Food and Agriculture Organization of the United Nations

General Fisheries Commission for the Mediterranean
Commission générale des pêches pour la Méditerranée

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PANEL 1

Supporting the sustainable development of small-scale fisheries in the Mediterranean and the Black Sea under the Blue Growth Perspective

Opening remarks

GFCM Secretariat

Food and Agriculture Organization of the United Nations

General Fisheries Commission for the Mediterranean
Commission générale des pêches pour la Méditerranée

Presentation of the background paper based on relevant case studies

Steve Cunningham & case study authors

Blue Growth: context and definitions

- Blue Growth in the GFCM:
  - Preamble to the Agreement for the Establishment of the GFCM:
    *"…convinced that the conservation and sustainable use of the living marine resources in the area of application and the protection of the marine ecosystems in which those resources occur plays **a major role in the context of blue growth and sustainable development**…"*

- DEFINITIONS:
  - Economist working definition of the Blue Economy:
    A sustainable ocean economy emerges when economic activity is in balance with the long-term capacity of ocean ecosystems to support this activity and remain resilient and healthy.
  - FAO Blue Growth initiative:
    sees the issue in terms of growth being sustainable and also that the distribution of growth benefits should be inclusive.
  - EU's Blue Growth Strategy:
    key indicators employment and gross value added within sector.

Blue Growth: principal questions

- Main question for Blue Growth:
  - What sectors of the Blue Economy have the biggest (within sector) growth potential and how can this potential be realized?
- KEY QUESTION for Blue Growth from a marine fisheries perspective:
  - How can fish resources be exploited so as to maximize their contribution to growth of the economy as a whole rather than to maximize growth of the sector itself?
- KEY ISSUE:

  Where other sectors mostly need support to encourage technical innovation, marine fishing requires fist and foremost research to support ***institutional innovation***

Case studies carried out:

A number of case studies were undertaken to provide background information on the economic condition of small-scale fishing in a variety of settings to inform the debate on the potential role of such fishing in a Blue Growth strategy.

National case studies

- Adriatic Coast, ITALY
- Alexandria Coast, EGYPT
- ALGERIA
- Antalya Coast, TURKEY
- Minorca Channel, SPAIN
- Northern TUNISIA
- Sicily, ITALY

Subregional case studies

- AdriaMed (Adriatic)
- CopeMed (Western Mediterranean)
- EastMed (Eastern Mediterranean)
- MedSudMed (Central Mediterranean)

Key questions addressed through the case studies

- Small-scale fisheries in the national context:
  - How is the term “small-scale fisheries” defined?
  - Has the national fisheries sector been assigned a role within the context of Blue Growth?
  - Does national fishery policy highlight a specific role or objectives for SSF?
  - What are considered to be the main benefits in general from fish resource exploitation? For SSF?
  - What particular measures (management, support or other) apply in the case of small-scale fishing?
  - Information also sought on the key parameters such as employment and production
- Small-scale fisheries in the context of the specific case study:
  - Volume and value of landings by species
  - Fishing activity
  - Fish harvesting rights
  - Post-harvest activities
- Subregional experiences studies of small-scale fisheries:
  - FAO Regional Projects

Adriatic Coast, ITALY

Adriatic Sea Snail Fishery Project

Dr. Emanuele Troli
Blue Marine Service Soc Coop

Adriatic Sea Snail Fishery Project

- Location:

  Central Adriatic Sea - City of Ortona, Abruzzo Region, Italy

- Study objectives:

  Restock the Adriatic sea snail in areas where this resource is greatly diminished.

  Specifically, the study installed special submarine structures to collect sea snail eggs, in areas where the resource is still abundant, and move them to depleted areas.

Adriatic Sea Snail Fishery Project

- Main outcomes:
  - **Project demonstrated that restocking can be done effectively and cost efficiently**
  - STRENGTHS:
    - Effective and simple techniques
    - Minimum effort for the fishers
    - No negative impact on seabed or other species
  - OPPORTUNITIES:
    - Activities promoting fisher involvement
    - Potential to increase product value
    - Positive impact on the reproduction of other species (cuttlefish)
- Main challenges:
  - **Lack of management plan for SSF resources**
  - WEAKNESSES:
    - Lack of interest by the Institutions
    - Difficulty of obtaining funds for large-scale actions
  - THREATS:
    - Illegal, unreported and unregulated (IUU) fishing
    - Lack of controls for compliance with the rules
    - Critical situation of the marine resources
    - Lack of uniformity of the rules
    - Fishing allowed during the reproduction period

Alexandria Coast, EGYPT

Small Scale Fisheries along the coastal area off Alexandria from Montazah to Al-Anfoushy

Alaa Elhaweet & Alaa Elfar
Arab Academy for Science, Technology & Maritime Transport

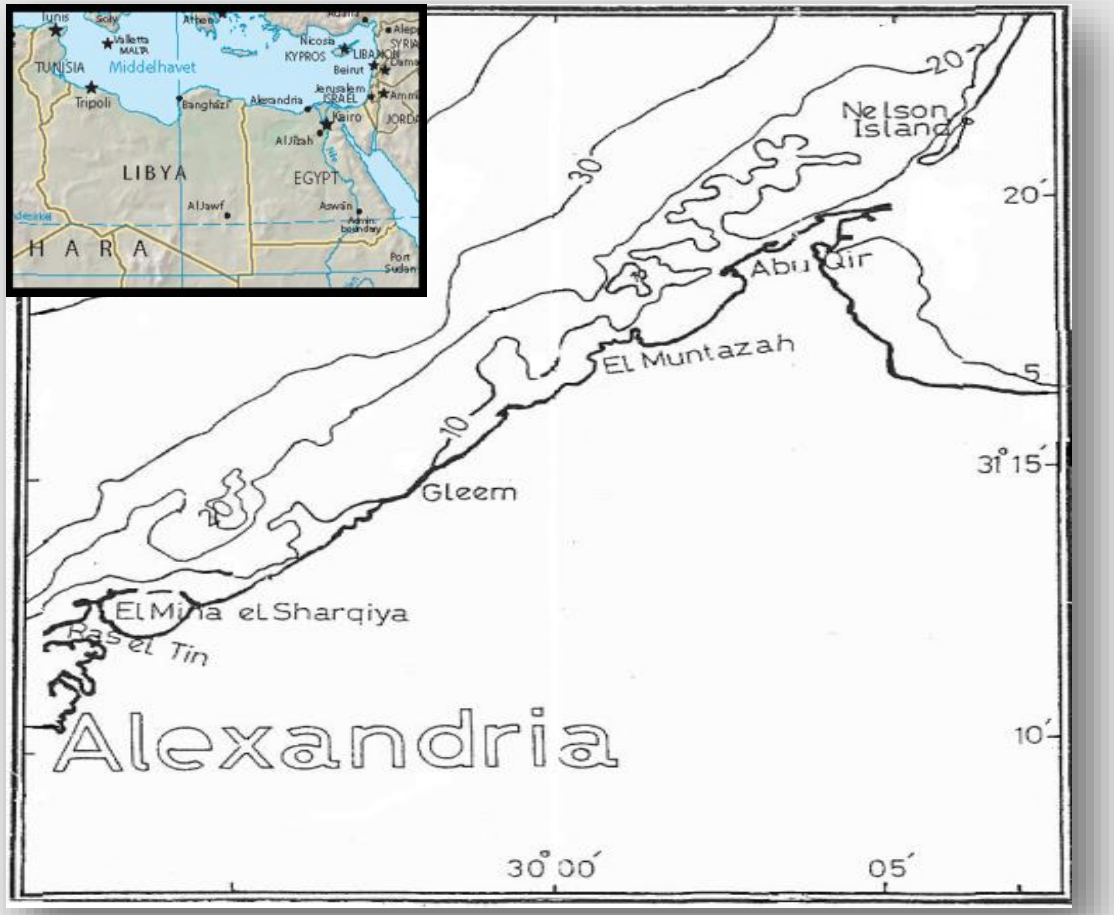
Small Scale Fisheries along the coastal area off Alexandria from Montazah to Al-Anfoushy

- Location:

  Eastern Mediterranean

  Egyptian coast from Montazah to Al-Anfoushy

- Principal characteristics:
  - 263 vessels landing about 10k tonnes
  - Limited number of licences are issued and an annual one month closed season is in effect (but measures not effectively applied)
  - Main gears: hook & line, trammel nets, gill nets.
  - Landings are marketed directly to the consumer or fish-shop while the majority sales through fish market or auction



Small Scale Fisheries along the coastal area off Alexandria from Montazah to Al-Anfoushy

- Main outcomes:
  - **Incomes remain high compared to the national average wage**
  - OPPORTUNITIES:
    - Establishment of SSF association for better resource management
    - Market demand for higher value “luxury” species
    - Wage earned by the crew is considered moderate compared to other fleet segments
    - Attraction of part time jobs.
- Main challenges:
  - **Main threats from other coastal activities especially recreational fishing, tourism and marine construction**
  - THREATS:
    - Recreational fishing
    - Tourism, particularly in the summer months
    - Construction of marinas along the coastal area
    - Increased pollution with destructive results for the fish habitat and fishing grounds

ALGERIA

La Stratégie Nationale de Développement de la Pêche et de l'Aquaculture: Quelle démarche pour un développement durable de la pêche artisanale en Algérie?

