

'The world turned upside down': Socio-economic impacts of a negotiated transition to an alternative mussel production system in the Dutch Wadden Sea

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Mussel farming in the Wadden Sea (NL)

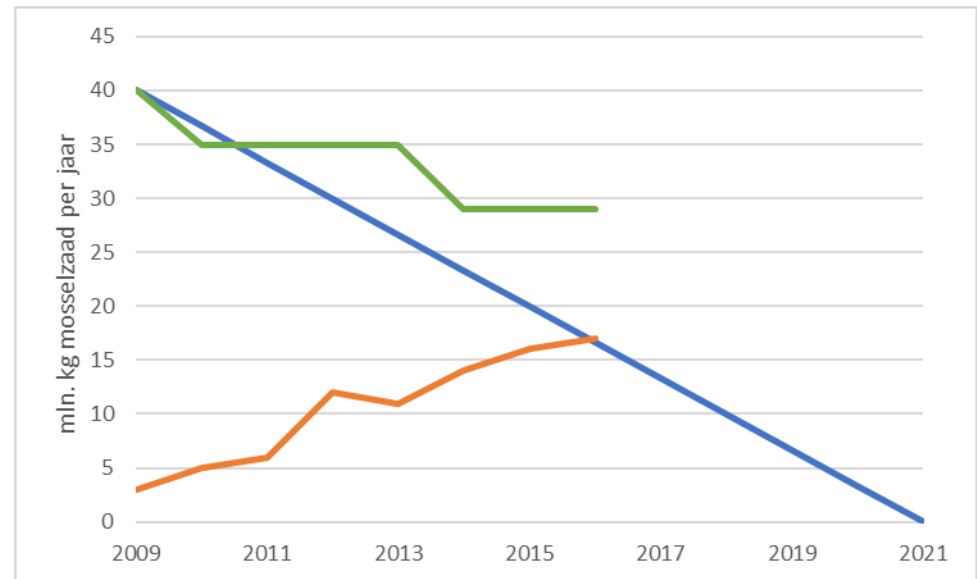


- In 2008, mussel seed fishery permit nullified in court
- Industry starts “Stop The Green Lie”-campaign



Mussel covenant (2009-2019): industry, government & NGO's

- Stepwise transition from mussel seed fishery to seed collector system (MZI)
- 28% total seed fishery closed
- Further closures planned following evaluation



