Partnerships for port development
Building inclusive port clusters

Multi-level analysis with a focus on learning mechanisms in port public-private partnerships

By Maurice Jansen

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RESEARCH PROJECT
Introduction

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Born, raised, living in Rotterdam
Study: Erasmus University Rotterdam
Business Administration
Strategic Management (MSc.)
Currently employed by STC-Group
Job Title: Sr Manager Innovatie, Research & Development

Development of case studies, management games and course ware in the area of port development and strategy, thesis supervision, teaching at MSc Shipping and Transport
Research coordinator STC-Group, Centre of Excellence Logistics
Visiting researcher at Erasmus University Rotterdam.

Agenda

• Port development at large
• Why an alternative approach
• Public and private: connecting macro goals with micro actions
• Partnership evaluation and monitoring model
• Research question and objectives
• Activities on the research agenda

Your input and expertise is valuable!
Ports development in 21st century

- The challenges of this century are unparalleled in history. To name a few:
  - World population growth (poverty, migration)
  - Energy transition (from fossil to renewables)
  - Scarcity of resources (globalisation, protectionism?)
  - Disruptive innovations (e.g. UberPop, AirBnB, Amazon Logistics Technology)

What is value?

- Value is perceived differently by stakeholders and is a source for conflict.
Port paradoxes

A problem that is a paradox has no real solution, and there is no way to logically integrate the two opposites into an internally consistent understanding of the problem. As opposed to the either-or nature of the dilemma, the paradox can be characterised as a “both-and” problem – one factor is true and a contradictory factor is simultaneously true (De Wit and Meyer 2010: 17).

Research question and objective

This research investigates 2 major societal challenges:
1) making ports more competitive and
2) enhancing the contribution of ports to inclusive development, balancing sustainable, societal and business goals.

How to form proper partnerships, how to make these partnerships more effective for filling the investment gaps in maritime infrastructure?
Research set-up

Multi-level analysis, with a focus on learning mechanisms in port public-private partnerships

Issue driven

• Issues are too big to be tackled individually
• Many negative externalities not factored in
• Infrastructure and knowledge gaps exist

Macro

Partnerships

• Stakeholders alignment
• Cluster performance
• Leader firms (MNCs) necessary for in-flow of funding and expertise
• Public private partnerships as governance model

Micro

Knowledge transfers

• Conditions unclear
• Indicators for effectiveness not in place
• Measuring effectiveness difficult
• Shared value creation

Research approach

Port and corridor development from a human development perspective

Literature review: inclusive business, cluster competitiveness, organisational learning

Identification of indicators for partnership effectiveness

Desk research
Survey
Indicators of inclusiveness per functional level in the organisation
An initial scoring for your company on the inclusiveness pathway

Defining contextual issues relevant for port development

Issue analysis by means of a survey
Clear understanding of the issues of inclusive business in general and specific per country

Barriers to implementation

Partnership portfolio plot
Analysis of perception gap amongst employees
Best practice and critical success factor analyses

Stakeholder dialogue

For every stakeholder dialogue an action plan is prepared to further developing and implementing inclusive business models
Executive training on how to implement solutions
Upgraded indicators
In-company dialogue on tipping points

Intermediary results will be shared internally and published via (academic) journals and conferences
Research outline in 3 phases

Issue identification in port development

International dimension

Dissertation

Focus on port development in The Netherlands, specifically in
- Amsterdam
- Rotterdam
Strategic connectivity in port clusters (Van den Bosch, et al)
Role of leader firms (Nijdam)
Issues

Inclusive growth and inclusive development
Sustainable enterprise
Van Tulder
Partnerships Resource Centre
International case studies
Survey among port authorities

Role of leader firms in port cluster competitiveness
Taking to learning perspective to problem solving
Collaboration instead of conflict management
From learning to organise, to organise to learn

Part 1: issue identification

Paradoxes in ports

More cargo, less congestion
More automation, more jobs
More economy, more nature, More port,
More space for leisure
More data, more to share
More view, more tolerance
More flexibility, more investing in talent development

Paradigms

Incremental success with modal split, but no breakthrough
Based on the bargaining society, driven by zero sum game play
Lack of understanding of partnering space leads to misalignment of strategic objectives
Empirical evidence:
Inlandlinks, PortBase, Building with Nature, STC-Group, Damen Shipyards, Cruise terminal Amsterdam, RDM Campus, PDP Africa

Port of partnerships

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Building inclusive port clusters
A multi-level analysis on learning mechanisms in port public-private partnerships

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AN ALTERNATIVE APPROACH IS NEEDED

Port projects per region

The WorldBank PPI database covered a private investment total of US$ 150bn in 2013, in low to middle income countries only

Source: WorldBank Private Participation Infrastructure database
At least 2 clear gaps exist in port development

- In relation to infrastructure, emerging and transitioning countries have witnessed an increasing interest from foreign investors which quite often lead to multi-million dollar investment projects.
- However, in relation to investing in human capital, for the improvement of logistics performance and more sophisticated logistics solutions knowledge and competencies, investments are lacking behind.