M. Saïd Chaouki CHAKOUR
Enseignant Chercheur
République algérienne démocratique et populaire
Ministère de l'Agriculture, du Développement Rural et de la Pêche

La Stratégie Nationale de Développement de la Pêche et de l'Aquaculture: Quelle démarche pour un développement durable de la pêche artisanale en Algérie?

- Location:
  - Algerian coastal zones
- Principal characteristics:
  - Employment: 20 000 direct employment, 60 000 indirect employment
  - Food security: main source of animal proteins for the majority of the coastal population
  - Typically a family activity
  - High potential for value chain development within the sector
  - Small-scale fishing is seen as both a target and a tool for Blue Growth.

The principal axes of the « Plan Aqua-pêche 2020 »

The Aqua-pêche plan is developed around 4 axes:

Axis 1 :

« Promotion de la filière pêche et de la filière aquaculture orientées vers l'intégration et la durabilité et favorisant la création d'emplois. »

Axis 2 :

« Amélioration de l'approvisionnement du marché domestique avec des produits diversifiés de meilleure qualité et plus accessibles pour le consommateur Mise en place de plans d'aménagement et de gestion des pêcheries »

Axis 3 :

« Mise en place de dispositifs d'appui et de soutien adaptés au développement des filières de la pêche et de l'aquaculture »

Axis 4 :

« Consolidation de la gouvernance et renforcement de la gestion participative et intégration du secteur au développement des capacités de croissance de l'économie productive. »

La Stratégie Nationale de Développement de la Pêche et de l'Aquaculture: Quelle démarche pour un développement durable de la pêche artisanale en Algérie?

- "Plan Aqua-pêche 2020" – the main instrument for promoting Blue Growth within SSF in Algeria:
  - Ambitious overarching plan for the sustainable development of fishing and aquaculture
  - Aims to double fish production.
  - An important element is to organise small-scale fishing through the creation of a series of integrated landing points that will be managed by the fishers themselves.
  - Three already completed
  - 14 management plans will be developed at the coastal wilaya level.
  - Early results already visible in terms of integration of women ino the value chain, fisher organisation, increased incomes, social security, co-management and training

Antalya Coast, TURKEY

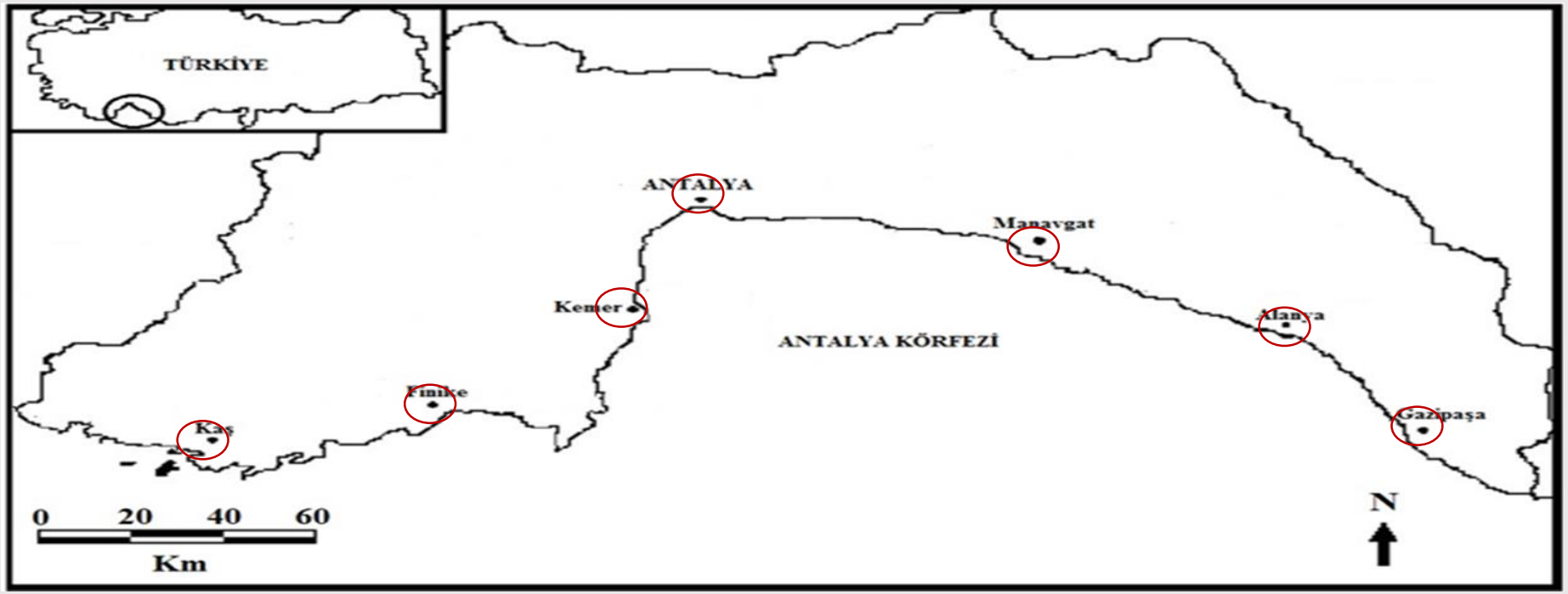
A Socio-Economic Analysis of the small-scale fishery in Antalya Coast, Turkey

Yilmaz Emre[1,3], Dario Pinello[2], Mark Dimech[2] & Filiz Kiştin[1]

[1]Mediterranean Research production and Training Institute, Antalya, Turkey
[2] Food and Agriculture Organisation, EastMed Project, Rome, Italy
[3] Akdeniz University,Faculty of Sciences,Department of Biology, Antalya, Turkey

A Socio-Economic Analysis of the small-scale fishery in Antalya Coast, Turkey

- Location:
  - The study area extends along Antalya Coast from Kaş in the west to Gazipaşa in the east
  - There are 7 fishing harbours along the coast.
  - GFCM GSA 24 Geographical Sub-area of the GFCM



A Socio-Economic Analysis of the small-scale fishery in Antalya Coast, Turkey

- Principal characteristics:
  - Small-scale fishing makes up almost the entire fleet fishing in this area (99.2%)
  - Vessels are generally owner operator
  - Most commonly used gear is the longline.
  - Invasive fish species, especially puffer fish, are putting pressure on local native species and threatening their stocks.
  - Fishing income is seasonal.
  - A small proportion of fishers also receive certain amount as pension but many have no social security
- OPPORTUNITIES:
  - Fisheries cooperatives exist and membership rate is around 60%
  - 3 special environmental protection areas where fishing is banned.
  - Some seasonal restrictions on small-scale fishing
- CHALLENGES:
  - Fishing cooperative members are not very satisfied with the cooperative services
  - Economic data difficult to obtain other than by survey
  - Fishing restrictions not well implemented or enforced.

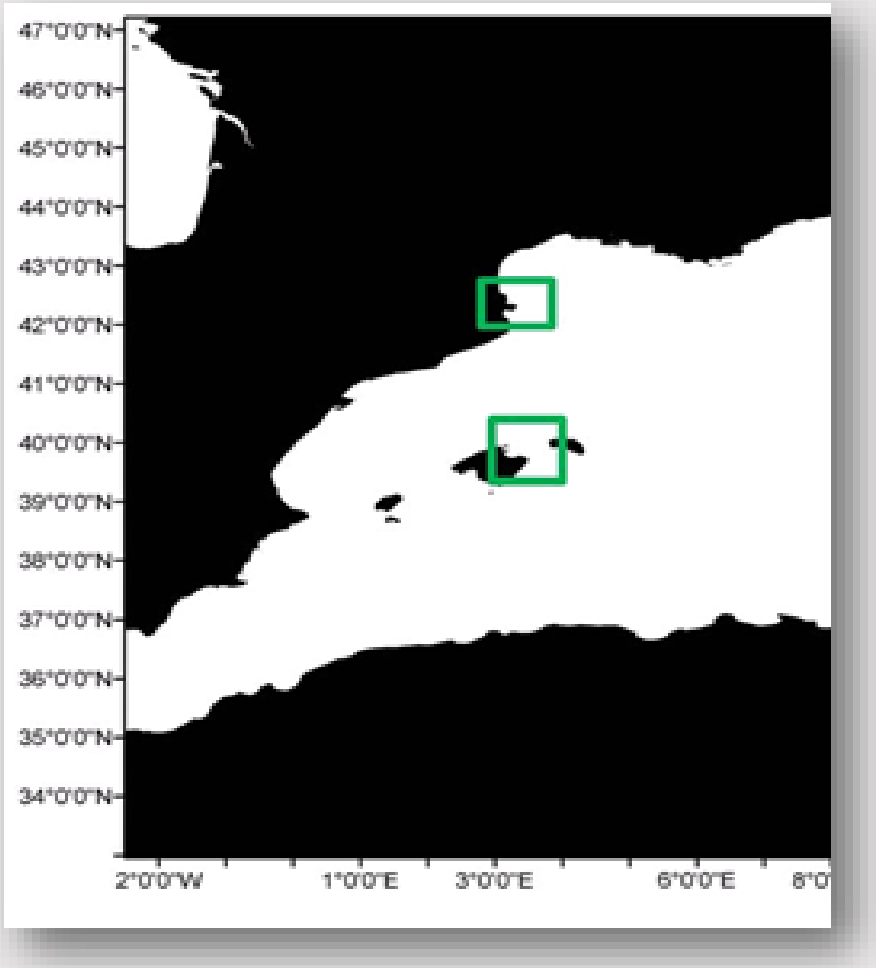
Minorca Channel, SPAIN

Artisanal fisheries in the Minorca Channel

David Díaz & Sandra Mallol
Institute of Marine Science (CSIC) & Spanish Institute of Oceanography (IEO)

