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UNITED NATIONS - Economic and Social Commission for Western Asia




# Sustainability Impact Assessment: A Tool for Decision-Making

*Integrating Environmental Concerns into International Trade Agreements:  
Case Studies on the SIA/EMFTA & Industrial Zones in the Arab Region*

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# Part I



SUSTAINABILITY IMPACT ASSESSMENT OF THE  
EURO-MEDITERRANEAN FREE TRADE AREA

*The SIA/EMFTA: A project funded by the European Commission, DG-RELEX/EUROPEAID*



*SIA/EMFTA Consortium led by The University of Manchester in partnership with:*













SIA  
EMFTA

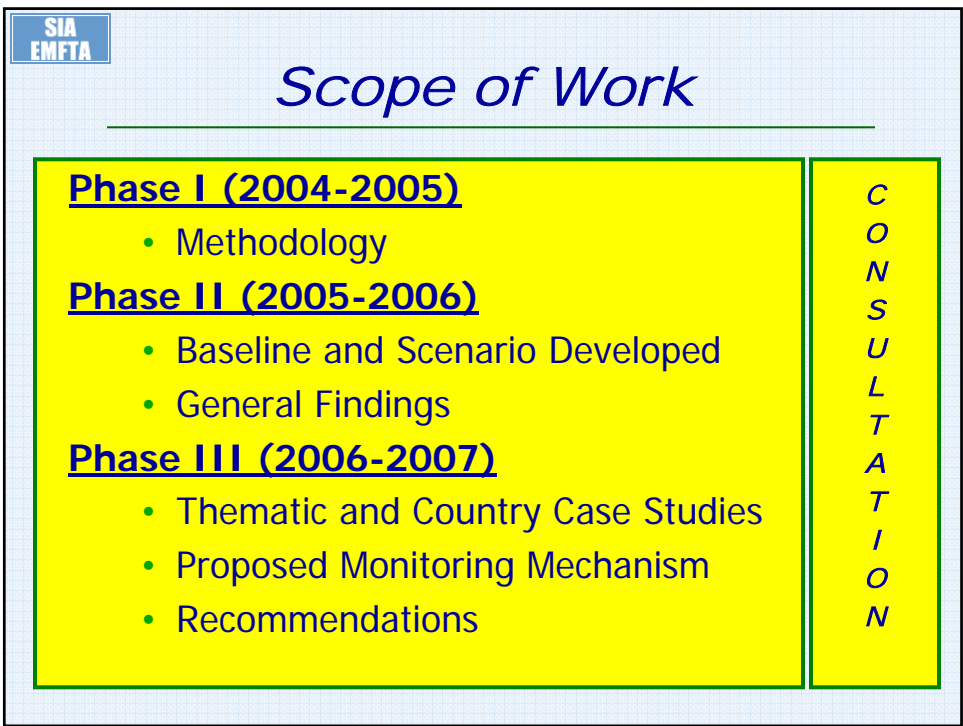
## History

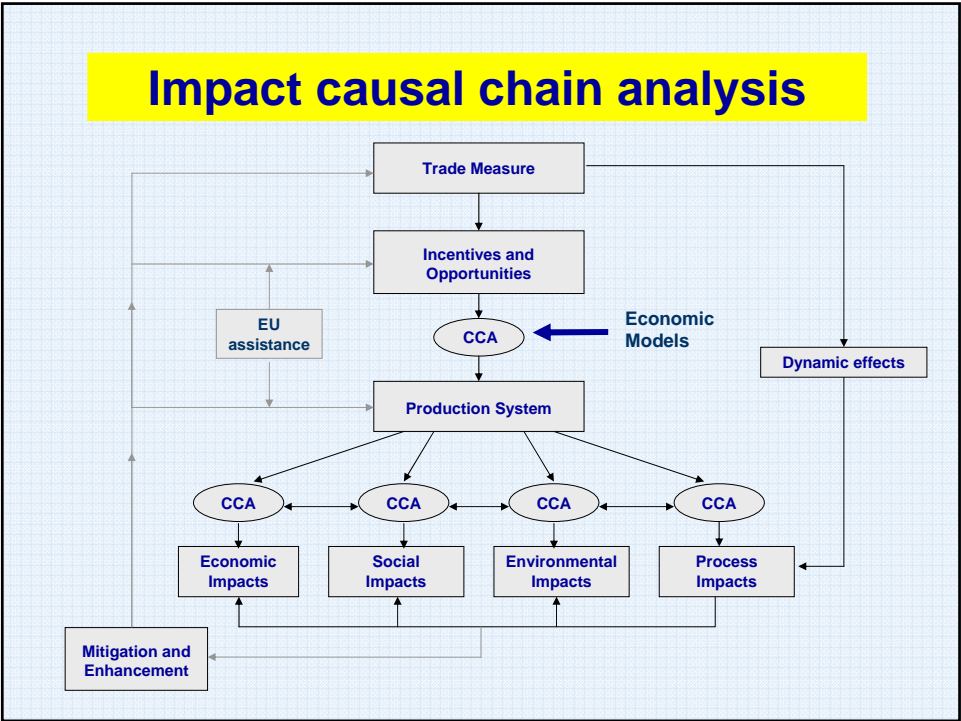
- The Euro-Mediterranean Conference of Ministers of Foreign Affairs in November 1995 set the year 2010 as the target date for establishment of the **Euro-Mediterranean Free Trade Area (EMFTA)**.
- EMFTA is to be achieved by means of bilateral Euro-Med **Association Agreements** negotiated between the EU and Mediterranean Partner Countries (MPCs), complemented by Free Trade Agreements between MPCs (regional & bilateral agreements for increased South-South trade).
- Civil Society, Private Sector voiced concern about potential social, economic and environmental impacts of such a free trade area.
- WSSD (2002) & WTO highlighting trade-environment linkages
- DG-Trade launched SIAs of bilateral, regional, global trade agreements:
  - 1999: SIA of WTO trade negotiations
  - 2002: SIA of EU-Chile trade negotiations
  - 2003: Trade SIA of EU-GCC trade negotiations
  - 2003: SIA of EU-African Caribbean Pacific (ACP) Economic Partnership Agreements
  - 2006: SIA of EU-MERCOSUR trade negotiations
  - 2006: SIA Stocktaking Conference

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## Purpose

- EC (EuropeAid Co-operation Office) thus commissioned an independent sustainability impact assessment (SIA) of the EMFTA in 2003 to:
  - **Examine the potential impacts of EMFTA trade measures on sustainable development in the region** – based on anticipation that there would be positive & negative impacts of the EMFTA
  - **Identify flanking measures for mitigating and enhancing possible EMFTA impacts** – as well as recommendations and a post-SIA monitoring mechanism
- Interestingly, EMFTA and this SIA unique in that it is:
  - Understood within the framework of the Euro-Mediterranean Partnership (EMP) – and thus it has political dimensions related to the EMP and even the European Neighborhood Policy
  - Funded by DG-RELEX EuropeAid, not DG-TRADE or MPCs





**SIA EMFTA**

*Impact Assessment Scenarios*

Scenario	Industry	Agriculture	Services	South-South Liberalization
Dimension				
Economic				
Social		<ul style="list-style-type: none"><li>➤ Assuming No EMFTA</li><li>➤ Assuming Full Trade Liberalization<ul style="list-style-type: none"><li>– Based on Causal Chain Analysis</li><li>– Considers possible Flanking Measures (enhancement and mitigation measures)</li></ul></li></ul>		
Environment				
Process				

<div>SIA EMFTA</div>		<h2>Indicators of Sustainability</h2> <p>Following review of hundreds of SD indicators during Phases I &amp; II, 40 core indicators identified drawing from existing data sources to facilitate post-SIA monitoring, including MSSD indicators</p>
EMFTA implementation		Data source
1	<b>Negotiated agreements</b> – SIA scenarios	published agreements (qualitative)
2	<b>Implementation of agreements</b> (e.g., tariffs, peaks, escalation, NTBs)	national, EC, MPCs, WTO
3	<b>Parallel actions</b> – SIA recommendations	National (qualitative)
4	<b>Imports/exports EU-MPC</b> (non-agricultural, agricultural, services)	national, EC, WTO, COMTRADE
5	<b>Imports/exports MPC-MPC</b> (South-South) (non-agricultural, agricultural, services)	national, EC, WTO, COMTRADE
6	<b>Production</b> (non-agricultural, agricultural, services)	national, EC, WTO, FAO

