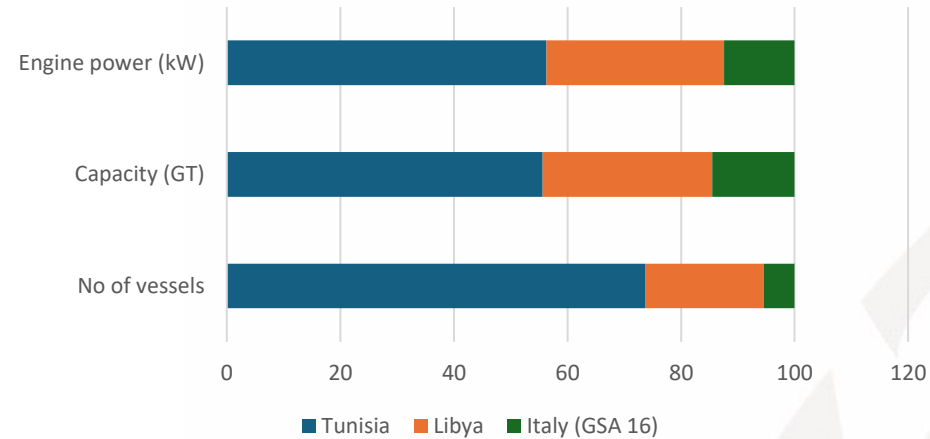
| | 2016 | 2018 | 2020 | Trend 20/16 (%) |
|----------------|-------|-------|-------|-----------------|
| Tunisia | 13124 | 13300 | 13081 | 0% |
| Libya | 2957 | 3974 | 3708 | 25% |
| Italy (GSA 16) | 1092 | 1026 | 967 | -11% |

Number of operating fishing vessels by fleet segment group and by GFCM contracting party, 2020

| | Small-scale vessels | Trawlers and beam trawlers | Purse seiners and pelagic trawlers | Other fleet segments | Total vessels |
|----------------|---------------------|----------------------------|------------------------------------|----------------------|---------------|
| Tunisia | 12081 | 433 | 484 | 83 | 13081 |
| Libya | 2719 | 212 | 115 | 602 | 3648 |
| Italy (GSA 16) | 556 | 351 | 28 | 32 | 967 |



Capacity and engine power of operating fishing vessels, 2020



Average year of construction and age of fishing vessels in the GFCM vessel record, 2022

| | Year of construction | Age |
|----------------|----------------------|-----|
| Tunisia | 1993 | 29 |
| Libya | 1998 | 24 |
| Italy (GSA 16) | 1984 | 38 |

Fishing fleet

Information on authorized fishing vessels in GFCM priority fisheries

| | Number of vessels | Average length overall (m) | Total gross tonnage | Total engine power (kW) |
|--|-------------------|----------------------------|---------------------|-------------------------|
| Demersal shrimp fisheries (Strait of Sicily) | 255 | 24.5 | 24872 | 81973 |
| Demersal fisheries (Strait of Sicily) | 1045 | 23.7 | 79799 | 324017 |

Demersal fisheries in the Strait of Sicily – GSAs 12 to 16 (Cyprus, Italy, Malta, Spain and Tunisia) 1 045 vessels (around 79 800 GT) are operating. Fishing vessels are bottom trawlers authorized for demersal fisheries in the Strait of Sicily. Italy and Tunisia account for around 57 percent and 41 percent of the total fleet, respectively

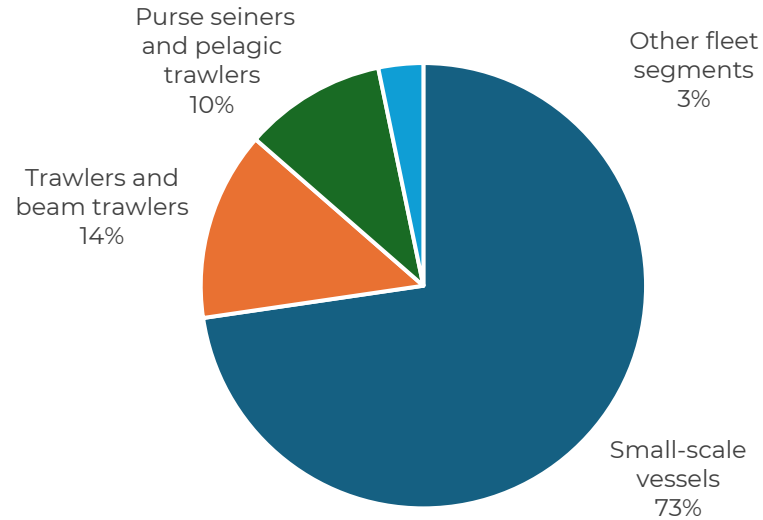
Demersal shrimp fisheries in the Strait of Sicily – GSAs 12 to 16 (Cyprus, Italy, Malta and Spain) 255 vessels are operating (around 24 800 GT). Fishing vessels are trawlers authorized for deep-water shrimp fisheries in the Strait of Sicily. Italy accounts for around 94 percent of the total fleet.