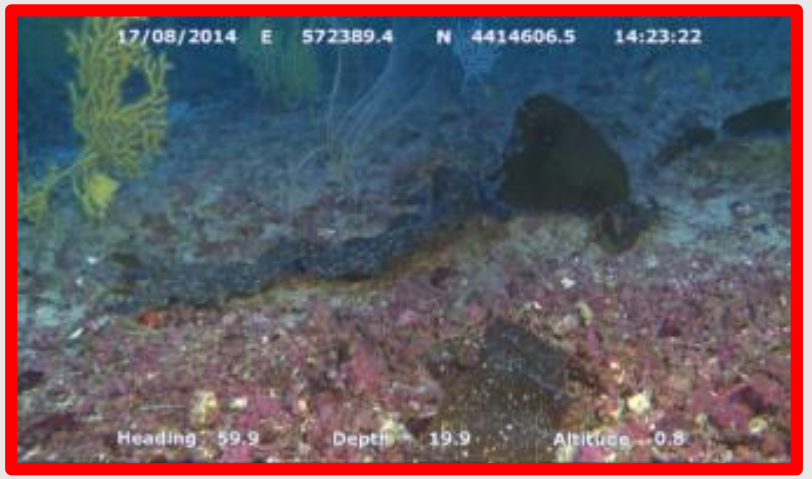
Artisanal fisheries in the Minorca Channel

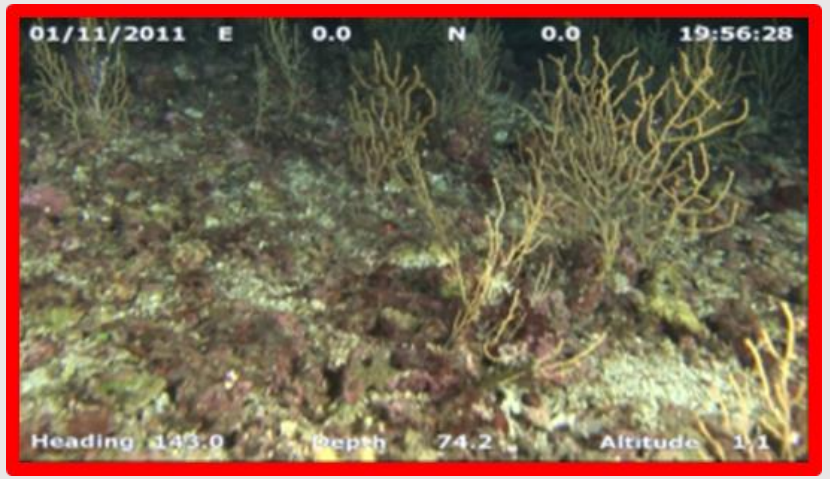
- Location:
  - SPAIN: Minorca Channel and Cap de Creus
  - Part of the Ecosafimed project: other studies also in Italy and Tunisia
- Study objectives:
  - To regulate small-scale fishing to reduce benthic impact
- Main policies:
  - Spiny Lobsters season open 5 month (IV-VIII)
  - Maximum 3 fishermen per boat
  - Trammel net maximum 48 hours of soak time
  - Fishing activity not allowed on weekends
  - MLS for most of the commercial species



Artisanal fisheries in the Minorca Channel

- Main outcomes:
  - Demersal fishing activities may impact the benthic communities (depends on fishing pressure, the characteristics of the gears and various environmental variables)
  - SSF is compatible with the conservation of the benthic communities BUT improvement is needed.
- Recommendations:
  - Integrate fishermen knowledge with scientific studies and monitoring
  - Return benthic discards to water within 30 minutes and to the same location
  - Avoid fishing in areas with fragile communities
  - Continue establishing MPAs in where valuable ecosystems identified
  - Promote the use of selective gears
  - Reduce fishing impact and effort
  - Regularly mend fishing nets
  - Promote best fishing practices





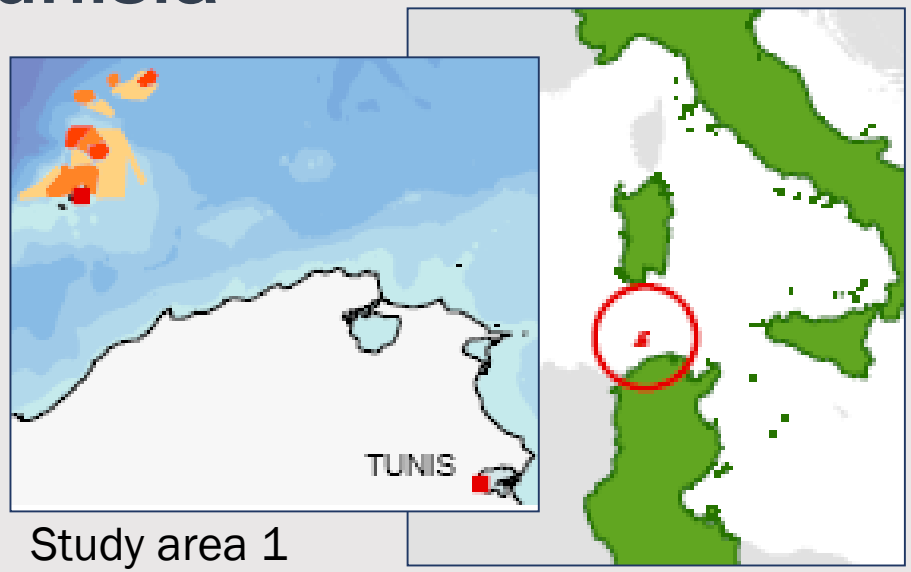
Northern TUNISIA

Characterization of artisanal fisheries targeting European spiny lobster in La Galite archipelago and Esquerquis Benches: Métier identification and potential impact on benthic communities

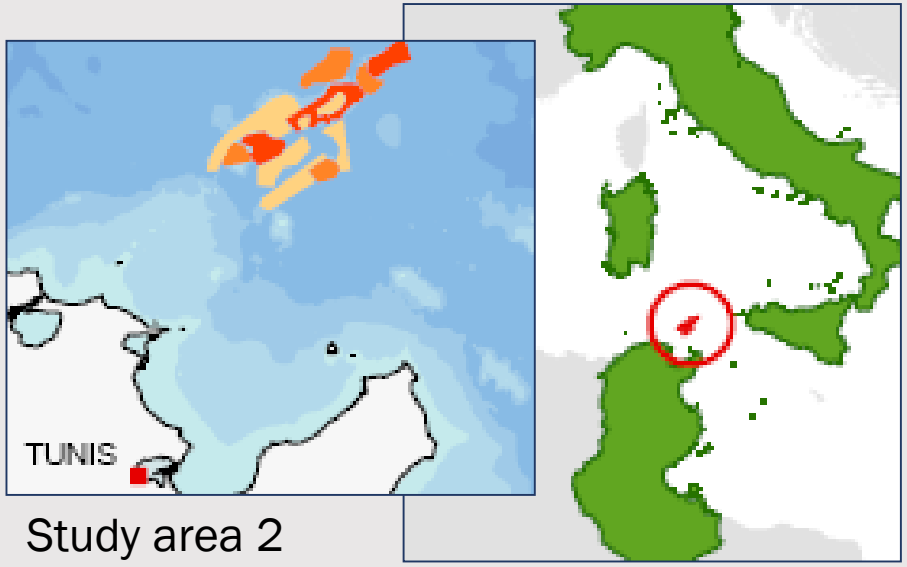
Ben Salem Skander, Gaamour Adel, Ben Abdallah Lotfi, Benmassaoued Rimel, Cherif Mourad, Djabou Hanem, Jaziri Sabri, Khemiri Sana, Koched Wael, Missaoui Hechmi, Ben Amor Mohamed Mourad & Rjeibi Okbi
National Institute of Marine Sciences and Technologies (INSTM)

Characterization of artisanal fisheries targeting European spiny lobster in Northern Tunisia

- Location:
  - Study area 1: La Galite Archipelago (14 métiers)
    - Trammel net is mainly used here to target spiny lobster (Palinurus elephas) in the spring and summer.
  - Study area 2: Esquerquis benches (10 métiers)
    - Most important métier is the gillnet targeting Bonito (Sarda sarda) from March to June and October to December
  - Part of the Ecosafimed project
- Study objectives:
  - Main aim is to assess impact of spiny-lobster fishery (small-scale fishing) on benthic communities



