Stakeholder environmental management for ports

A case study of three Greek ports - Volos, Kavala & Lagos

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1. Introduction
2. Overview of stakeholder theory applications in environmental management
3. Best practices identification of stakeholder engagement in environmental management at ports
4. Stakeholder management process plan
5. Case studies of environmental stakeholder management at the three ports
6. Main conclusions
7. Further work
1. Introduction

- Stakeholder pressure has the effect of influencing and forcing organisations to take certain actions.

- Stakeholder engagement can help ports to manage:
  - environmental issues,
  - comply with environmental regulations,
  - help with corporate social responsibility & image

- Environmental care and port performance are not necessary conflicting issues.
  - Both are needed for achieving: community support and commercial success
2. Stakeholder theory applications in environmental management

- Corporate Environmental Management
  - Nokia - WEEE & ROHS directives
  - Neste Oil - Palm tree bio diesel
  - Estonian ferry company at Gulf of Finland
- Aerospace Manufacturing Industry
- Wind park development
  - British Wind Energy Association case studies
- Coastal Planning
  - Australia & aboriginal population
- Airport planning
  - Example of bad practice
3. Best practice examples (1/4)

Port of Brussels
- Master Plan 10-25 years vision
- Divided the port into zones
- Stakeholder analysis for each zone
- Soft involvement of stakeholders through interviews on strategy formulation
- Hard involvement in port’s SWOT analysis & multi-criteria analysis of stakeholders and objectives for each zone.

Port of Antwerp
- Long term strategic planning case
- Stakeholders from Economy & Land Use, Mobility, and Nature Conservation.
- Scenario building, long term supply of land at the port, nature conservation, infrastructure capacity & financial parameters.
- Interviews with stakeholders from all affected sectors.
- Analysis of current and future demand and impact for each area of the port (sea & land leg, hinterland, network).
3. Best practice examples (2/4)

- **Ports of Rotterdam and Amsterdam**
  - Demand for expansion on infrastructure & transport facilities
  - Support by government but not from local communities.
  - Intensive dialogue with stakeholders.
  - The environment was used as a key for expansion.
  - In the end: better utilisation of current facilities & 1000ha expansion for Rotterdam.

- **Port of Melbourne**
  - Use of stakeholders to build the port’s Safety & Environmental Management plan (SEMP).
  - Port Activity Map (PAM) – A Risk management map of the port, built through stakeholder workshops.
  - Use of stakeholders to develop policies and objectives.
  - Dialogue to help improve Safety & Environmental Management
3. Best practice examples (3/4)

- **Port of Portland**
  - Strategic objective: Environmental Outreach and Communication Program.
  - The programs aimed to integrate & involve stakeholders into Port planning and decision making.
  - Devised tools for each phase of project development to include stakeholders.
  - Outreach manager whose job is to align environmental, business and stakeholder interests.
  - Educated stakeholders through open house meetings, fact sheets.

- **Port Metro Vancouver**
  - Port 2050 visioning process.
  - Created 4 scenarios of how the port will look in next 20-40 years through stakeholder workshops. 100 stakeholders participated.
3. Best practice examples (4/4)

- Currently running the Land Use project and Get involved open house events.
- Call for stakeholders to get involved with the planning phase:
  - Aims in assisting port tenants to identify port areas for expansion
  - Clarify the aims and objectives to communities.

- Port of Durban
  - Development project to upgrade container handling.
  - The aim of the project was to:
    - Educate and involve stakeholders on container handling.
    - Develop and access solutions.
    - Identify best solution with the support of stakeholders.
    - Open house meetings, workshops, correspondence, visioning exercises, forums.
4. Stakeholder engagement plan (1/2)

Stakeholder identification

Why engage?

Who to engage with?

What to engage about?

Strategic Thinking - Stakeholder Engagement
4. Stakeholder engagement plan (2/2)

Environmental stakeholders

1) Owners/
   Shareholders
2) Administration/
   Management
3) Port users: Terminal
   operators/ stevedoring,
   Transport companies,
   Shipping lines,
   Shipping agencies,
   Logistics companies,
   Warehousing
   companies, Industrial
   companies, Importers/
   exporters, Towage and
   pilotage, Waste
   reception
4) Personnel: Employees
   & Port labour, Labour
   Unions
5) Suppliers: Ship
   chandlers, Fuel suppliers
6) Community
   stakeholders: Community
   groups, Environmental
   NGOs, Tourists
7) Government
   organisations: Labour
   inspection, Environmental
   inspection, Police, Fire
   brigade, Customs, Food
   inspections, Port authority,
   City planning
8) Insurance companies
9) Banks
10) Competitors
11) Press/media
12) Scientific institutions
13) National regulators
14) Local authorities:
   Municipality, Regional,
   Prefecture
5.1 Case studies - Port of Volos (1/2)