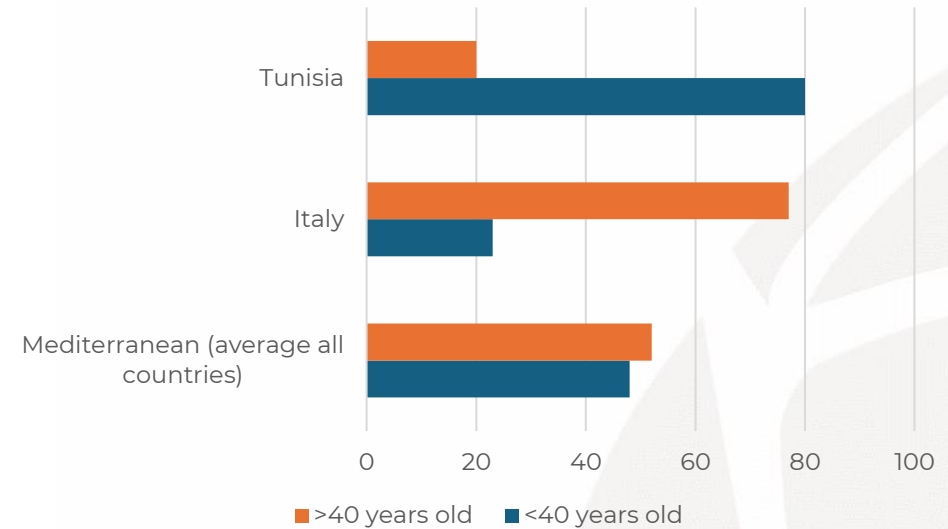
Catch limit (tonnes) for giant red shrimp and blue and red shrimp in 2023:
Italy 1,012 tonnes
Tunisia 165 tonnes
(Recommendation GFCM/45/2022/5)

Employment

Employment by fleet segment group in Central Mediterranean countries



Age distribution of fishers



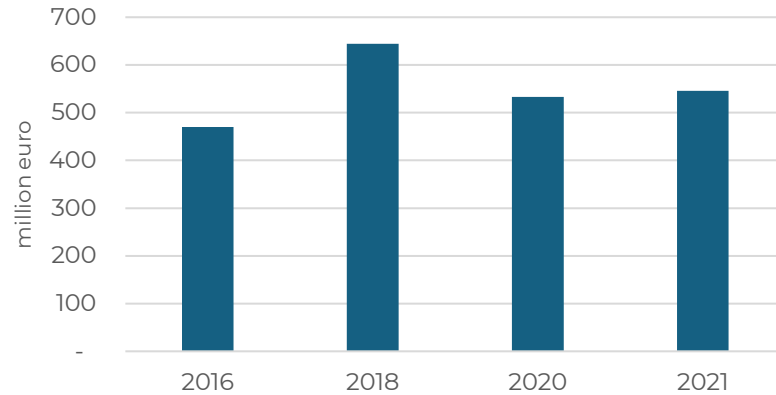
Employment on board small-scale and industrial fishing vessels in Italy and Tunisia

| | Small scale fisheries | Industrial fisheries | Total employment |
|----------------|-----------------------|----------------------|------------------|
| Tunisia | 30,395 | 10,132 | 40,527 |
| Italy (GSA 16) | 796 | 1,917 | 2,713 |

These indicators underline the potential for continuity and social sustainability of the fishery sector.