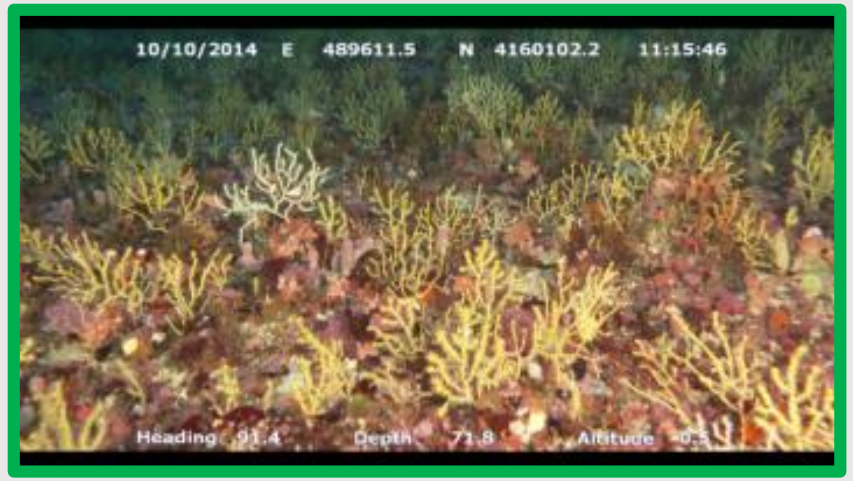
Study area 1



Study area 2

Characterization of artisanal fisheries targeting European spiny lobster in Northern Tunisia

- Survey results:
  - 3 gears studied:
    - Lobster and fish trammel nets: possible long term impacts.
      - The majority of discarded species are released alive.
    - Longlines: possible smaller impact on benthic communities
- Main outcomes:
  - Compared to other methods, small-scale fishing does not seriously impact the benthic communities.
  - SSF should be promoted in the Mediterranean
    - These practices seem to be the best way to exploit the marine resources in a sustainable manner.
- Recommendations:
  - Same recommendations as the Minorca Channel Ecosafimed study



Sicily, ITALY

Gulf of Castellammare Fishery Reserve

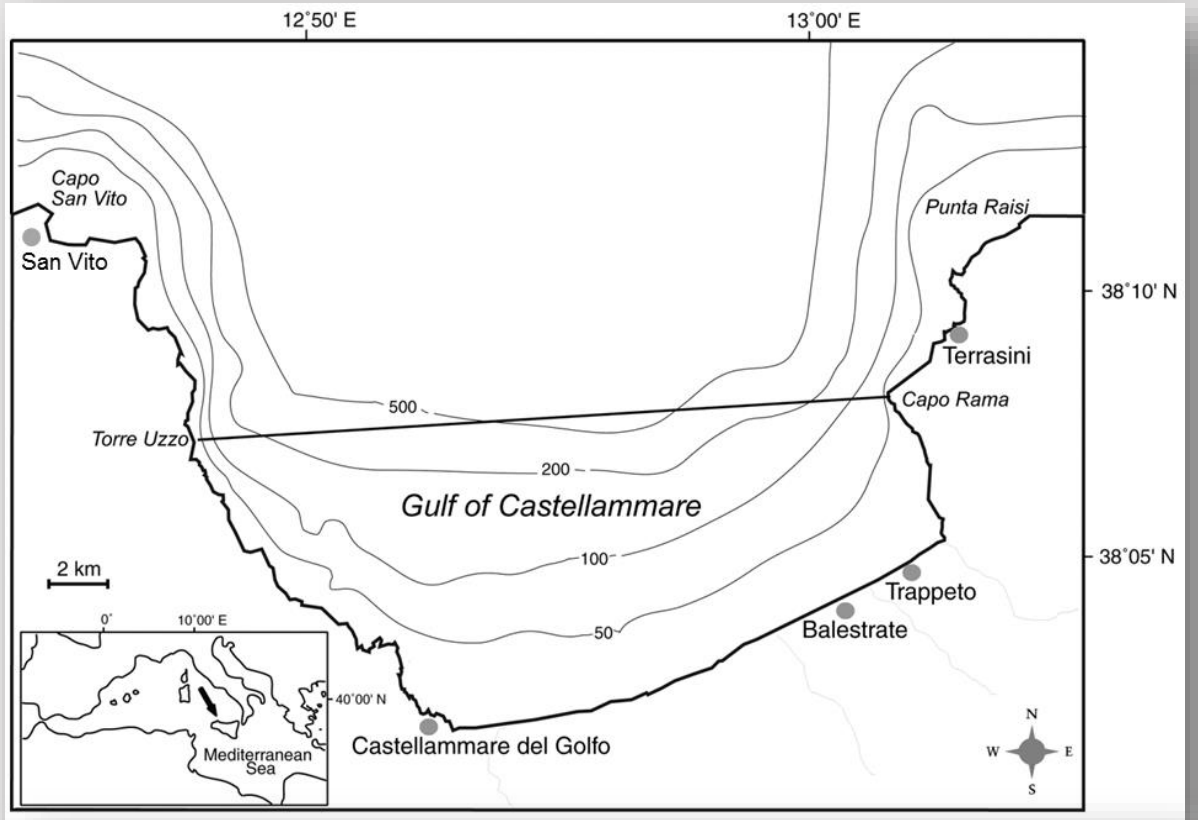
Tomas Vega Fernandez & Arturo Zenone
CNR-IAMC

Gulf of Castellammare Fishery Reserve

- Location:

  Northern coast of Sicily: 7 municipalities, 5 harbours (≈ 400 km^2)

- Principal characteristics:
  - 95 vessels (80% polyvalent SS vessels)
  - Trawl-fishing ban: L.R. 25/1990
  - Exclusion area ≈ 200 km2
  - Total revenues of about 3M €/yr
  - About 130 fishermen employed
- Policy framework:
  - National triennial program for fisheries and aquaculture 2013-2015 reflects the revised CFP
  - ‘Social’ objectives and indicators are of economic nature
  - environmental objectives and indicators are lacking
  - SSF management is left to LMPs (bottom-up approach)



Gulf of Castellammare Fishery Reserve

- Main findings:
  - Management of the fishing activity (exploitation pattern) rather than fishes (resources)
  - Stocks rebuilt in relatively few years
  - SSF benefits from expanded fishing grounds after the exclusion of trawling
  - SSF employment maintained during 20yrs, despite national trend being negative
  - Top-down management approach, failed by 2005 due to external drivers
  - Perception of illegality and environmental degradation as problems
  - Bottom-up initiatives as opportunities for legitimating management

Subregional study: Adriatic

Seasonality of set gears and eco-ethology of the target species: a comparative approach in the Adriatic Sea

Fabio Grati, Admir Aladzuz, Ernesto Azzurro, Luca Bolognini, Pierluigi Carbonara, Mimoza Çobani, Gjuke Deda, Filippo Domenichetti, Branko Dragičević, Jakov Dulčić, Mirko Đurovic, Zdravko Ikica, Aleksandar Joksimovic, Sanja Matić-Skoko, Giuseppe Lembo, Bojan Marčeta, Alberto Santojanni, Maria Teresa Spedicato, Nika Stagličić, Nedo Vrgoć, Nijaz Zerem, Enrico Arneri, Luca Ceriola, Nicoletta Milone

Seasonality of set gears and eco-ethology of the target species: a comparative approach in the Adriatic Sea

Study area and characteristics:

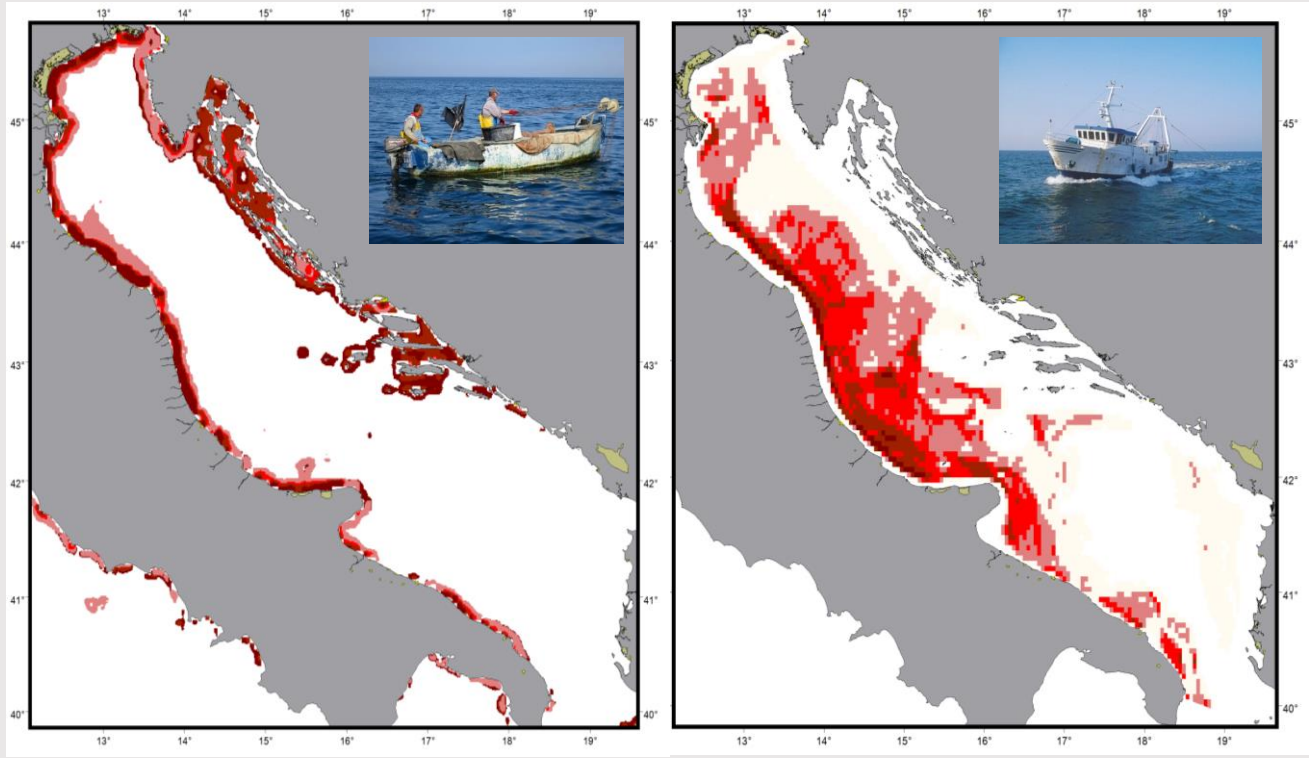
- Adriatic Sea
- Study focused on set gears
- Sensitive & priority habitats
- Spatial conflicts (SSF and trawling).