Source: WorldBank, LPI index 2014

Need for infrastructure, need for human capital development

- Netherlands
- Kenya
- Region: Sub-Saharan Africa
Impact: Develop integrated approach to inclusive port development

Conventional approach to infrastructure development:

* Pro-active approach to build knowledge infrastructure from the start of port project
* Focuses on education and training in public sector
* Focuses on knowledge spillovers in private sector, within firms and in supplier relationships

Port / maritime development in human resource perspective

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<th>Industry policy</th>
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<th>Feasibility</th>
<th>Business case</th>
<th>PPP Set up</th>
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<td>Business case</td>
<td>Training centre set up</td>
<td>Execution</td>
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Human resources development is not factored in the business case of infrastructure development

AN ALTERNATIVE APPROACH?
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Why an alternative approach?

- 99-year lease
- No feasibility study
- No EIA
- Tax concessions under scrutiny

Why an alternative approach?

Infrastructure driven projects lead to enormous sunk-costs for governments.
But where are the private companies?

Supply driven, based on forecasts of traffic from other ports in the region, but without proper market and competition analysis
Why an alternative approach?

Part of the Lamu Port South Sudan Ethiopia Transport corridor (LAPSSET) Accommodate oil, gas industry China Communication Construction Company 32 berths - 1000 acres

Society is not involved

Biosphere is heavily impacted

Port authorities
Loading/unloading facilities
Human Resource Infrastructure
Governance
Terminal operators
Education institutes
Government bodies

Silo approach leads to a continuing disconnect between infrastructure and knowledge gap

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Silo approach leads to a continuing disconnect between infrastructure and knowledge gap

This gargantuan project is estimated to cover 1,400km, with plans for an oil refinery and terminal; internation track to Southern Sudan. In Lamu alone, 6,000 people displaced by the project; but local people in the affected area were not consulted concerning the project nor have they been allowed to review the recent environmental impact assessment study. Native wildlife and local ecosystems are at risk from the port. The destruction of Lamu’s unique cultural heritage have banded together to oppose the construction of the port which stands to devastate both the culture of Lamu and its natural environment.

The site proposed for the port could not be any more environmentally damaging, posing tremendous negative impact on Kenya’s mangroves, coral, and threatened marine fauna. It, 1980, 60,000 hectares of the coastal mangroves are on UNESCO’s Man and the Biosphere Project in recognition of its international conservation importance. The intention of this designation was to preserve in perpetuity the outstanding biodiversity, natural resources, and ecology of the area through management that incorporates the full participation of local people.
## Literature review

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<th>Researchers</th>
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<td>Port management models, PPPP</td>
<td>Van der Lugt, De Langen, Haezendonck, Verhoeven</td>
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<td>Strategy alignment</td>
<td>Strategic value, connectiveness, ambidextrous port</td>
<td>Van den Bosch, Hollen, Nijdam, Van der Lugt</td>
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<td>Port competitiveness</td>
<td>Cluster competitiveness, leader firms</td>
<td>Nijdam, De Langen, Notteboom</td>
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<td>Partnerships</td>
<td>Partnership evaluation framework, PPP, partnership effectiveness</td>
<td>Van Tulder, Da Rosa</td>
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<td>Social responsiveness, inclusiveness</td>
<td>CSR, stakeholder management, inclusiveness</td>
<td>Van Tulder, Winkelmaan, Notteboom, Verbeke, Haezendonck, Dooms</td>
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<td>Resource-based view</td>
<td>Value creation, economies of expansion, resources, capabilities, tacit knowledge, capacity building</td>
<td>Penrose, Teece, Wernerfelt, Malone &amp; Yohe</td>
</tr>
<tr>
<td>Knowledge transfers</td>
<td>Knowledge management, human capital, capacity building, dynamic capabilities</td>
<td>Argyris, Schön, Teece</td>
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**PUBLIC AND PRIVATE: CONNECTING MACRO GOALS WITH MICRO ACTIONS**
Multi-layer approach required to tackle these issues

