

Evaluating meta-governance as a guiding principle for municipalities to develop a climate-proof urban area: a case study of the municipality of Delft.

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Abstract:

Climate change demands the development of climate-proof urban areas. Municipalities are responsible for adequate developments but the municipalities cannot achieve this alone. Therefore, municipalities have to cooperate with other actors in their network for contributions to a climate-proof urban area. The steering by government actors to coordinate and facilitate as a network actor asks for a different role than top-down steering. The meta-governance approach provides guidance to coordinate and facilitate shared developments with network actors. A case study was used to analyse a local municipal project of the municipality of Delft to evaluate whether the meta-governance approach is suitable. The case study showed the role of the municipality as a meta-governor with a mix of meta-governance techniques which contributed to a project with shared execution of adaptation measures. Further research should focus on more complex and regional projects as well as more case studies to test the general applicability of meta-governance.

Keywords: *Meta-governance, municipal role, climate-proof urban area, case study*

1. Introduction

Over the past years decentralization in the Netherlands resulted in more responsibilities for municipalities without an increase in income. One of the responsibilities concerns the development of the public area. This public area is under pressure due to the claims for different functions such as electricity infrastructure, sewage system, (public) transportation and its social function (Dhar & Khirfan, 2017; Spaans & Waterhout, 2016).

Climate change causes a challenge for municipalities to ensure the public area can cope with the effects of climate change such as increased heavy rainfall (Dunn et al., 2017). The average rainfall increased with 26% between 1910 and 2013, and the KNMI points out the trend in observations that the amount of rainfall will increase with 12% per degree Celsius increase due to climate change (KNMI, 2015). Especially in dense urban areas heavy rainfall causes flooded streets and damages to

property. On the 23th of June 2016 extreme rainfall caused an estimated damage of 20 million euros alone in the Randstad (Nu.nl, 2016).

Next to the increase of responsibilities there is the government paradigm shift. The paradigm of government intervention is shifting towards letting the market itself develop plans and contribute to the public area (Alexander et al., 2016). Therefore, this paradigm shift leads to an increased number of actors in development and increases the complexity of coordination for the municipality (De Bruijn., 2010). Since the municipality remains the final responsible actor, it has the challenge to govern the network of actors in development. Hence, this coordination problem and the current dominant institutional characteristics in the Netherlands result in a network problem for municipalities (Francesch-Huidobro et al., 2016).

When it comes to dealing with the effects of climate change the network coordination becomes even more difficult. Short term actions should lead to a long term climate-proof urban area but it is not clear who is responsible and thus should invest in a climate-proof urban area (Frantzeskaki & Kabisch, 2015). Additionally, municipalities own the largest amount of surface, but not all measures for a climate-proof urban area can be implemented in the public area. Hence, other private areas are needed, whether these are owned by citizens or private organisations.

In the literature, network governance is indicated as a form to deal with the before mentioned cooperation and coordination issues. Meta-governance is the way how the form of network governance can be governed, in other words, 'governance of governance' (Molin & Masella, 2016). Meta-governance is intrinsically linked to network governance which aims to coordinate network governance (Hajer, 2010). In the literature review by Molin & Masella (2016) it is indicated that network governance was mostly researched in the Netherlands based on its conceptualisation and dimensions whereas the Danish school focused on meta-governance of these networks. It was also noted that despite the growing attention to network governance and meta-governance, the literature on these topics are still very fragmented. Hence, it will be interesting to evaluate the meta-governance approach in a Dutch network.

Furthermore, there has been only one case study research on meta-governance in the Netherlands which focused on regional infrastructure development (Zonneveld & Spaans, 2014). For municipalities to deal with the effects of climate change and to develop a climate-proof urban area it is interesting whether meta-governance is also suitable for

this purpose. So, in this paper a case study analysis of a municipal project to develop a climate-proof urban area is performed and tested if the meta-governance approach would be suitable. Additionally, Wilson et al., (2017) indicate that further research is needed on meta-governance at a local level on how private actors can participate and contribute to local developments. This leads to the following research question.

"In what way could the meta-governance approach assist municipalities to develop a climate-proof urban area in cooperation with other network actors?"

This paper is structured as follows. Section two provides the theory on meta-governance. In section three the method to acquire the data for the case study, and case study selection is explained. In section four the case study results are presented. Finally the conclusion and the discussion are given.