Indicators of Sustainability Impacts			
Economic			
Real income	7	GDP per capita	national/WB
	8	GDP growth rate (total, per capita)	national/WB
	9	Average input prices, services	national
	10	Consumer price index	national
	11	Tariff revenue, total government revenue	national/WB
	12	Total agricultural exports/imports	national, EC, WTO
	13	Total industrial exports/imports	national, EC, WTO
	14	Total service exports/imports	national, EC, WTO
Fixed capital formation	15	Fixed capital formation	national/WB
Employment	16	Unemployment (urban, rural, total)	national/WB
Social			
Poverty	17	Poverty level (\$US/day 1, 2)	national/WB
	18	Average wage rates (skilled, unskilled, industrial, agricultural)	national/WB
	19	Food imports as percent consumption	national/WTO
	20	Social expenditure	national/WB
Health and education	21	Health expenditure, education expenditure	national/WB
Equity	22	Gini index	national/WB
	23	GDI	UNDP
	24	GEM	UNDP
	25	Cultural diversity	MSSD 17a

Roundtable on Issues Related to the  
Establishment and Activation of National  
Committees on Trade and Environment  
(Beirut, 12 – 14 January 2010)

Indicators of Sustainability Impacts			
Environmental			
Biodiversity	26	Loss of <b>arable land</b> by desertification etc.	MSSD 16
	27	Surface of protected <b>coastal and marine areas</b>	MSSD 26
Environmental quality	28	Proportion of the population with <b>access to safe drinking-water</b> (total, urban, rural)	MSSD 4
	29	Proportion of the population with <b>access to sanitation</b> (total, urban, rural)	MSSD 5
	30	<b>Household waste generation</b> per capita	MSSD 21a
	31	Number of <b>uncontrolled dumping sites</b>	MSSD 21b
	32	<b>Air quality</b> index	MSSD 22
	33	<b>Greenhouse gas emissions</b> (total & total transport-related emissions: shipping, air)	MSSD 8 (modified*)
Natural resources	34	<b>Water efficiency index</b> (total and per sector)	MSSD 1
	35	Exploitation index of <b>renewable water resources</b>	MSSD 3
	36	<b>Energy intensity</b> , total and per sector	MSSD 6
Process/Dynamic Effects			
	37	Proportion of renewable energies in the energy balance sheet	MSSD 7
	38	Public and private expenses for research and development	MSSD 34
	39	Transport infrastructure investment	MSSD 5a
	40	Rural-urban migration rate	national

\* Indicator 33 (greenhouse gas emissions) will need to be a modified version of that MSSD indicator in order to give specific information on **transport emissions as well as total emissions**.

Impact of <u>Industrial Liberalization</u> Summary Table	Countries / sectors affected	Causal factors	Factors affecting significance	Potential significance		Indicator
				ST	LT	
Economic						
<u>Real income</u>						7
welfare	EU manufacturers	Increased exports		↑	↑	13
	Morocco, Tunisia, others less	lower consumer and input prices	pass through of tariff reduction to domestic prices	↑	↑	10
government revenues	Algeria, Lebanon, Palest., others less	reduction in tariffs	compensation through other revenue generating activities	↓	↓	11
<u>Fixed capital formation</u>	Algeria, Egypt, Tunisia, Morocco, others less	production changes, firm closures, new investment	investment climate, firm dynamics	↓	-	15
<u>Employment</u>	Algeria, Egypt, Tunisia, Morocco, others less. Food and beverages, textiles, automotive, others	production changes, labour productivity	wages policy, labour market flexibility, training, long term growth	↓	-	16
Social						
<u>Poverty</u>						17
unemployment	Algeria, Egypt, Tunisia, Morocco, others less. Food and beverages, textiles, automotive, others	production changes, labour productivity	existing unemployment and vulnerability, wages policy, training, workforce mobility, transferability of skills, long term growth	↓	-	16
wage rates	Algeria, Egypt, Tunisia, Morocco, others less. Food and beverages, textiles, automotive, others	production changes, labour productivity	wages policy, workforce mobility, transferability of skills, long term growth	↓	-	18
social support	Algeria, Lebanon, Palest., others less	government revenue decrease	compensation through other revenue generating activities	↓	↓	20