Revenue and Gross Value Added – Central Mediterranean

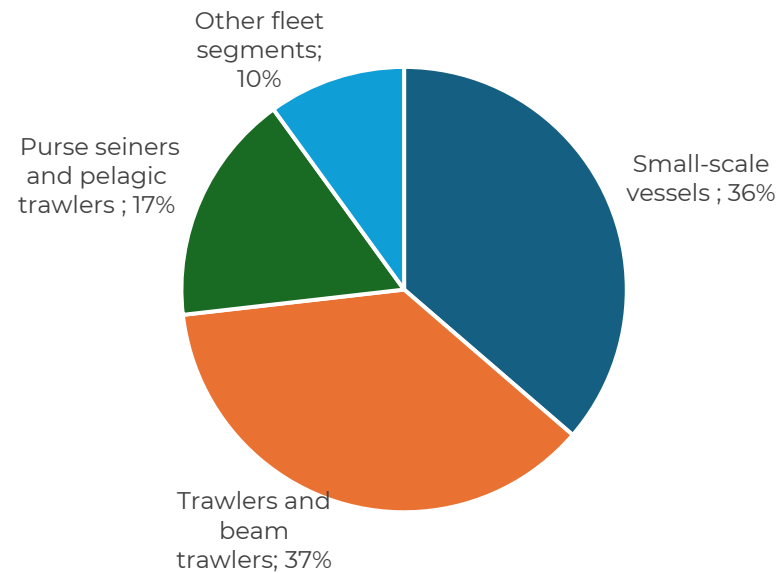
Trend in revenue from marine capture fisheries



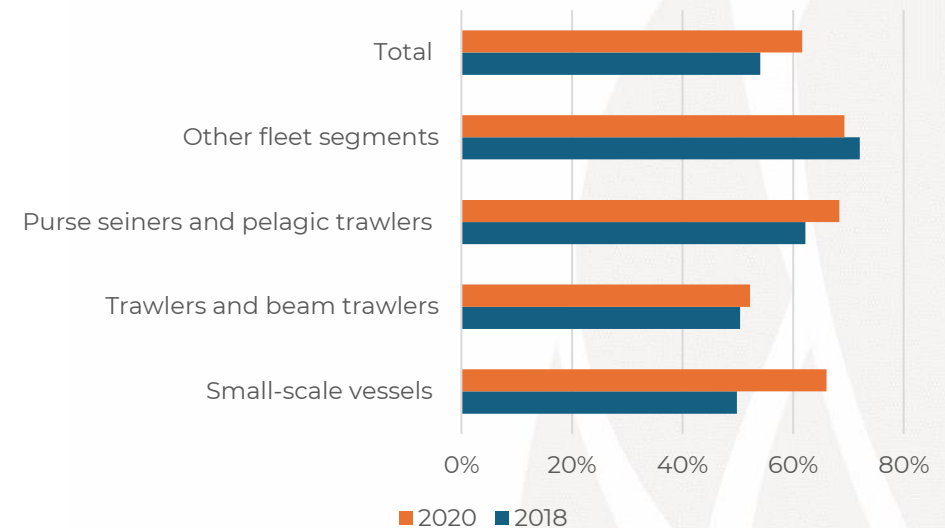
Trend in revenue from marine capture fisheries in **industrial fisheries** in Tunisia and Italy (GSA16), million euro

| | 2018 | 2020 | 2021 | Trend 21/18 (%) |
|---------------|------|------|------|-----------------|
| Tunisia | 182 | 187 | 196 | 8% |
| Italy (GSA16) | 144 | 83 | 95 | -34% |

Revenue from marine capture fisheries by fleet segment group



Gross value added by fleet segment group in 2018 and 2020



Revenue – Central Mediterranean

Operating cost structure (as a percentage of the total costs), trawlers, 2020

| | Personnel costs | Energy costs | Repair and maintenance costs | Commercial costs | Other variable costs | Fixed costs |
|------------------------|-----------------|--------------|------------------------------|------------------|----------------------|-------------|
| Mediterranean trawlers | 41% | 32% | 9% | 8% | 6% | 5% |
| Tunisia (>12 m) | 64% | 20% | 9% | 4% | 2% | 1% |
| Italy (>12 m, GSA16) | 44% | 32% | 6% | 6% | 6% | 6% |