Main Results:

- Demography of catches – set gear has different impact on stocks
- Fishing effort and landings concentrated on spawning & recruitment periods
- Set gears generally have relatively good selectivity but in some cases not
  - Example of gillnets and trammel nets in two Italian areas (only about 20% in weight = target species)
- High landings associated with lower prices

SSF fishing grounds

Trawlers' fishing grounds (Italian fleet)



Seasonality of set gears and eco-ethology of the target species: a comparative approach in the Adriatic Sea

Policy Context:

- **EU countries (Italy, Slovenia, Croatia)**
  - Reformed CFP – includes 3 main actions supporting SSF:
    - Extension of the right for member states to restrict fishing within 12 nautical miles;
    - Exclusion of SSF from transferable fishing concessions schemes
    - Targeted financial support measures (Fisheries Fund)
- **Albania**
  - no structural or specific policy to support SSF
- **Montenegro**
  - defines “small” scale commercial fishing as vessels <12m LoA with specific tools and equipment.
  - No structural measures in place and no funding mechanisms.
  - National co-financing measures: aim to increase the efficiency of SSF
  - Technical measures under consideration to safeguard SSF (e.g. restriction of trawling activities to areas outside the 3 NM zone or 50m depth)

Seasonality of set gears and eco-ethology of the target species: a comparative approach in the Adriatic Sea

Main Challenges:

- Lack of appropriate data and complete statistics is one of the main constraints for most of the Adriatic coastal countries, undervaluing the real role of SSFs in a Blue Growth process.
- SSFs need efficient spatial planning due to impacts by other human activities in coastal area and onshore

Main Opportunities:

- SSF provides significant contribution to the total marine catch with focus on local markets, giving better prices (short fish supply chain)
- Price, quality, convenience and safety are principal determinants of consumer demand on fish and the seafood offered by SSF matches all these requirements.
- The rising awareness of the improved quality of seafood landed by SSF, that is resulting in increasing domestic consumption and increasing number of foreign tourists each season in this basin, are some of the important positive indicators for further sector growth.

Subregional study: Western Mediterranean

Involvement of fishers on standardized data collection in Small Scale Fisheries and development of complementary activities to improve community livelihoods.

COPEMED II

Sustainable small scale fisheries in Morocco and Tunisia

Study location:

- Data collection by fishers in: Dikky (Morocco), Ghannouch (Tunisia) and El Akarit (Tunisia) following protocol designed by project

Study characteristics:

- System adapted to scale of each location, either using a fisher or some wholesalers
- Developed an easily replicable system that showed how monitoring by community members can be a cost-effective way to generate reliable data on multiple indicators and for the assessment of stocks.
- Community involvement helps to develop the capacity of professionals, strengthen their organization and their participation in co-management.

Ghannouch – SSF (nets)

El Akarit – clam collection

Dikky – SSF (hooks)

Sustainable small scale fisheries in Morocco and Tunisia

Salient outcomes:

- Activity diversification – focused mostly on non-fishing activities for women (e.g. traditional tapestry in Akarit) and also bee-keeping as an alternative for fishers
  - The involvement of women contributed to develop new capacities “out of home”, improving their visibility and self-confidence, and providing economic independence.
  - New commercial products produced by women helped improve the family incomes
- Fisheries monitoring is often lacking for SSF due to their complexity and limited human/financial resources
- Monitoring implemented by community members can be reliable and can have a low human and financial cost. It is also easily replicable.
- Community involvement helps to develop the capacity of professionals, strengthen their organization and their participation in co-management.

Ghannouch – SSF (nets)

El Akarit – clam collection

Dikky – SSF (hooks)

Subregional study: Eastern Mediterranean

A Subregional Analysis of the socio-economic situation of Small Scale Fisheries in the Eastern Mediterranean

Dario Pinello, Mark Dimech, Marcelo Vasconcellos
EastMed project, Food and Agriculture Organisation of the United Nations (FAO)
Viale delle Terme di Caracalla, 00153 Rome, Italy

A Subregional analysis of the socioeconomic situation in the Eastern Mediterranean fisheries

Study area:

Cyprus, Egypt, Greece, Gaza Strip and West bank, Italy (GSA 19), Lebanon, and Turkey

Characteristics of the small-scale fleet in the Eastern Mediterranean:

- Value of landings: US$680 million (42% of total)
- Volume of landings: 120 million tonnes (21% of total)
- Days at sea: 2,509 million (41% of total)
- Employment on board: 38,800 (FTE) (48% of total)
- Fleet - number of vessels: 34,500 active (85% of total)

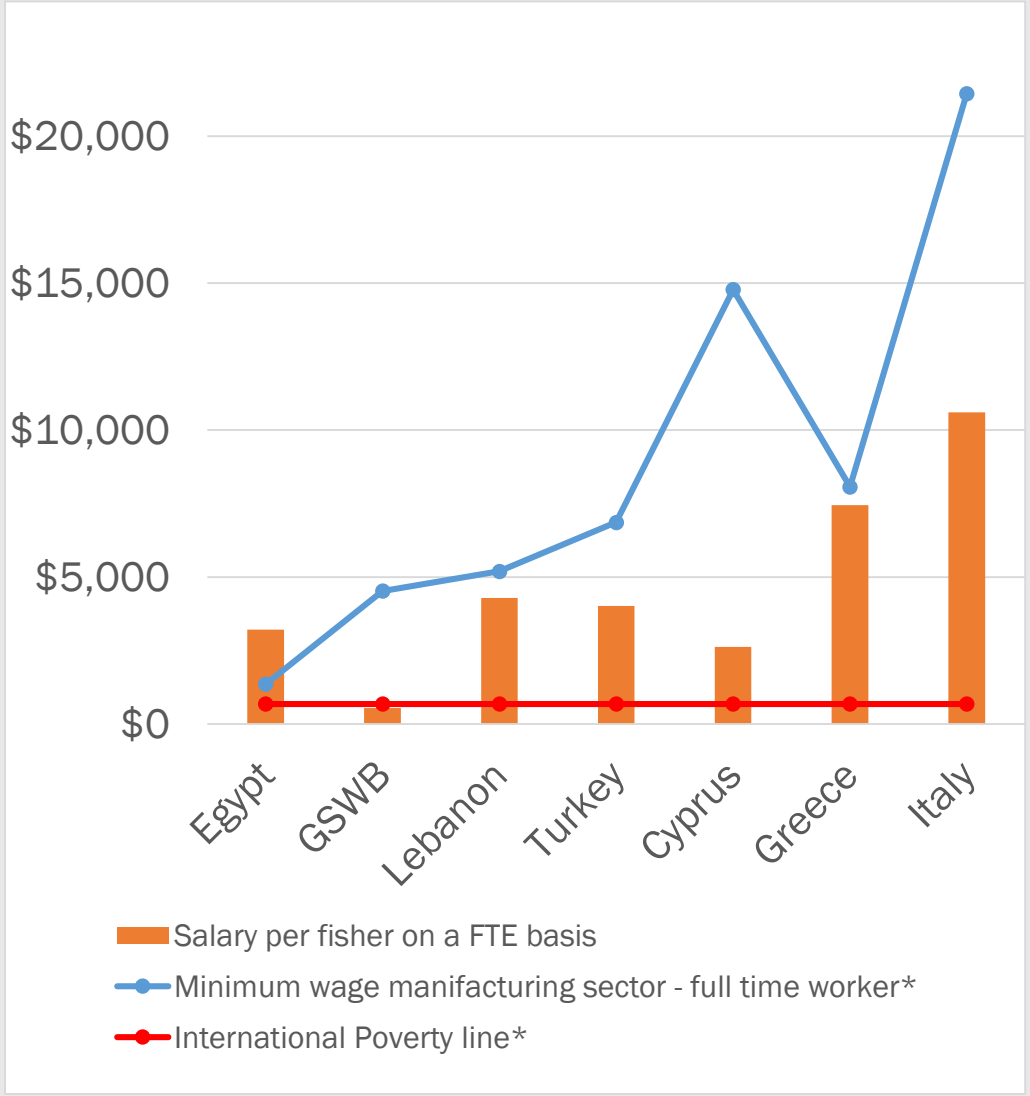
A Subregional analysis of the socioeconomic situation in the Eastern Mediterranean fisheries

