Structuring Policy Problem:

Plastic Pollution in the Mediterranean Sea

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Marine pollution

- 7% of global marine MP accumulation
- · 730 ton of plastic waste/ day
- 40% increase during the summer \rightarrow

200 million tourists/year

· 2.5 trillion USD cost of pollution



The Mediterranean

Agricultural intensification

- 174 kg/ ha fertilizers
- 6.7 kg/ha pesticides
- · Deteriorating air quality
- Insufficient production of food for regional consumption

Networking

- Creation of permanent collaborations and frameworks
- ☐ Increase institutional capacity
- ☐ Co-reconstructing

Synergy in action

- ☐ Enforcement of common objectives
- Regional and national cooperation
- ☐ Common monitoring and assessing

Monitoring

- □ EIA □ KPIs
- ☐ LCA ☐ etc.
- ☐ MFA

Public cooperation

- ☐ transparency
- ☐ public access to data
- ☐ Environmental awareness
- Education
- □ Prevention activities



"plastic trap of the world"

Major sources of	marine litter in the medit	erranean sea	Pollution intensity (Tons/year
Cities/Country	Barcelona	Spain	1787
	Izmir	Turkey	1562
	Algiers	Algeria	1.22
	Alexandria	Egypt	2209
	Tel Aviv	Israel	3278
Rivers and	The Po Delta	Italy	1350
water-way system/Country	Ceyhan	Turkey	5109
	Seyhan	Turkey	3465
	Nile	Egypt	6772
	Rhone	France	1454
	Buyuk Menderes River	Turkey	2406
Shipping lanes	International		20,000



Meta-problem: lack of accountability in plastic pollution and resolution through cooperation

Problem Sensing

Problem Search

Problem Delineation

Problem Specification

A problem that needs to be addressed:
Countries in the Mediterranean most impacted versus a general overview.

EU countries vs non-EU (Balkans especially Albania, Turkey, North Africa especially Algeria and Egypt)

730 ton of plastic waste a day (Inadequate Waste Management)

40% increase due to tourism (500,000 macro and 130,000 micro tons of plastic each year due touristic activities)

Entanglement and Ingestion of plastic among multiple marine species

Direct effects on marine animals

Impact on both marine health

Microplastics abundant in areas with important riverine input (Algeria, Albania, Turkey)

Key variables and factors related to the problem:

Agriculture Industry (Countries who are not able to produce their own foods are bound to trade and import)

Tourism Industry

Fishing Industry

Governments (2.5 trillion cost of cleanup)

Coastal Towns

All countries around the Mediterranean sea are impacted by it but there is not collaboration

NGOs doing majority of the education work

Research centers and scientists

Countries who are vulnerable more than others should be prioritized

Concise
description to
facilitate effect
problem solving:
Within the reach of
different
governments and
countries with
diverse political
beliefs (high levels
of corruption)

How feasible is the financial burden of plastic pollution versus the revenue of the tourism industry?

Which sectors need to cooperate together in order to delineate the roots of the problem?

Private sector

Lack of accountability from pollution.

Collaboration from all countries in the Mediterranean

Actionable plan for achieving desired results:

Enhancing knowledge on the origins of marine plastics with a focus on Albania, Turkey, Egypt, and Algeria.

Engaging stakeholders from different industries such us fisheries and tourism to develop solutions to plastic leakage and reduce use.

Funds for Data monitoring

Empowering local communities on the coastal town more affected by pollution.

European Union's Plastic Strategy needs to include all the countries involved

Mediterranean Action Plan through regional cooperation and policy implementation

Limiting plastic use but also funding for clean-up have the same importance and both need to coordinate.

How much plastic waste is floating in the Mediterranean Sea? | World Economic Forum (weforum.org)

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