

Political Reflection

Long-term policy to manage flood risk on the IJssel River.

EPA141A: Model-based Decision Making

Group 9 : Transport Company

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1. Background

As a transportation company that uses the IJssel River as one of the waterways, it's important for us to minimize the IJssel River's flood risks. If the river floods, transporting goods becomes impossible and ruins our business. Therefore, we support the Rijkswaterstaat initiatives in developing policies to manage flood risk in the IJssel River. Rijkswaterstaat came up with three potential measures: Dike Heightening, Room for River (RfR), and an Early Warning System. From those proposed policies, transport companies favour promoting **dike heightening**. The rationale is we notice that the water level is also important for our operation security, and a higher water level means larger ships can sail, which translates into better profit.

2. Emerging Tensions and Challenges

In general, transportation company faced three prominent tensions and challenges during the decision-making process such as:

2.1. Conflicting Interest

Contradictions and dualities create tension (Santolaya-Sanz, 2017). Reflecting on the IJssel River case, there are conflicting interests with us that set business operation stability as our main concern. The conflicting parties are:

- **Environmental interest groups** strongly prefer RfR policies over dike heightening. They argue that dike heightening lacks environmental benefits, while they view RfR as a successful water management solution that also preserves biodiversity, demonstrated by 85% stakeholder satisfaction. They also emphasized ecological resilience and longevity of RfR over simple dike heightening. However, RfR may jeopardize our business operation because it will lead to lower water levels and threaten our business.
- **Delta Commission** encourages the proposed flood risk management policies to account for climate change action. Meanwhile, dike heightening is not considered a climate change measure. During the discussion, the Delta Commission realized that building room for the river requires high investment, and they only allocated 28 billion euros for the whole Netherlands, hence a very small number for IJssel. Therefore, they introduce a balanced implementation of dikes rings and RfR.

After gaining consensus to combine Dike heightening and RfR, the next tension arose when defining the location for heightened dike and RfR across Gelderland and Overijssel Province. Every actor has different views on which levers should be done, such as:

- **Environmentalists** impose that policymakers need to set RfR as a baseline policy in all of the region, then in several points that are not possible to get RfR, can adopt dike heightening.
- **Overijssel Province** is opposed to RfR in their territory due to high investment costs.
- **Transportation companies** strengthen the importance of dike heightening in all dike rings, especially in urban areas that have a dense population

2.2. Investment from Transport Company Framing

In the initial policy proposal from Rijkswaterstaat, the total investment for the dike and RfR will be 234 million euros with a shared fund by Delta Commission 50%, Gelderland and Overijssel Province government 25%, respectively. In the middle of debates, Overijssel Province and Environmentalists raised issues about **why transportation does not contribute to the investment** for IJssel River flood risk levers. Both parties **frame** transport companies as one of the significant pollution contributors, so ethically, they need to be responsible by investing in public infrastructure to mitigate environmental damage caused by our operation, such as potential flood risk. This situation triggers tension because both parties use framing political strategy to persuade others with their interpretation of which transport company has to take part in the investment and lower their investment share (Benford & Snow, 2000).

2.4 Knowledge Integration

Reliable methodological tools and evaluation techniques are capable of showing that well-constructed knowledge truly works in terms of indicating solutions for policy problems (Capano, 2022). Reflecting on our previous debates, we struggled to bring a solid result of our model to support our argumentation during debates, especially the first debate, because our model is not finished yet. As a consequence, most of our statements rely on other secondary data from articles and previous research that align with our aspirations.

3. Strategy to Manage Tensions and Challenges

In order to manage the rising tensions and challenges above, we set several political strategies such as:

3.1 Open for Negotiation

We recognise that it is difficult to generate a policy that satisfies all of the related parties. Therefore, we open room for **negotiations** to set the common ground. Henry Kissinger (1969) defined negotiation as a process of combining conflicting positions into a common position under a decision rule of unanimity. In the negotiation stage, we actively promote dike heightening, which is beneficial for policymakers due to **cost-effectiveness**, knowing Delta only has a limited budget and requires Gelderland and Overijssel Province government contributions. Besides, we also set the Best Alternative To a Negotiated Agreement (BATNA) that describes the best possible outcome if the current negotiations fail. In our case, we set at least dike rings 3 and 5 that are located in the **urban area** and need to get dike heightening because it has a significant impact on our business. **Our strategy succeeded** because, in the final policy, Rijkswaterstaat proposed dike heightening in **4 out of 5 dike rings (dike rings 2, 3, 4, and 5)** and was approved by all actors.