Main outcomes:

- SSF produces a substantial amount of the fish in the Eastern Mediterranean countries
- Value added 0.05% of the total GDP generated in the region
  - Contribution of other relevant industries not included (i.e. maintenance, equipment, shipbuilding, cultural value, tourism)
- **The questions is NOT what GDP is gained, BUT what would be lost in the absence of SSF**

Fishing income:

- The fishery sector employs less than 1% of the labour force
  - Fishery sector is, however, an important source of income and employment in coastal communities
  - Fish is a highly valuable source of animal protein
- Only in Egypt does the fisheries sector provide a higher value added per worker than the agricultural sector



Subregional study: Central Mediterranean

Artisanal fishery communities in the central Mediterranean: three managed case studies in the blue growth perspective

Sergio Vitale[1], Marianne Aquilina[2], Nader Ben Hadj Hamida[3], Scander Ben Salem[3], Mohamed Nejmeddine Bradai[3], Fabio Falsone[1], Othman Jarboui[3], Reno Micallef[2], Danilo Scannella[1]

[1] CNR, Mazara del Vallo, Italy; [2] MSDEC, Malta; [3] INSTM, Tunisia

Seasonality of set gears and eco-ethology of the target species: a comparative approach in the Adriatic Sea

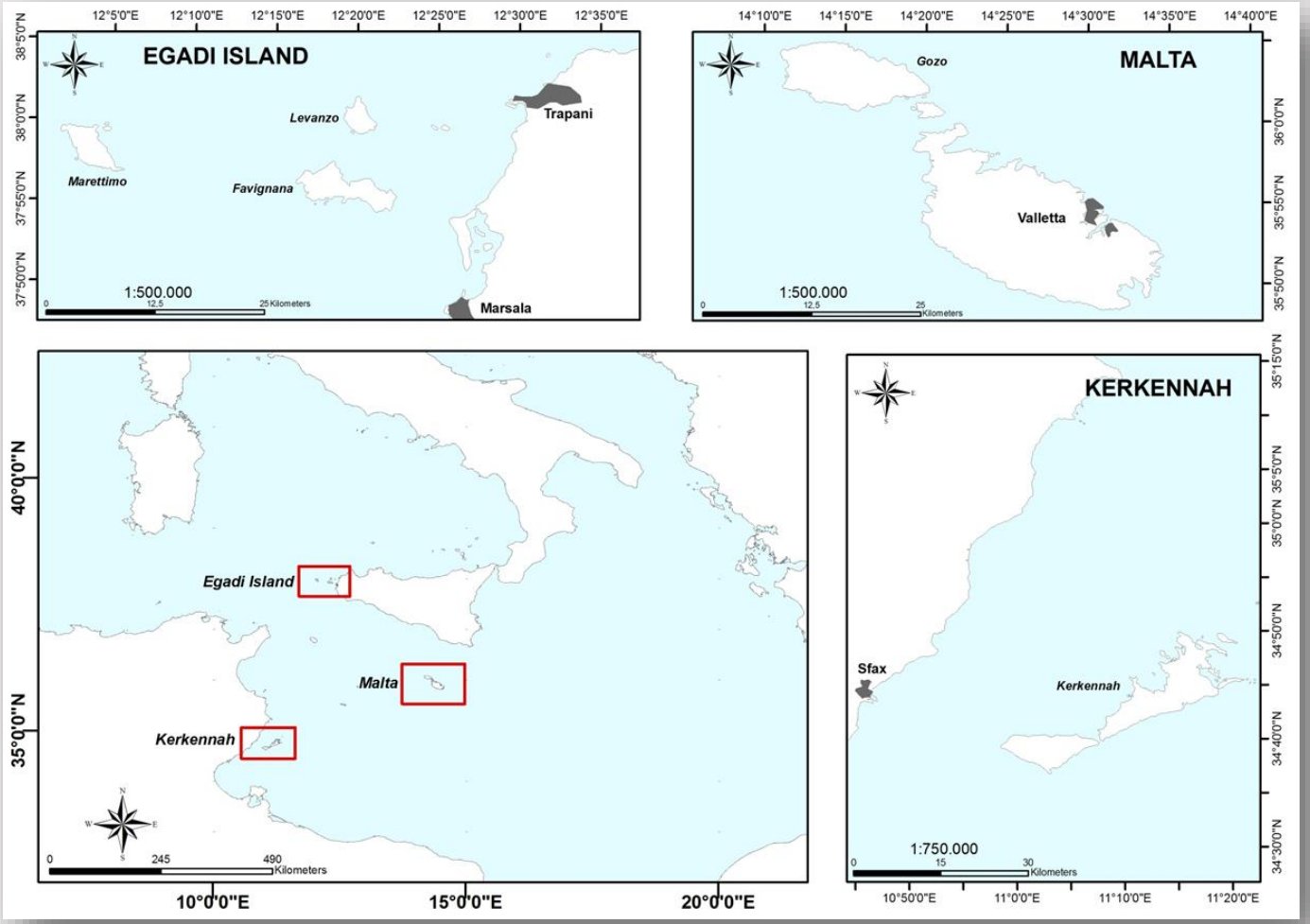
Study area:

- Central Mediterranean Sea:
  - **Malta**
  - **Kerkennah Islands** (located off the Gulf of Gabès, Tunisia)
  - **Egadi Islands** (part of the largest marine protected area (MPA) in European seas)

Management measures:

- Management measures in place mainly concern landing rules, biological aspects, or spatial-temporal restrictions of fishing activity

  (i.e. licensing, minimum landing sizes, restricted areas, closed seasons, etc.)



Seasonality of set gears and eco-ethology of the target species: a comparative approach in the Adriatic Sea

Concluding remarks:

- The management system appears to be rather top-down, *however*, the project concludes that:
  - “The decision-making process in all the investigated areas is characterized by a system that can transparently address trade-offs among the management objectives of the different groups of stakeholders and/or local communities”
- In the Egadi, Kerkennah, Maltese islands both, managers and fishers, acknowledged that:

  A participatory approach is the only possible approach to ensure the conservation of healthy of the seas and the socio-economic well-being of coastal communities

- The Egadi, Kerkennah, Maltese islands areas can be considered advanced laboratories:
  - the co-existence of many institutional entities and legislative rules, together with proper knowledge of the marine ecosystem and fishing activity represent the baseline for the implementation of management plans under the blue growth prospective

Building on the case studies: how can small-scale fisheries contribute to Blue Growth?

Fish resources and economic growth: an economic analysis

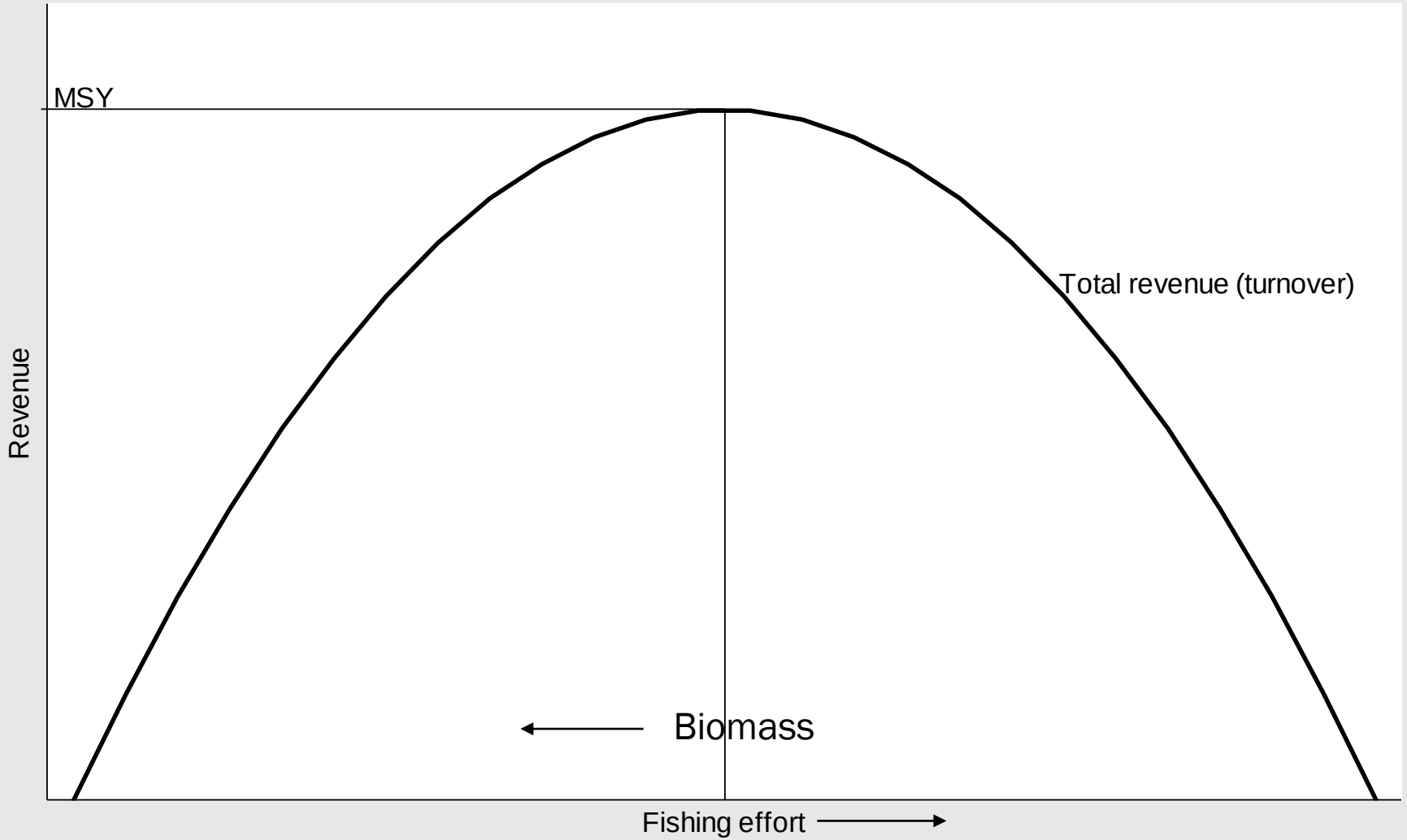
- How do fish resources relate to GDP, therefore contributing to economic growth?