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Impact of <u>Industrial Liberalization</u> Summary Table	Countries / sectors affected	Causal factors	Factors affecting significance	Potential significance		Indicator
				ST	LT	
<b>Environmental</b>						
<u>Biodiversity</u>	Localised	<ul style="list-style-type: none"><li>• Non-significant benefit from reduced water use</li></ul>	<ul style="list-style-type: none"><li>• Water stress,</li><li>• Intensity of industrial use</li></ul>	-		
<u>Environmental quality</u> air, water, land	Egypt and to a lesser extent Morocco and Tunisia	<ul style="list-style-type: none"><li>• Efficiency improvements in industry</li><li>• Consolidation</li><li>• Increased investment</li></ul>	<ul style="list-style-type: none"><li>• Producers' willingness modernise</li><li>• Access to expertise</li><li>• Regulators' response</li></ul>	↑	↑	26, 28, 32
climate change	All countries	<ul style="list-style-type: none"><li>• International transport</li></ul>	<ul style="list-style-type: none"><li>• Transport modes</li></ul>	↓	↓	33
<u>Natural resources</u> water, energy	Egypt and to a lesser extent Morocco and Tunisia	<ul style="list-style-type: none"><li>• Reduced water and energy use by industry</li></ul>	<ul style="list-style-type: none"><li>• Producers' willingness modernise</li><li>• Access to expertise</li><li>• Regulators' response</li></ul>	↑	↑	34, 35, 36
<b>Process</b>						
<u>SD principles and strategies</u>	All	Efficient technology and economic growth	Environmental regulation	-	↑↓	8, 38