2. Theory on meta-governance

Meta-governance is an indirect form of governing through various processes of self-governance (Derkx & Glasbergen, 2014). *"Enhancing coordinated governance in a fragmented system based on a high degree of autonomy for a plurality of self-governing networks and institutions"* (Sørensen, 2006, p. 100). The operational implication of meta-governance is effected through contracts, result management, management according to objectives and financial frameworks (Sehested, 2009).

Meta-governance can be used by all levels of government therefore, suitable to apply on a local and regional level by municipalities and provinces, but it is also suitable for governments to operate above their government level such as a municipalities to operate on a regional scale (Ziafati Bafarasat, 2016).

2.1 Meta-governance techniques

In general there can be identified four techniques of meta-governance which are summarized by Sehested (2009, p. 248):

"The first is the political and economic framing of network governance. This could take the form of regulation through political goals and visions, allocation of financial and other resources to network activity, or framing through the building of common discourses and narratives in the governance situation. The second type of meta-governance is network design, and can involve decisions regarding who ought to participate, how networks and processes are structured, and so on. The third type of meta-governance is network management. This concerns the regulation of tensions, resolution of conflicts, and management of unequal resources in the networks (Klijn & Edelenbos, 2007). Finally, the fourth meta-governance technique is network participation where politicians and planners can directly influence the discussions and decisions made in the networks (Sørensen, 2006, pp. 110–113)."

The four meta-governance techniques can be divided in two categories of 'hands-off' and 'hands-on' where the former is used in the first and second techniques and the latter for the third and fourth techniques (Sehested, 2009). 'Hands-off' is seen as the meta-governor who is not in direct contact with the actors whereas 'hands-on' is seen where the meta-governor is supporting and facilitating the actors and direct interaction is applicable (Sørensen, 2006).

2.2 Meta-governor

Meta-governance can be performed by a meta-governor and it is not defined who will take this responsibility as every government level can act as a meta-governor. Provinces and municipalities are seen as good meta-governors since the complexity of governance between the local and provincial level, and decentralized decision making (Zonneveld & Spaans, 2014).

Within municipalities it is argued that the urban planners will be suitable to take the role of meta-governor. This 'hybrid planner' is identified by Sehested (2009) and can take the roles as professional strategist, manager, market planner and process planner all necessary in spatial planning. Sehested also argues that the practice of planning is pre-eminently connected with meta-governance because of the plurality of values, objectives, plans and development is brought together in urban planning. However, the role of the hybrid planner as meta-governor will be limited to network framing since governing is also a matter for politicians and thus two types of meta-governors can be expected. Meta-governance is foremost a way of structuring decision making processes in networks where every actor has responsibilities (Bentley et al., 2012).

2.3 Barriers with meta-governance

The effect of heavy rainfall on the public area does not only affect the municipality. It has to deal with other administrative authorities as provinces and water boards who are needed for shared solutions. For improvements in the public area consensus between network actors is needed. This consensus is formed through the process of negotiation and renegotiation and should be steered or guided in some way (Francesch-Huidobro et al., 2016). De Graaf & van der Brugge (2010) indicate that the institutional mechanisms to realize, operate and maintain these multi-

actor consensus is lacking. Also, Frantzeskaki et al. (2014) state that the question is raised how much complexity can be dealt with through meta-governance with the amount of uncertainty in the future.

Furthermore, in the European research program for regional integrated strategies in Europe (RISE) four barriers for effective meta-governance were indicated: influence of government bodies from outside the governance network, hierarchical conditions that have influence on the outcomes, how processes are embedded and the use of instruments.

3 Method

As indicated, this paper presents a case study to test the applicability of meta-governance on a Dutch case at a local level in developing a climate-proof public area.

Study area

For this case study a municipality is chosen which is comparable with other municipalities. In the Netherlands there are 388 municipalities with a population range between 1500 and 850.000 (CBS, 2017). Since there are a lot of small sized municipalities the preference is a middle sized municipality. A medium sized municipality which is easily accessible is the municipality of Delft. This municipality has just finished a project in 2016 which focused on developing a climate-proof public area. Furthermore, this project was different since the municipality operated as a network actor and shared execution of plans was reached with network actors.

Data gathering

The previous mentioned project at the municipality of Delft is referred as project green blue. This project consisted of eight stakeholders representing different actors in the municipal network. In figure 1 the stakeholders are displayed including their

main interest or task in the project. By means of semi-structured interviews the stakeholders were interviewed to answer a set of pre-defined open questions and to keep the opportunity for additional information. In appendix 1 the summaries of the interviews.