  GDP is problematic in the case of fishing:

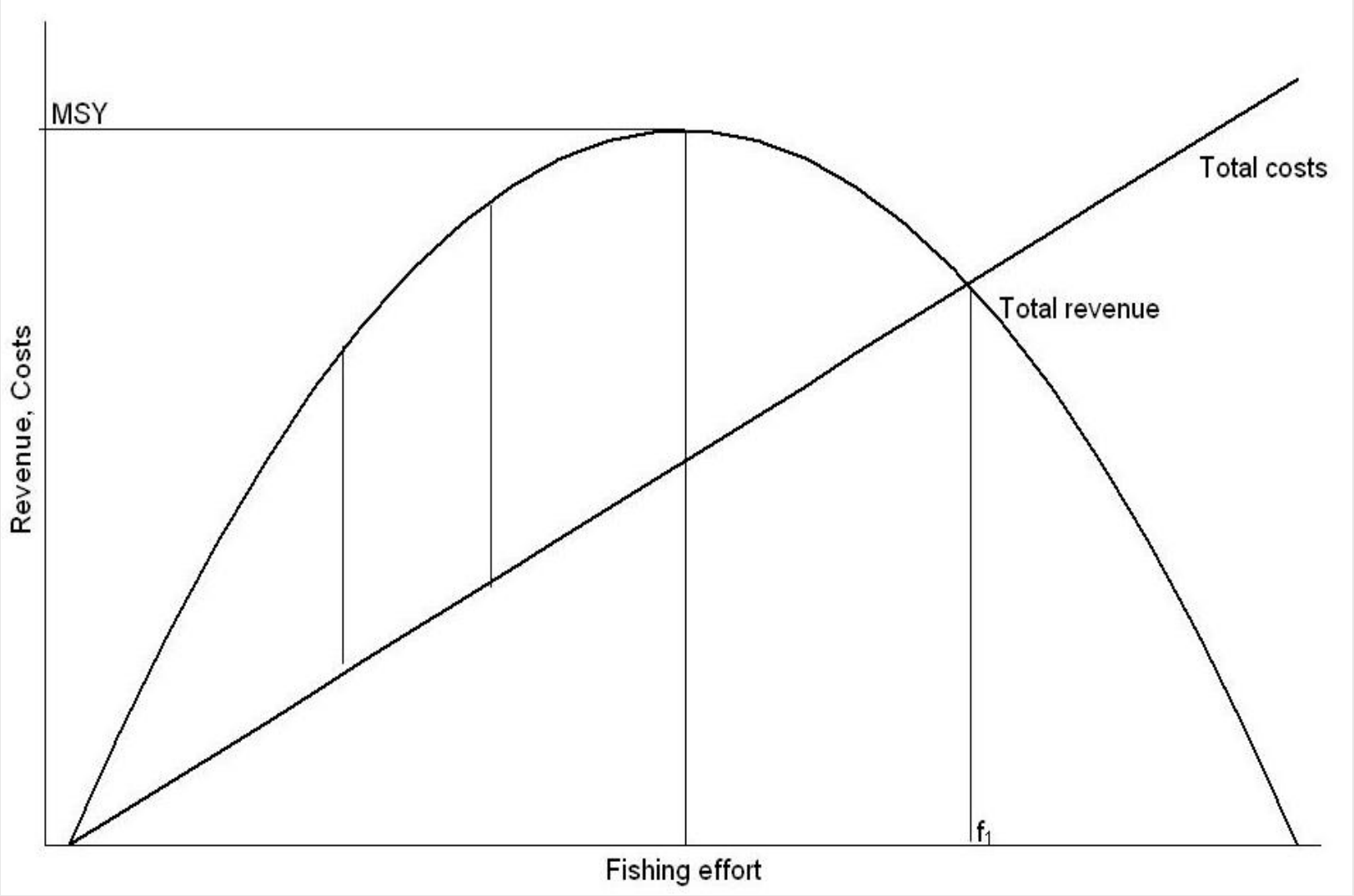
  1. Many fish resources are currently overexploited economically and biologically, so they are not producing their potential GDP.

  2. It is not just the amount of GDP contribution that is important in a Blue Growth context, but also the structure or the components of GDP.