Personnel costs



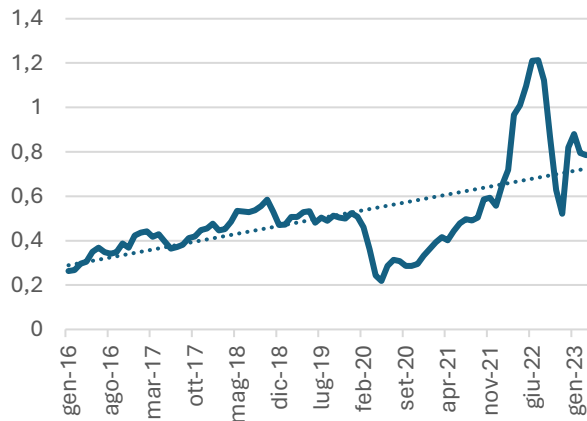
sharing system

Energy costs



average fuel price and subsidies

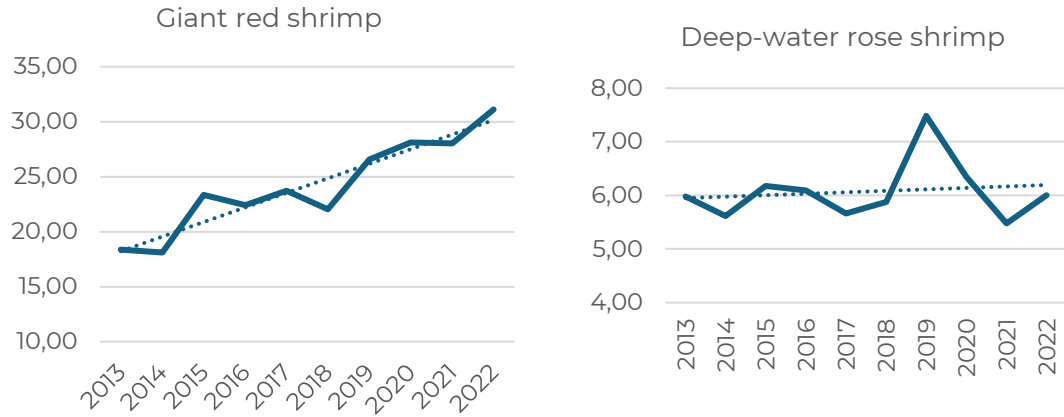
Trend in Fuel price, Italy



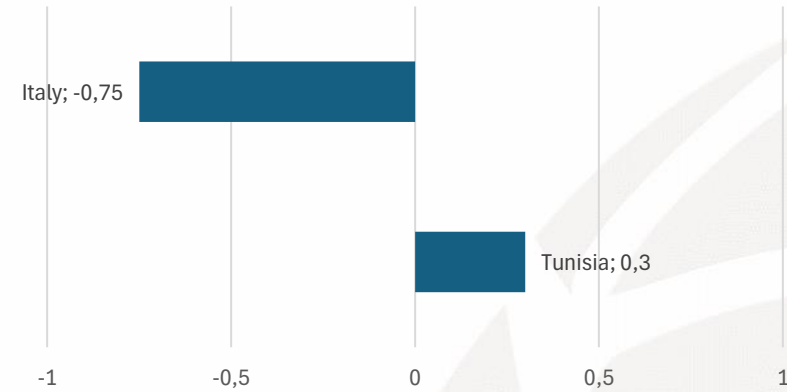
“In Tunisia, fuel subsidies are provided to bottom trawl vessels (45% and 35% of fuel price in North and South + East Tunisia, respectively). Subsidies encourage migrant vessels to leave coastal fishing grounds in South and East Tunisia and move towards northern areas to target deep-water rose shrimp and European hake. It follows that the management of fuel subsidies could be a further tool for national policy makers to balance fleet displacement and the exploitation of fishing grounds.” (Ben Arfa, 2022)

Prices and trade

Ex-vessel price of Giant red shrimp (ARS) and Deep-water rose shrimp (DPS) for trawlers operating in GSA16