Environmental issues - Port of Volos

- Air quality
- Dust
- Air emissions
- Port development (land, sea)
- Noise
- Ship Waste
- Sea water quality
- Cargo releases
- Energy consumption
- Community relations
- Bunkering
- Ship ballast water
- Hazardous cargos
- Light pollution
- Dredging
- Odours
- Land contamination
- Contingencies

Stakeholder influence

The port of Volos

Project Part-Financed by the European Union
European Regional Development Fund
5.1 Case studies- Port of Volos (2/2)

Environmental stakeholders- Port of Volos

- No. of issues affected
- Total influence

<table>
<thead>
<tr>
<th>Stakeholder Type</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Administration/Management</td>
<td></td>
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<tr>
<td>Environmental NGOs</td>
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<tr>
<td>Prefecture authorities</td>
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<tr>
<td>Environmental authorities</td>
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<tr>
<td>Municipality authorities</td>
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<tr>
<td>Port authority</td>
<td></td>
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<tr>
<td>Employees &amp; port labour</td>
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<tr>
<td>Labour Unions</td>
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<tr>
<td>Terminal operators/stevedoring</td>
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<tr>
<td>Transport companies</td>
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<tr>
<td>Press/media</td>
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<tr>
<td>Waste reception</td>
<td></td>
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<tr>
<td>Industrial companies</td>
<td></td>
</tr>
</tbody>
</table>
5.2 Case studies - Port of Kavala (1/2)

Environmental Issues - Port of Kavala

- Stakeholder influence

- Air quality
- Dust
- Air emissions
- Port development areas
- Noise
- Ship waste
- Sea water quality
- Cargo releases
- Energy consumption
- Community relations
- Bunkering
- Ship ballast water
- Hazardous cargoes
- Light pollution
- Dredging
- Odours
- Land contamination
- Contingencies
5.2 Case studies - Port of Kavala (2/2)

Environmental stakeholders - Port of Kavala

- Port authority
- Environmental inspection
- Shipping lines
- Administration/Management
- Scientific institutions
- Terminal operators/Stevedoring
- Logistics companies
- Industrial companies
- Owners/Shareholders
- Community groups
- Health inspection
- Employees & port labour
- Transport companies
- Towage and pilotage
- Municipality authorities
- Waste reception
- Fuel suppliers
- Police
- National regulators
- Environmental NGOs
- City planning
- Warehousing companies
- Labour inspection
- Press/media
- Tourists
- Shipping agencies
- Insurance companies
- Banks
- Competitors
- Labour Unions

- No. of issues affected
- Total Influence
5.3 Case studies - Port of Lagos (1/2)

Environmental Issues - Port of Lagos

- Stakeholder influence

- Air quality
- Dust
- Air emissions
- Noise
- Ship Waste
- Port Waste
- Sea water quality
- Cargo releases
- Energy consumption
- Community relations
- Bunkering
- Ship ballast water
- Hazardous cargos
- Light pollution
- Dredging
- Odours
- Land contamination
- Contingencies
6. Main conclusions

- Talk to your stakeholders!
- Stakeholder engagement is crucial to avoid conflict of interests between organisations/ports and stakeholders.
- The best practice examples of stakeholder engagement at ports showed:
  - Talking to your stakeholders is a good thing.
  - Stakeholder management is more suitable for strategic planning, visioning and port development.
  - It’s better to ask stakeholder’s opinion in advance. Be proactive!
- All three case study ports had understanding of the stakeholder engagement concept. Some had more.
- Lack of resources—main barrier to better environmental performance.
- Willingness for better environmental performance.
- All ports require better environmental practices.
7. Further work

- Stakeholder theory research on ports needs to be continued.

- Ports should establish environmental management systems and monitor Key Performance Indicators.

- Deliver training to the ports regarding the stakeholder concept.

- Assist the 3 Ports to carry out stakeholder significance evaluation based on Power, Proximity, Urgency.

- Assist the 3 ports to create environmental objectives and access how these affect/ are affected by stakeholders.


- Help the ports deliver stakeholder meetings.

- Evaluate performance and stakeholder expectations.

- More information on the upcoming stakeholder management report.