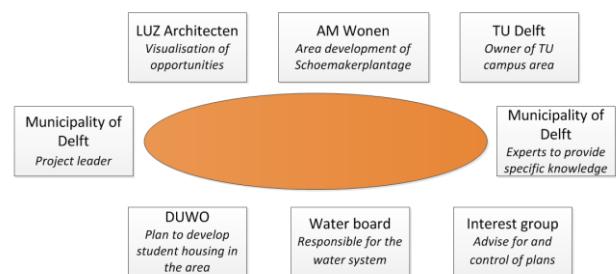


Figure 1: Stakeholders and their interest in project green blue

4 Case study results

4.1 Case description

The project green blue started in 2011 and was finished at the end of 2015 (LUZ-Architecten, 2016). The reason for the project was a conflict between several actors which started in 2003. Eventually this led to one of the decisions by the Council of State that an Environmental Impact Report, in Dutch Milieu Effect Rapportage (MER), was needed (Raad van State, 2009). The MER-procedure was followed which includes rules and regulations on flora and fauna. To seize the opportunity the municipality formalized cooperation in a project with the purpose to improve the quality of the area. During the project opportunities were identified which could be effectuated by taken specific measures. These opportunities were formalised in the opportunities map for the whole TU-area. Furthermore, the stakeholders agreed through the process on who would execute specific measures.

Ref.	Function	Institution
A	Chair	Interest group 'TU Noord'
B	Real estate developer	FMVG (real estate of TU Delft)
C	Project manager	DUWO – housing association
D	Architect	LUZ Architecten
E	Project leader	Municipality of Delft
F	Advisor	Water board Delfland
G	Project manager	AM Wonen – real estate developer
H	City ecologist	Municipality of Delft

Table 1: Stakeholders at project green blue

4.2 Findings on the project green blue

This section presents the findings of the project on several aspects.

Process structure

Since the stakeholders stood before each other in court the start of the project was essential for them to understand that cooperation was necessary to come to a solution [H, F]. The structure of the process was designed by the project manager. First the starting assumptions and mutual goals were discussed. These goals were tangible which ensured direction in the process [B]. Furthermore, time was invested in building the relations and identifying and communicating each other's interests [E]. Also, it was indicated that the discussion of opportunities was intended to investigate the area and define possibilities, not leading to strict deals [A, B]. The negotiation led to the right configuration of translating technical conditions for development into practice [C].

Additionally, a sense of urgency [E] and the framing of improving liveability [D, E] ensured cooperation. At last it was important that there were two incentives for cooperation, on the one hand the progress report and on the other hand the zoning plan which needed to be changed but only with the support of all stakeholder [D].

Relationships between network actors

Good cooperation is essential in making a project a success therefore, the mutual relationships between stakeholders were very important [A]. The role of the project leader was indicated as crucial on this aspect for bringing and keeping the stakeholders at the

table [A, B, D,]. Enough time was invested to build trust, explain development conflicts and resolving these [A, D, E, F, H].

It is essential that actors at the negotiation table have the right mandate [E]. The larger an actor, the more difficult it is to deal with all the different interests one organisation could have [B]. When this fails within an organization, but the rest can find the support it could lead to friction and conflicts in the process and affects the mutual relationship [C]. It is important to bring equal input in the process or the mutual relationship is under pressure [A, E, F].

Municipal role

Every stakeholder indicated that the role of the project leader of the green blue project was essential in making the project a success. Especially in keeping every actor at the negotiation table and to invest in the open attitude of the process, which resulted in good and substantive discussions [A, B, D, F]. Furthermore, the municipality had two functions in the process, on the one hand to steer and lead the process and on the other hand to provide specific knowledge and explain why or why not a measure could be implemented [E, F].

The municipality acted as a network actor which led to cooperation building instead of top down control [D, E, H]. However, without political support the project would not exist. Therefore, it is very important for the municipality to have internal consensus to be able to allocate means to the project [A, B, E]. Furthermore, the non-municipal stakeholders indicated that the municipality should be the prima initiator and coordinator of such projects because it functions as the central point for coordination when it comes to development in the public area [A, D, F, G].

Responsibilities of others

In cooperating with other actors the municipality operated as a network actor which implies that there are responsibilities for the other involved actors as well. These actors indicated that the responsibility lies in advise and control of plans [A], or to provide the translation from ideas into visualisations [D]. Also, some actors can be included due to their knowledge or experience which makes it a valuable addition at the negotiation table [F]. Furthermore, some actors can be included in the project because of their potential for contribution regarded their ownership of public area [B] or the ambitions to develop real estate [C, G].