Standardized trade balance in Italy and Tunisia, 2022

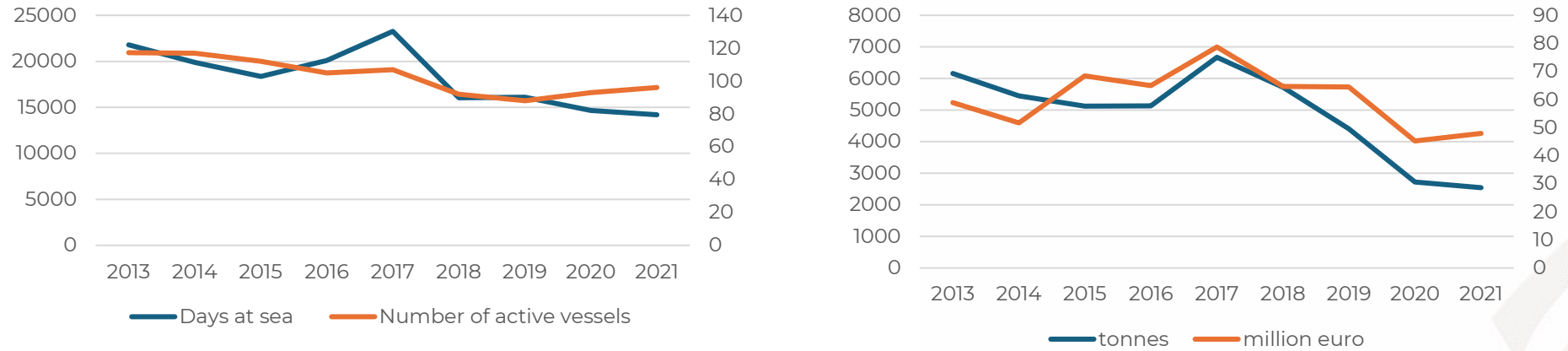


Exchange rate Euro - Tunisian dinar TND



Focus on Italian trawlers in GSA 16

Trend in effort and landing, demersal trawlers, GSA16



Main estimated economic variables for 2021 and 2022 compared to the base period (average 2017-2019). Demersal trawlers 24-40m, Italy

| | Average 2017-2019 | 2021 | 2022* |
|-------------------------------------|-------------------|---------|---------|
| Gross value added per vessel (euro) | 347,502 | 319,248 | 193,416 |
| Net profit per vessel (euro) | 77,059 | 59,517 | -16,535 |

*Provisional data

Focus on Italian trawlers in GSA 16 – Sustainability evaluation

Economic and social objectives, indicators and reference points used in the sustainability evaluation

| Dimension | Objectives | Specific objectives | Indicators |
|-----------|---|--|--|
| Economic | Fostering a profitable fishing industry | Maintaining the profitability of the fishing fleet | MON (Net Operating Margin) |
| | | Maintaining the sector's ability to sustain itself | CR/BER (Current Revenues/Break-even Revenues) |
| Social | Minimising the social impact resulting from the reduction of fishing effort | Maintenance of the well-being or standard of living of workers | VA/FTE (Value added/FTE) |
| | | Maintaining the level of employment | FTE (Number of Full-Time Equivalentents) |

Source: Decreto del Direttore Generale n. 26510 del 28 dicembre 2018. Modifica dei Piani di Gestione Nazionale relativi alle flotte di pesca per la cattura delle risorse demersali nell'ambito delle GSA 9, 10, 11, 16, 17, 18 e 19 8; Uila 2019

Indicators, reference points (RPs) and ranges for traffic light systems used in sustainability evaluation

| Dimension | Indicators | RPs | Range RPs/Traffic light system |
|-----------|------------|--|---|
| Economic | MON | 20 | MON < 10% (Red) |
| | | | 10% >= MON <= 20% (Yellow) |
| | CR/BER | 1 | MON > 20% (Green) |
| | | | CR/BER < 0,9 (Red) |
| Social | VA/FTE | baseline by fleet segment = average VA/FTE value 2017-2019 | 0,9 >= CR/BER <= 1 (Yellow) |
| | | | CR/BER > 1 (Green) |
| | | | VA/FTE < (baseline-20%) (Red) |
| | FTE | baseline by fleet segment = average FTE value 2017-2019 | (baseline-20%) <= VA/FTE <= baseline (Yellow) |
| | | | VA/FTE > baseline (Green) |
| | | | FTE < (baseline-20%) (Red) |
| | | | (baseline-20%) <= FTE <= baseline (Yellow) |
| | | | FTE > baseline (Green) |

Source: MiPaft, 2018; Uila 2019

Focus on Italian trawlers in GSA 16 - Effectiveness evaluation

Traffic light system effectiveness assessment for demersal trawl (DTS) segments in GSA16, 2020-2021

Demersal trawlers VL1218



Demersal trawlers VL1824



Demersal trawlers VL2440



Small scale fisheries VL0612



Conclusion

Main features of the industrial fleet operating in the area

- Adaptation to new regulations: spatial measures, quota regime, effort limitation
- High concentration of income in few species: giant red shrimps and deep rose shrimps
- Good profitability

UE

- Strong reduction in fishing effort
- Reduction in income and gross value added
- High quality of the landings
- High ex-vessel price (valorisation and traceability actions, labels,..)
- Investments in cold chain technologies and packaging

Non-EU

- Increase in fishing effort
- Increase in income and gross value added
- High ex-vessel price (demand from the international market and favorable exchange rates)
- Stable production costs
- Relatively young working population (in Tunisia, the majority with <45 years old)

Main concerns

UE

- The state of stocks and the lack of recent assessments
- Limitations on fishing opportunities (limits on days or volume of landings)
- Lack of generational turnover
- Difficulty in finding fishers
- Competition with non-UE fleets
- Competition with imported products
- High dependence on energy costs

Non-EU

- High dependence from international market
 - Fluctuation in exchange rate Euro - Tunisian dinar TND
-

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