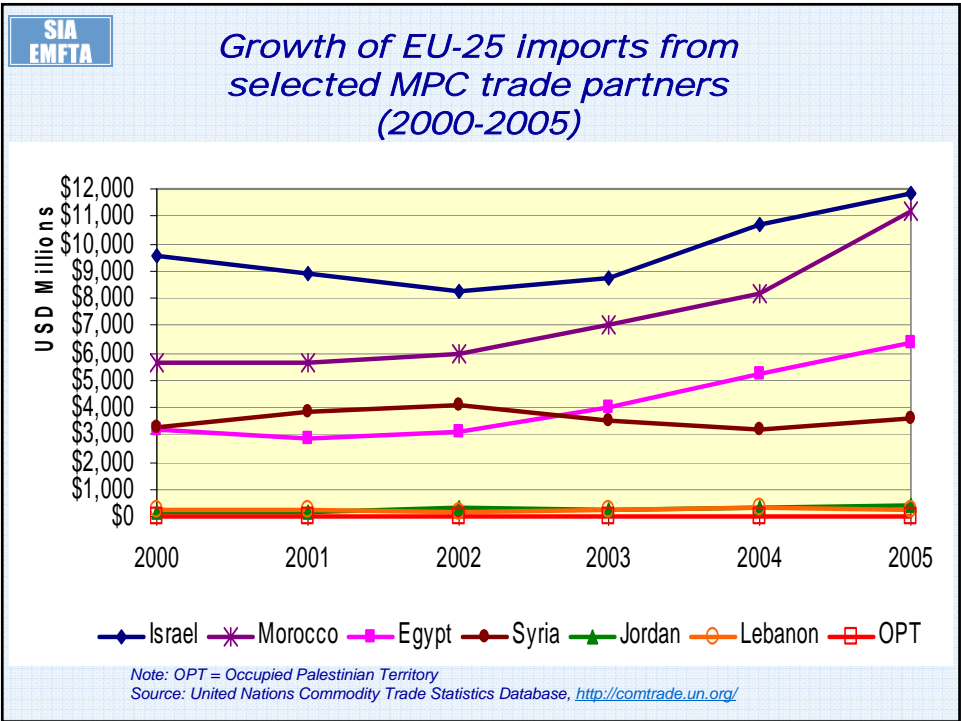
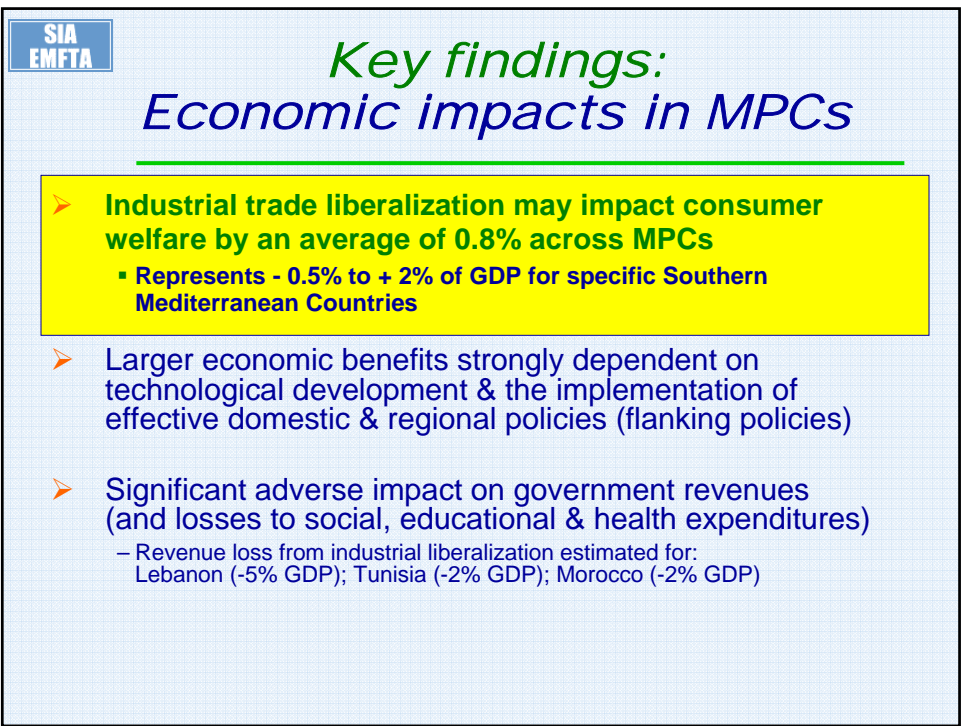
Impact of <b>Agriculture</b> Summary Table	Countries / sectors affected	Causal factors	Factors affecting significance	Potential significance		Indicator
				ST	LT	
<b>Environmental</b>						
<a href="#">Biodiversity</a>	Strong positive and negative effects in locations where production falls and rises.	<ul style="list-style-type: none"><li>• Production changes and pressures on resources</li></ul>	<ul style="list-style-type: none"><li>• Existing levels of stress</li><li>• Implementation of programmes to protect sensitive areas and promote sustainable use</li></ul>	↑↓	↑↓	26, 27, 35
<a href="#">Environmental quality</a>						
water quality	Positive and negative effects in locations where production falls and rises.	<ul style="list-style-type: none"><li>• Production changes</li><li>• Greater intensification</li><li>• Greater resource efficiency</li></ul>	<ul style="list-style-type: none"><li>• Stronger regulation</li><li>• Support for efficiency improvements</li></ul>	↑↓	↑↓	28
climate change	All countries	<ul style="list-style-type: none"><li>• International transport</li></ul>	<ul style="list-style-type: none"><li>• Transport modes</li></ul>	↓	↓	33
urban environment	All countries	<ul style="list-style-type: none"><li>• Loss of rural jobs exacerbates trends for internal migration</li></ul>	<ul style="list-style-type: none"><li>• Town planning systems</li><li>• Infrastructural investment</li></ul>	↓	↓	28, 29, 31
<a href="#">Natural resources</a>	All countries	<ul style="list-style-type: none"><li>• Positive and negative effects on water abstraction and land conversion</li><li>• Economic growth</li></ul>	<ul style="list-style-type: none"><li>• Existing levels of stress.</li><li>• Water management and land use policies and regulations</li></ul>	↑↓	↓	26, 35

Roundtable on Issues Related to the  
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Impact of <u>Services Liberalization</u> Summary Table	Countries / sectors affected	Causal factors	Factors affecting significance	Potential significance		Indicator
				ST	LT	
Environmental						
<u>Biodiversity</u>	General	• No significant impacts identified		-	-	
<u>Environmental quality</u>						
air and water quality	• Environmental services • Energy services • etc.	• Greater use of improved management techniques	• Government willingness to revise legislation	↑	↑	28, 32
solid waste	• Distribution services	• Increased packaging	• Stronger regulation • Recycling	↓	↓	30
climate change	• Distribution services	• Long range transport		↓	↓	33
<u>Natural resources</u>	• Environmental services • Energy services • etc.	• Minor beneficial impacts		-	-	