Important lessons

Derived from the interviews the most important lessons are described. Effective communication, to clarify expectations and assure effective discussions. Respect each other, create mutual understanding, feel free to discuss and reflect on plans. From the beginning the interests of each actor should be known. This approach will facilitate substantive discussions and respectful reflections. With the use of sketches and drawings the imagination was stimulated. With the result that actors were incentivised to contribute to the opportunities. Discussing concrete measures takes the substantive discussion much further than discussion more generic visions and ambitions. This makes it more tangible for everyone and feeds the feeling that the invested time will lead towards improvement of the quality of the area. Having the right actors at the table with the right mandates to act and implement the agreed upon measures. An interest group could contribute less but can make sure there will be acceptance on plans and prevents opposition from actors. Make sure there is enough time to discuss the opportunities and plans, also to invest in trust and relationship.

4.3 Relation to meta-governance

All stakeholders indicated that the municipality should be the prime starter and process manager of such projects because of its task with the zoning plan, the overview the municipality has in an area, the opportunities to take it on broader subjects e.g. social policy and traffic improvements. Thereby other actors are more reluctantly to take initiative, the awaiting attitude can be due to limited resources.

Three factors were identified in the interviews what the municipality should do, which are alike with the notion of meta-governance: 1) Coordinate and facilitate negotiation, 2) Communication of responsibilities and 3) Set frameworks and conditions for development.

The identified role and factors in the case study clearly indicate that the municipality took up the role as meta-governor. The framework and condition setting for developments is alike with the second technique of a hands-off approach which focuses on design of networks and rules and regulations. Setting boundaries on development is very top down but needed for network actors to know how to comply with developments as interviewees indicated.

The third technique, a hands-on approach of network management is focused on managing the networks, as the municipality did in the project green blue by coordinating and facilitating the negotiation process. Which includes the communication of responsibilities to the other involved actors what is expected from them.

Lastly, the municipality was directly involved in the decision making process in the project green blue because of its project leader and the extra addition of municipal actors to provide information. This is seen as the most

direct form of meta-governance which is the fourth technique as a hands-on approach.

5 Conclusion

For this paper the research question was as follows: *"In what way could the meta-governance approach assist municipalities to develop a climate-proof urban area in cooperation with other network actors?"* The conclusions are based on the case study analysis of the project green blue in the municipality of Delft.

The case study showed a project to improve the quality of the public area which had as extra benefit that it became more climate-proof. The municipality was the initiator of this project and operated as a network actor. This new way of coordinating and steering developments was successful for several reasons. Private organizations contributed with the execution of measures. The process resulted in good mutual relationships and understanding which resulted in the continuation of cooperation. Broad acceptance was created through the right stakeholder involvement by the municipality.

The way the municipality acted in the project green blue is similar to the description of a meta-governor. Hence, the meta-governance approach can assist municipalities to develop a climate-proof urban area in cooperation with network actors. A mix of meta-governance techniques was used. Through the network design (second technique) the project was shaped, which actors could participate, the purpose of the project, the designed process stages. Through network management (third technique), tensions and conflicts were regulated. Lastly, network participation (fourth technique), municipal experts were involved at the negotiation table to provide specific knowledge. Very important was the way the municipality coordinated and

facilitate discussion to develop high quality plans instead of demanding through a top-down approach.

Since this research was the first case study to explore the role of meta-governance in a local project in the Netherlands, three recommendations for future research are given. First, this research focused on one successful project. It is recommended to investigate more local projects and identify success or failure factors to contribute more to best practices of meta-governance. Second, this research focused on a project, but the municipality develops the urban area also through maintenance cycles. It is recommended to investigate in the meta-governance approach to use maintenance cycles as a window of opportunity to develop a climate-proof urban area. Third, this project was foremost a local project with some complexity with the involved actors. However, it is recommended to investigate in larger projects on a regional or national scale where there are more involved government levels since meta-governance can be used by other governmental actors.

6 Discussion

This research focused on a local municipal project in Delft. So, the conclusions are based upon the interviews of the eight involved stakeholders. Although the notion of meta-governance is very well applicable to this project it is difficult to generalize. As discussed, more case studies should give a better understanding. Furthermore, the generalization to other countries is not justified since the Netherlands has a different planning practice than other countries such as Germany or Great Britain. The known complex government structure in the Netherlands and its way of consensual decision making is hardly compared to any other country.

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