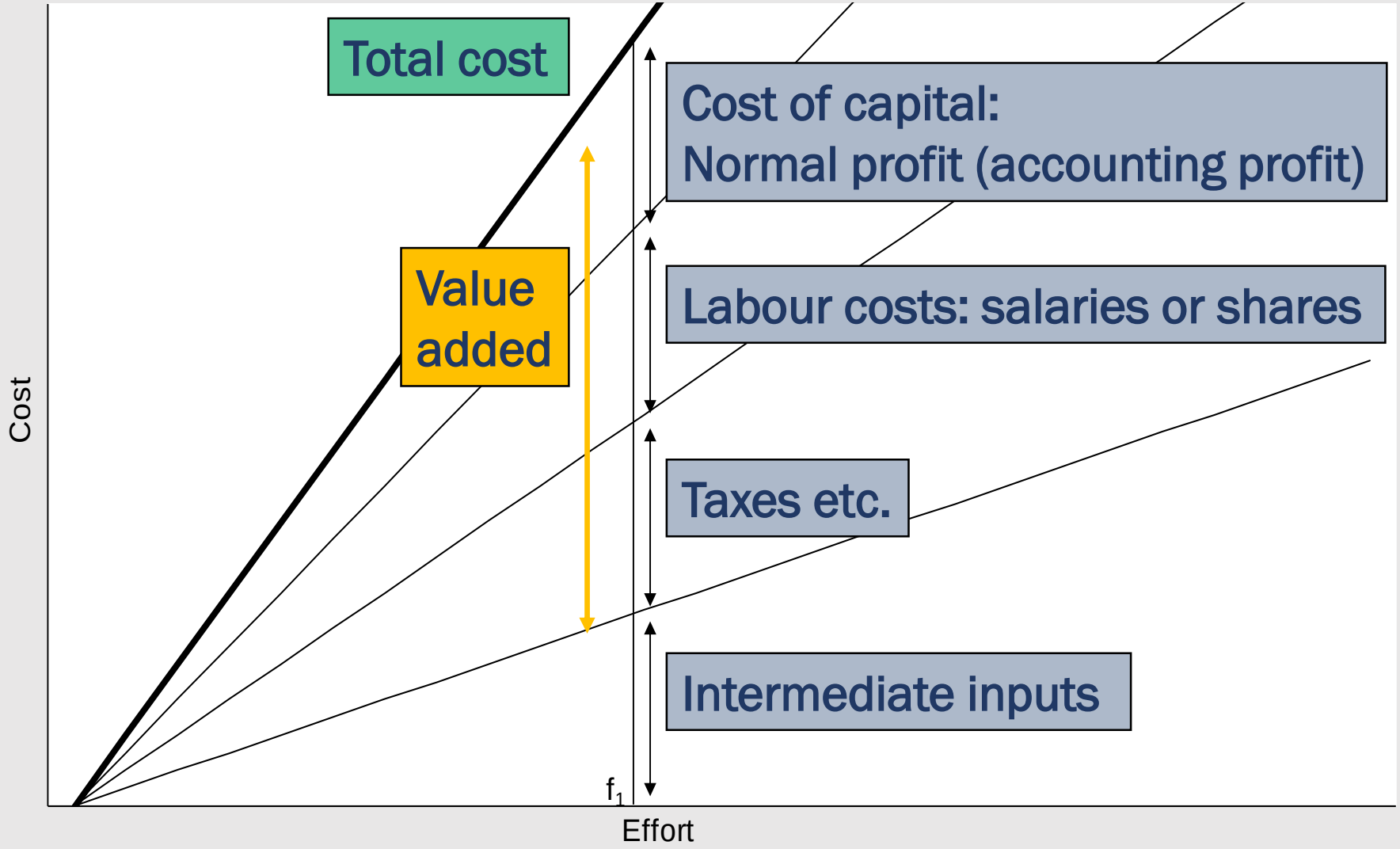
Sustainable output and revenue



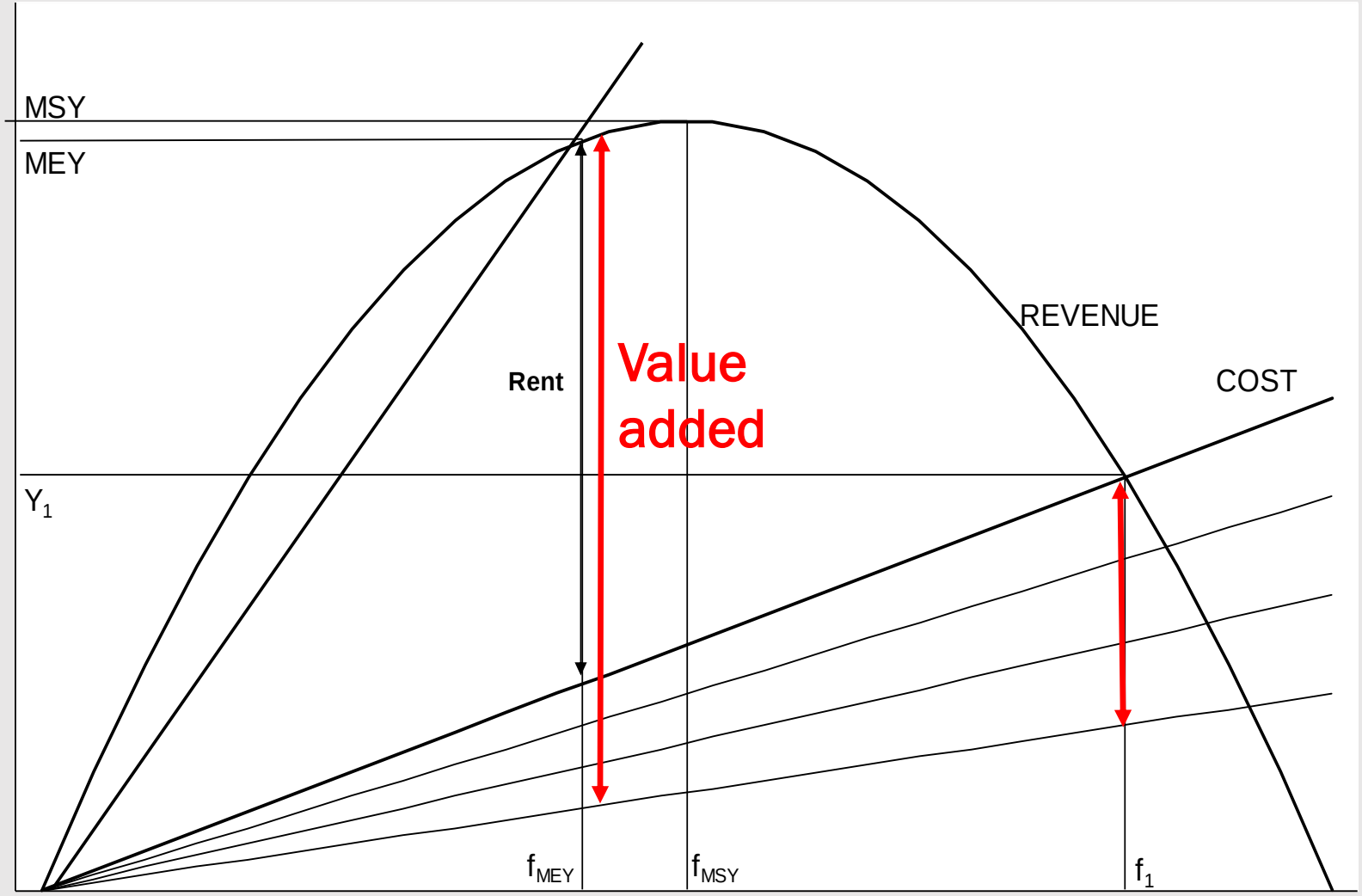
Bringing revenue and cost together



The structure of fishing costs



Need for effective management (i.e. institutional) arrangements



GDP contribution

- If the fishery is well managed and exploited in an economically-efficient manner, the GDP contribution can increase greatly
- A use right system is crucial in achieving economic efficiency
- As the structure of the GDP contribution changes, a **resource rent** is generated
- This resource rent represents a **perennial investable surplus** that can make a sustained contribution to economic growth
- THE CRUCIAL ISSUE IS TO FIND WAYS TO SUSTAINABLY GENERATE A RESOURCE RENT
- The question of rents is complicated because rents are dynamic and so there is a need to give incentives to fish harvesters to grow rents over time.

Back to the question of Blue Growth…

- If we take an economic growth perspective, it is CLEAR that **marine fishing has much to offer**
- GROWTH vs CONSERVATION
  - The delivery of Maximum Gross Value Added can also deliver the conservation goal (within the fishery)
  - If the stock is exploited at less than MSY, there is NO growth vs. conservation trade-off.
- EMPLOYMENT
  - The above scenario might result in less fishing employment (but this depends on HOW fishing is done)
  - There may be more employment elsewhere in the value chain because production increases
    AND
    The investable surplus can create non-fishing jobs
  - Employment is therefore also a complicated objective

Lessons from the case studies

- Problem of defining small-scale fishing:
  - No unique definition
  - Always defined in terms of the physical activity of fishing
  - There needs to be a link to the fish resource
    - This is where economic returns are generated
    - Important because of versatility of small-scale fishers
- Use of species-related management plans
  - Although SSF exploits a range of species, often the most valuable species are limited
    - Castellammare, Sicily case study:
      - 37 species exploited
      - Top 4 species represent 57% of landed value
    - Minorca Channel, Spain case study:
      - Spiny lobster represents approximately 33% of landed value
      - To 5 species represent 78% of landed value

Lessons from the case studies

- Employment and incomes:
  - Although the sector supports many jobs, incomes are often low
  - Must address: what determines fishing incomes and how are they linked to the rest of the economy?
- Use rights:
  - There is a general lack of use rights
  - Use rights are a key issue for the generation of resource rents
- Scope for moving towards Blue Growth:
  - There seem to be a number of significant fish resources exploited ONLY by SSF
    - Develop a Blue Growth strategy for that specific resource
  - In other cases, SSF is only one kind of fishing exploiting a resource
    - Integrate SSF into overall management plans
  - The key is INSTITUTIONAL INNOVATION

Lessons from the case studies: main challenges

- Enforcement:
  - Need to ensure proper enforcement of rights for small-scale fishers
- Limited economic data:
  - There is much room for improvement in terms of data collection
  - FAO Regional Projects are helping to make enormous strides in this regard
- How to limit the environmental impact of SSF:
  - The perception is that SSF is environmentally friendly
  - Despite its low-impact, it is still capable of overexploiting fish stocks

An interesting success story…

Ramsay Bay, Isle of Man (UK) – 2009

- Closed to scallop dredging for 5 years
- The area was designated a Marine Nature Reserve with small area allocated to fishing
- Producers organization given lease to manage
    - Area reopened to fishing (December 2013) following cooperation between fishers and scientists
- The organization contracted 2 vessels to fish, on behalf of all 30 organization members
    - Fishing occurred over 2 days and timed with lucrative Christmas season to achieve maximum profit
- Survey identified highest density of scallops, therefore activity only affected 3% of the seabed
- Net profit (rent) was UK£51.3 thousand
    - Profit was paid to all 30 members of the producers organization as a dividend

Q&A Session

Nadia Bouhafs

Q&A Session

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What is meant by the “sustainable development” of small-scale fisheries and what trade-offs does this imply?

What potential do small-scale fisheries hold to increase the value of their activities and how can this be achieved?

Which means of monitoring are appropriate for small-scale fisheries?

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General Conclusions

Steve Cunningham & Nadia Bouhafs

Conclusions from the background paper

- It is clear that small-scale fishing activities in the Mediterranean and the Black Sea potentially have an important role to play within a Blue Growth framework.
  - The implications for existing strategies must be considered
  - The best strategic choice may vary by location
- Realising the role of SSF within a Blue Growth requires a change in vision
  - SSF activities should be linked to the resources they exploit
- Gradual reform will be needed in the way fishing activities are managed
  - Implementation of use right systems capable of resource rent generation

General Conclusions for Panel 1:

"Supporting the sustainable development of small-scale fisheries in the Mediterranean and the Black Sea under the Blue Growth perspective"

- Develop indicators to measure the contribution of the small-scale fisheries sector to economic growth and to measure the impact of this sector.
  - *In particular, estimate:*
    - *Value of the output produced*
    - *Economic impact on coastal communities*
    - *Impact of SSF on related sectors such as tourism*

- Examine the economic impact of small-scale fisheries under different exploitation arrangements, with a view to identifying circumstances under which small-scale fisheries generate an investable surplus.
  - Identify points of entry for technological, management, marketing and policy interventions facilitating such favourable circumstances.

- Agree upon a regional or sub-regional definition of "small-scale fisheries", in a way that links the fishing activity to the fish resources and facilitates policy-making to support small-scale fisheries.

Food and Agriculture Organization of the United Nations

General Fisheries Commission for the Mediterranean
Commission générale des pêches pour la Méditerranée

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Thank you for your attention