Impact of <u>South South Liberalization</u> Summary Table	Countries / sectors affected	Causal factors	Factors affecting significance	Potential significance		Indicator
				ST	LT	
<b>Environmental</b>						
<u>Biodiversity</u>	Positive and negative effects in locations where production falls and rises.	<ul style="list-style-type: none"><li>• Production changes and pressures on resources</li></ul>	<ul style="list-style-type: none"><li>• Existing levels of stress</li><li>• Implementation of programmes to protect sensitive areas and promote sustainable use</li></ul>	↑↓	↑↓	26, 27, 35
<u>Environmental quality</u>						
air, water, land	Positive and negative effects in locations where production falls and rises.	<ul style="list-style-type: none"><li>• Production changes</li><li>• Greater intensification</li><li>• Greater resource efficiency</li></ul>	<ul style="list-style-type: none"><li>• Stronger regulation</li><li>• Support for efficiency improvements</li></ul>	↑↓	↑↓	26, 28, 32
climate change	all	<ul style="list-style-type: none"><li>• International transport</li></ul>	<ul style="list-style-type: none"><li>• Transport modes</li></ul>	↓	↓	33
<u>Natural resources</u>	all	<ul style="list-style-type: none"><li>• Greater efficiency in regional utilisation. Economic growth.</li></ul>	<ul style="list-style-type: none"><li>• Existing levels of stress</li><li>• Water management and land use policies and regulations</li></ul>	↑	↓	35, 36







### *Key findings:* *Social impacts in MPCs*

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- Significant adverse impact on unemployment
- Downward pressures on wage rates (industrial wages in the short term, and agricultural wages in the long term)
- Greater vulnerability of poor households to fluctuations in world market prices for basic foods
- Adverse effects on the status, living standards and health of rural women
- Strongly related to agriculture and urban unemployment



### *Key findings:* *Environmental impacts in MPCs*

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- Significant local impacts on water resources, soil fertility and biodiversity in areas of high existing stress
- Higher environmental stress in cities, resulting from declining rural employment and accelerated rural-urban migration
- Higher air pollution and coastal water pollution from greater international transport
- Higher waste generation from greater use of packaging materials.

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### *Key findings: Impacts in the EU*

- **Overall economic benefit – but marginal**
  - Industrial trade liberalization may improve consumer welfare by + 0.2% of GDP for EC countries (EC-15)
- No significant adverse impacts from industrial, services and South-South liberalisation
- Agricultural liberalisation has significant local adverse social impacts in Southern EU Countries
- **Associated environmental impacts both positive and negative**
- Further research is needed to evaluate optimal mitigation measures

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### *Key findings: Aggregate affects*

- Overall economic benefit – but benefits small
- Consumer welfare in the region expected to gain by up to 0.8% of GDP
  - Corresponds to about 3-4 months of economic growth at typical growth rates
- Exposes how important it is to consider the potential effects of the EMFTA within the political framework of the Euro-Mediterranean Partnership