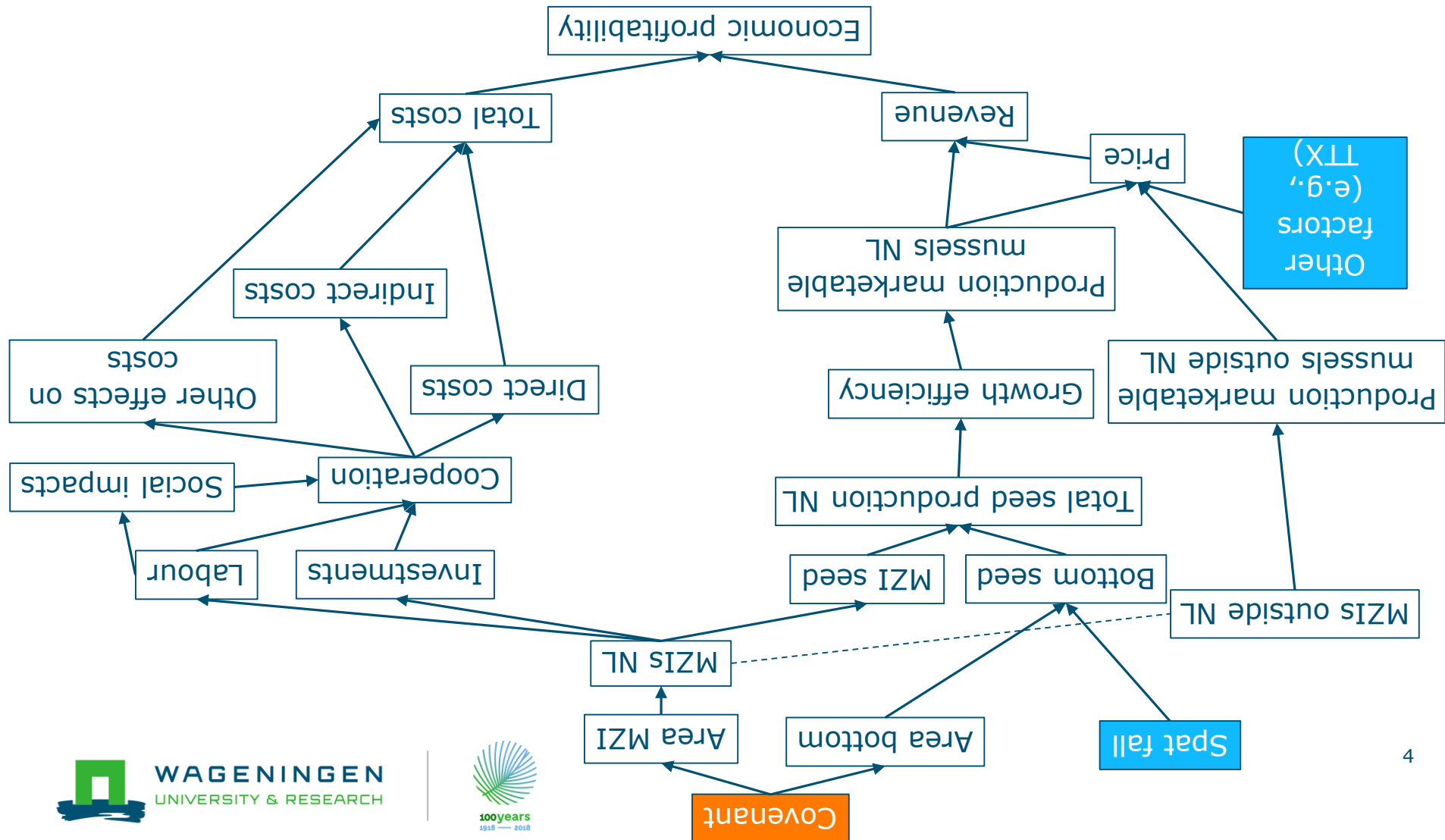
Blue: Expected reduction of seed fishery at start of the covenant

Green: Realised reduction bottom seed harvesting

Red: Actual harvest of seed from collectors

Source: Van Oostenbrugge *et al.*, 2018

Conclusion: the mussel transition turned the industry upside down...