3.2 Raise Multi-Issue Games

In response to the framing that our transport company is non-ethical due to not investing in flood risk measures, we are employing a multi-issue games political strategy. We formulate a **broader definition** of ethical values to avoid one issue game because that leads to either/or decision-making by introducing multiple issues on the table (de Bruijn, 2008). We argue that as a private company, we cannot invest in

public infrastructure because there is a **potential risk of conflict of interest**. Companies might prioritize their own interests in using the IJssel River over the public good because they already have a share in the dike construction, leading to decisions that benefit the company at the expense of the community. Besides, transportation companies can execute other forms of corporate social responsibility (CSR), such as compensation to improve IJssel neighbourhood farmers' well-being. **Our strategy succeeded** because, in the final recommendation, there is no share from the transportation company in dike heightening, and there is room for river investment.

3.3. Deliver Scientific Argument

Even though we have limitations in presenting our model's result in the debate, we attempt to convince all actors about the importance of dike heightening compared to room for river with backup from previous scientific research such as:

- Research by Klijn et al. (2018) shows that dike heightening provides a **direct and reliable** method for protecting areas from high water levels. Dike heightening has a proven track record in many countries, offering a straightforward way to increase flood protection without requiring significant changes to land use or river morphology
- cost-benefit analysis by Kind (2014) indicates that dike heightening can be more **cost-effective** in the long term compared to creating additional space for rivers. This analysis takes into account the costs associated with land acquisition, relocation, and environmental mitigation necessary for the "Room for the River" projects.
- Dike heightening is more **practical** than the 'room for the river' approach because it allows simultaneous implementation with embankment regular reinforcement since the embankment fragility is crucial in determining flood risk (Klijn, 2012).

As mentioned above, 4 out 5 dike rings are heightened. Therefore, our strategy is successful.

4. Decision Making Behavior

There are three main behaviours that we performed throughout the decision-making process:

4.1. Interactive Decision Making

During the negotiation stage, we actively corresponded with Rijkswaterstaat, the Environmental interest group, Gelderland Province, Overijssel Province, and Waterboard. The main motive for **involving stakeholders** in interactive decision-making is to improve the quality of decision-making by using the information and solutions of various actors (Edelenbos & Klin, 2006). This strategy is very useful in our case because by communicating with Overijssel Province, we know that they are highly in favor of dike heightening compared to RfR because they have budget limitations.

Besides, acknowledging their interest helps us to form common goals that create a win-win solution. We are trying to be transparent with other actors when delivering important information. However, we also notice the boundaries, such as not telling them that we have special connections in the Dutch court system because this information leads to distrust from other parties. It is crucial to maintain an

interactive strategy in decision-making because it ensures that diverse perspectives are considered, fostering more comprehensive and inclusive solutions.

4.2. Consistent

Policy consistency could be a valuable strategy for governments to gain legitimacy and strengthen successful implementation (Engen et al., 2018). Therefore, starting from the first debate up to the final one, we consistently uphold our interests in dike heightening and do not participate in the joint investment. **Consistency also helps to avoid contradicting arguments** from our side, which opponents can exploit to undermine our credibility. Moreover, a steady and coherent argumentation strategy can help to build trust with the audience, showing that our position is well thought out and resilient under scrutiny.

4.3. Evidence-Based Perspective

In order to persuade all actors of the importance of dike heightening, we use scientific evidence that was mentioned in the previous section. Scientific research can help address political questions and issues, especially multidimensional issues (Edler, 2020). Scientific argument is important in decision-making because it helps to remove subjective biases and emotions from the negotiation process, allowing parties to focus on logical reasoning and verifiable facts. Moreover, presenting facts and data from scientific research builds trust and shows the reliability of our claims.

5. Potential Risks on Our Strategies

Our tension management strategies encounter several risks as follows:

5.1. Open for Negotiation

- Stakeholders may misunderstand openness for negotiation as a lack of commitment or clarity on objectives (Coughlan et al., 2003). To overcome this risk, we attempt to be consistent in our standing during the negotiation and confident in upholding our interests.
- Difficulties in finding mutually acceptable compromises potentially lead to prolonged negotiations or deadlock (Mansbridge & Martin, 2013). We addressed this risk by setting up the BATNA that still meets the transport company's interest in maintaining the overall water level.
- Being too open may weaken our bargaining power (Hou et al., 2019). Even though we try to be transparent with other actors, we are fully aware of the boundaries, as mentioned earlier, to keep their respect and our credibility as one of the actors.

5.2. Raise Multi-Issue Game

- Managing multiple issues concurrently can overwhelm the negotiation process, making it difficult to prioritize and address critical concerns effectively (Bazerman et al., 1998). Therefore, we only put this strategy as a diversion when they request our investment and keep the main topics as the primary focus.

5.3 Deliver Scientific Argument

- Stakeholders may **challenge the scientific data presented**, leading to disagreements or distrust in the validity of the argument. Therefore, we are **careful in selecting literature** to support our standing based on its credibility and reputation
- Difficulties in finding the related research that supports our argument in promoting dike heightening. To overcome this risk, we expand search parameters to include related fields or disciplines that may offer relevant insights. Sometimes, adjacent areas of study or interdisciplinary research can provide valuable perspectives.

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