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## Part II

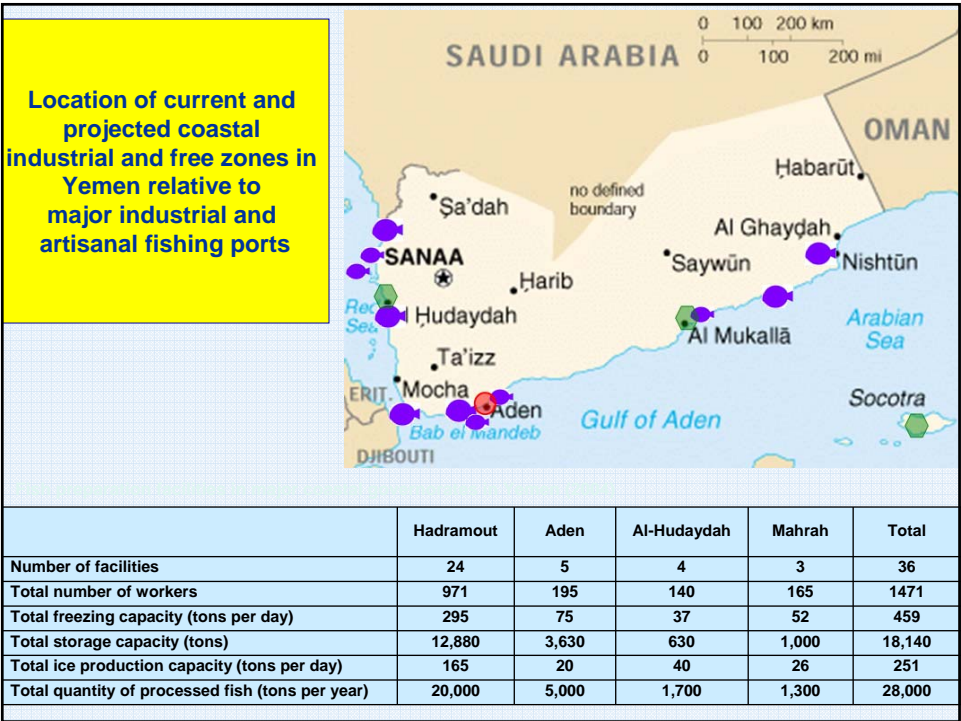
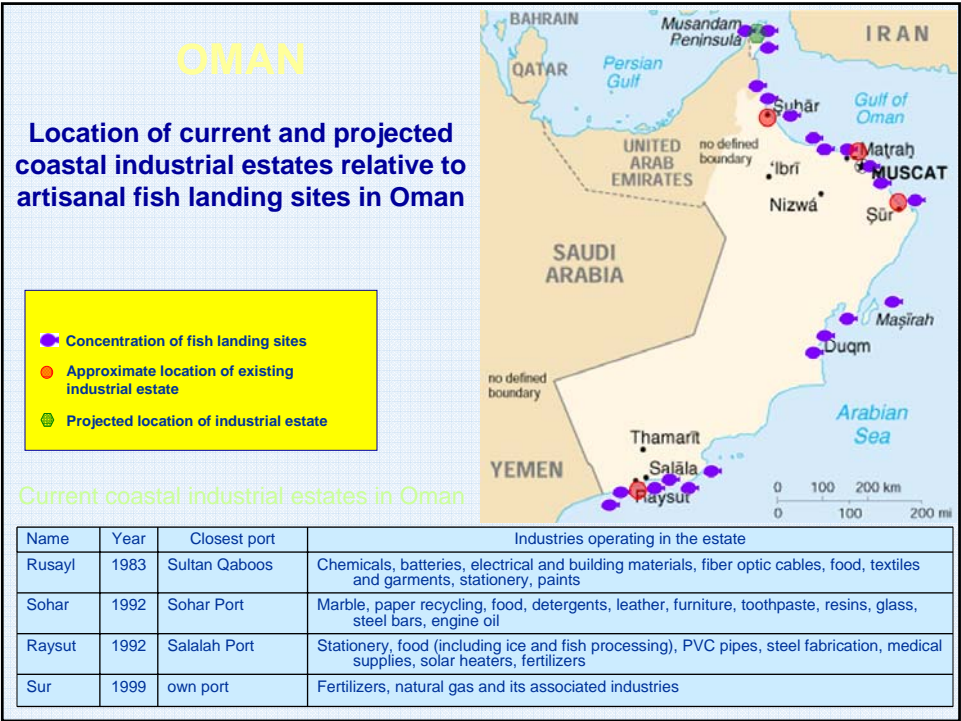
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### Industrial Zones & Free Zones in Selected Arab Countries:

Issues of concern for trade, environment and  
sustainability

### Number of IZs & FZs Increasing

- The number of industrial zone in the ESCWA region has been **increasing** and many more are planned for development in the coming years.
- These zones are the **outcome of industrial policies** seeking to expand opportunities in the manufacturing sectors, while also creating areas where pockets of growth can be harnessed in a conducive, enabling environment.
- The **geographic concentration of manufacturers and service providers** in industrial zones can allow for productivity gains and enhanced competitiveness from:
  - economies of scale
  - shared environmental management services & infrastructure
  - easier access to business support services
  - improved transportation networks linking industrial zones to trade corridors and ports
  - lower costs associated with building management & operations<sup>24</sup>



## Need for Integrated Thinking

- Free zones (export zones) often linked to transportation networks, often leading to expansion of road networks and port installations
- Associated environmental impacts associated with increased transit/trade in goods
- Need to find balance between instruments for facilitating trade, and need to protect local resources and livelihoods
- More rigorous environmental monitoring in industrial zones is thus not a deterrent to growth of zones or of firms
- Need for integrated planning between trade, environment, industrial and agricultural policies
- Balance is needed when examining trade and environment issues within the context of globalization, but the goal remains sustainable development.

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*Thank you!*



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