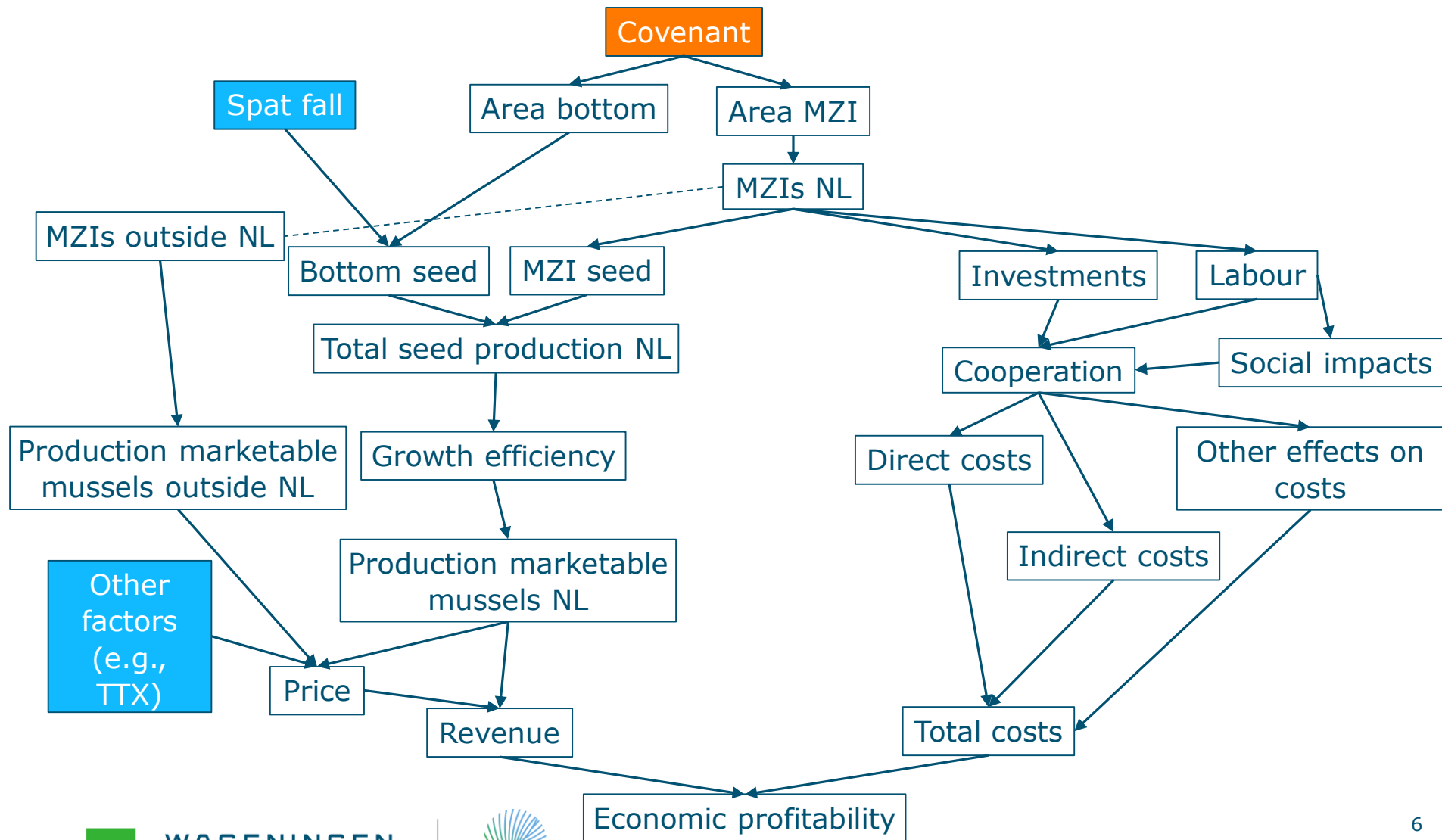


Socio-economic assessment of the transition driven by the covenant

- Analysis of existing and new economic data
- 13 In-depth interviews
- Questionnaire for mussel farmers (response rate 60%)
- Scenarios economic effects of seed collector system



Overview impacts mussel transition



Conclusions socio-economic assessment

- Guaranteed (and extra) supply of mussel seed
- Additional costs: 6-9 mln € (2014-16) = 15% total costs
- Negative relation between supply marketable mussels and price → extra supply of MZI mussels hardly generates more revenue
- Decrease in profitability and weakened financial situation
- Net economic effect MZIs in nearly all cases negative (except when there is no spat fall on bottom)
- Increasing levels of cooperation between farmers
- Increase in workload and higher accident risk
- Impacts on social life

What's next?

- Agreement to close additional 7.7% mussel seed fishery area in 2019
- Industry reluctant to go any further:
 - financial situation
 - need for better quality cultivation parcels (in closed areas)
- Covenant up for renewal end 2019



Will there be a new covenant?

- Relationships again under pressure
 - NGOs: “MZIs work, all mussel seed harvesting to be relocated to North Sea” (and eventually also cultivation)
 - Industry: “legitimate, traditional users working in balance with ecosystem; economically profitable industry part of covenant”
- Fundamental differences in views and perceptions shape the current dialogue
- Outcome uncertain: continued cooperation or revert back to court cases?
- A story to be continued...

Thanks for your attention!



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