Cluster performance using reports from: e.g. UNCTAD, Worldbank, WEF

Port competitiveness based on cluster competitiveness

Competitiveness of ports and logistics clusters is determined by the connectivity within and with other clusters

Lead firms as owner and carrier of (tacid) knowledge and expertise play a crucial role

Source: Rotterdam School of Management, 2011
Port competitiveness based on connectivity, clusters and partnering ports

Foreland strategy:
Connecting with ports overseas

- The Dutch experience in building prosperous port is put in practice by the PDP-combination.
- Providing a total package of expertise in advanced technology, the environment, stakeholder and customer concern as well as governmental relations.
- The PDP is a unique collaboration between 17 Dutch companies and knowledge institutes with expertise in the following three critical areas: Management, Infrastructure and development, Transport and logistics.
- Supported by Dutch government (Embassy of The Netherlands in Ghana).

Port competitiveness based on connectivity with partner ports in the network (2)

- Foreland strategy: Connecting with hinterland ports
- Need to have more information on intermodal services and options.
- To have better access to intermodal options.
- Inlandlinks maps out the hinterland network and provides information on the package of intermodal services on offer and facilities.

Once platform exists, other companies see the shared value and add content and connections to the network.
Knowledge sharing and trust is key for a cluster

Cluster competitiveness

- Trust: It is easier to develop a level of trust among organisations and people with similar backgrounds.
- Tacit knowledge exchange supports easier, faster and less expensive sharing of benchmark or market information.
- Collaboration: concentration of firms with similar needs and concerns gives natural rise to joint activities, such as lobbying, public relations and trade and export promotion.
- Research & Education: state-of-the-art research, expertise used in education, leading to a steady supply of educated employees.
- Supply base: Strong supply base with multiple suppliers brings competitive pricing yet cutting edge supplier innovations, crucial for competitiveness.

Source: Yossi Sheffi, MIT, 2010

Partnership resources centre model

- **Mission**: Building port development in partnership through local inclusiveness to generate a higher return on investment from local human capital.
- **Input**: Foreign companies investing in assets (port and corridor infrastructure, companies).
- **Activity**: Inclusive business practices, Labour needs assessment, Competency development, Education and training needs assessment.
- **Output**: Implementation inclusive business models, Implementation curricula higher education, Implementation internship and career development.
- **Context**: Research focus.

Partnership resource centre evaluation model will be taken as a framework.
### Taxonomy for inclusive development

<table>
<thead>
<tr>
<th>Role</th>
<th>Landlord</th>
<th>Project developer</th>
<th>Cluster manager</th>
<th>Co-creator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy alignment</td>
<td>Firm</td>
<td>Shareholder</td>
<td>Cluster</td>
<td>Society</td>
</tr>
<tr>
<td>Objectives</td>
<td>Maximise Throughput</td>
<td>Dividends</td>
<td>Maximise revenue and profit for companies in the port</td>
<td>Enable regional or national societal and economic development</td>
</tr>
<tr>
<td></td>
<td>Profit</td>
<td>Return on investment</td>
<td>Accessibility</td>
<td>Direct and indirect employment</td>
</tr>
<tr>
<td>Resource allocated to</td>
<td>Maximise productivity</td>
<td>Grow the business</td>
<td>Innovate products and services</td>
<td>Develop new business models</td>
</tr>
<tr>
<td>Knowledge transfers</td>
<td>Within the firm</td>
<td>With customers / suppliers</td>
<td>Between business community and research and education institutes</td>
<td>Within clusters overseas and within port networks in the foreland and hinterland</td>
</tr>
<tr>
<td>Social responsiveness</td>
<td>Inactive</td>
<td>Reactive</td>
<td>Active</td>
<td>Pro-active</td>
</tr>
<tr>
<td>Partnership model</td>
<td>No partnership, individual</td>
<td>Contractual agreements</td>
<td>Under cluster management</td>
<td>In cross-sector partnerships</td>
</tr>
</tbody>
</table>

### Ongoing scope and activities

- **Port and transport development**
  - Issue identification on port and corridor development
- **Literature review** on inclusive business in port clusters
- **Identification of port partnerships**
  - Monitor the development of our (knowledge) partnerships over time
  - Zero-measurement on indicators for inclusive partnership development
- **Region / Country focus: which countries, partnerships?**
  - Netherlands, Rotterdam, Amsterdam
  - Africa: Ghana, Mozambique, Namibia (?), SA
  - Latin America: Colombia
  - Middle-East: Oman
  - Asia (?)

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This magazine brings together on partnerships for port development, cross-border between ports and its emerging and transnational economies.

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