



# Evaluating local and national public foresight studies from a user perspective



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## ABSTRACT

In this paper, we discuss the opinions and experiences of local and national Dutch policy-makers in applying foresight methods within the context of strategic policy processes. Motives behind the selection of foresight methods, the timing involved in using insights from foresight studies in strategic policy-making processes, the added value of foresight methods, and the barriers and leverage points experienced by policy-makers are described and compared at the local and the national level. Different insights are related to different activities in the policy cycle, i.e., agenda-setting, policy preparation, decision-making, implementation, and evaluation. In most evaluative studies on foresight, the added value is addressed from a 'supply-driven' point of view, by which we mean from the point of view of experts on the production or methodology of foresight studies. In this paper, the evaluation is approached from a demand-driven perspective, in other words, from a user perspective – i.e., that of policy-makers who have applied the results of foresight methods in policy-making processes. The insights presented in this paper are based on recent policy document analyses, in-depth interviews, and questionnaire research involving users in the local and national policy domain.

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## 1. Introduction

Government organisations design policies for a future full of uncertainties. Policy-makers who focus on long-term policy issues can use foresight methods during strategic policy-making processes to arrive at a better understanding of the future and its uncertainties, and to design policies that are more future-proof. Knowledge about the future can be gathered, structured and applied in different ways by using various foresight methods (see, among other things, [1]). In this article, we focus on the use of foresight methods, with special attention to scenario analysis, which involves the exploration of alternative images of the future, including the pathways that describe and explain how events and developments in the contextual environment are connected. In addition, scenario analysis is the systematic analysis of a variety of uncertainties combined into distinctive stories about the future (see [2]). In this article, the consideration of scenario analysis as a method includes both the development and the use of scenarios. We are interested in finding out (1) how scenario analysis – as a

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method – is used in the creation of strategic policy and (2) what policy-makers consider to be its added value. In various studies, the added value for strategic policy-making processes has been emphasised: the use of the scenario analysis method makes policy-makers more aware of the future, future changes and the policy implications, and government organisations learn to anticipate by developing more robust policies, etc. [2–5]. We examine whether these theoretical assumptions correspond to the experiences of policy-makers in their everyday practice. According to a recent study by the European Environmental Agency [6], there is insufficient empirical evidence of the added value of scenario analysis in general, and in particular in strategic policy processes in the public domain. In this paper, we argue that, by paying more attention to the user perspective in the public domain, we may be able to gain insight into the value added of scenario method [6] [7].

## 2. Research approach

### 2.1. Research questions

In setting up and analysing the cases, we adopted a demand-driven approach, focusing on the end-user perspective – i.e., that of policy-makers who have applied scenario analysis – and using their perceptions as a measure of the perceived added value. We draw a distinction between experiences at a local and at a national level (within the same country), to increase our understanding of possible similarities and differences, taking the different responsibilities and tasks of these levels into account. In a sense, this amounts to determining whether the prefixes ‘local’ and ‘national’, which are often used in literature, do indeed apply.

The aim is to increase insight into topics such as the level of acquaintance and experience with scenario analysis methods in strategic policy-making, the motives policy-makers have for using the scenario analysis method, and the perceived levers and barriers. We combine these insights with the different elements or phases of a policy cycle: in which phase(s) of the policy cycle is the scenario analysis method used, and how and in which phase(s) is the added value perceived. With respect to the policy cycle, we draw a distinction between the phases of agenda-setting, policy preparation, decision-making, policy implementation and policy evaluation (see [8]). Indeed, according to literature, scenario analysis methods can be used in the different phases of the policy cycle [1,2,4,6,9–11]. Because we are not only interested in the impact of using scenario analysis methods in the different phases of the policy cycle, but also in the factors that affect the potential impact on the policy process, we look at the perceived levers and barriers as well. We focused on the following research questions at the national and local levels:

- How familiar and experienced are policy-makers with the use of scenario analysis methods?
- What are their motives for applying scenario analysis methods?
- How are the results used in the strategic policy process, and in which phase(s) specifically?
- What, according to policy-makers, is the added value of using foresight methods in strategic policy processes?
- Which levers and barriers do they perceive when applying foresight methods in strategic policy processes?
- What are the similarities and differences in the application of foresight methods to strategic policy processes between the local and national level?

These research questions imply a clear focus on policy-making in the public domain (see, for example, [15]) and on the perceptions of policy-makers, because they may be involved in the development phase of scenarios as well as the usage phase of a foresight study.

### 2.2. Methods and data sources

We compared experiences at the local level with experiences at the national level. At the local level, we adopted a case-based approach to increase our understanding of the key issues involved. Four case studies were analysed, focusing on different settings of strategic policy-making in the Netherlands. Each case involved experiences with the application of scenario analysis methods at a regional and/or local policy level (including municipalities and regional authorities). The strategic policy processes in the Dutch municipality of Overschie (a district of the municipality of Rotterdam), the Dutch province of Limburg, the municipality of The Hague and the province of Overijssel were assessed. The cases were selected on the basis of whether they involved the use of scenarios for strategic policy-making and whether there was sufficient willingness to cooperate with the study and access to civil servants for interviews and other data sources.

The case involving the **Province of Limburg** concerns the use of two scenario studies, each in the context of the development of a strategic environment plan (see [16,17]), that was developed for the first and second Limburg environment plan (covering a long term vision and strategies for the entire province) respectively (see [18] and [19]). In the development process of the first environment plan, qualitative scenarios were developed by an external organisation in a broad participatory process. A project team of the Provincial organisation monitored the scenario analysis project. In the development of the second plan, quantitative scenarios were produced. Policy-makers from the provincial organisation were involved more thoroughly in the development of the scenarios. The empirical evidence for this paper is based on three in-depth interviews with policy-makers who were closely involved in the development of the scenarios, the analysis of the scenario studies, and the environment plans.

The **Overschie** case involves the development and use of a qualitative scenario analysis as a strategic building block for a new strategic coalition programme for the new governing board [20]. In-depth interviews were conducted with the four members of the municipality management team and with five civil servants who were involved in the scenario analysis.

The case of **Trendbureau of Overijssel** includes different foresight exercises for strategic policy processes of city councils and the provincial organisation itself, focusing on different policy themes. The Trendbureau is an independent organisation that is embedded in the provincial organisation of Overijssel and carries out foresight studies for local policy organisations and organises debates and workshops to increase awareness about possible future changes. We used an independent evaluation that was conducted in 2010 by the University of Twente [21], based on interviews with 21 politicians and civil servants and a document analysis. Furthermore, one of the co-authors of this article interviewed the coordinator of the Trendbureau.

In the case about **the Hague**, a scenario analysis was carried out by 16 civil servants of the Department of Urban Development, which developed four generic qualitative scenarios for the city of the Hague [22]. The scenarios were used to reflect on the strategies of the city council's urban development Investment Programme. Using a questionnaire, 16 civil servants evaluated the development process of the scenarios. The two project coordinators of the Investment Programme were interviewed after the development of the scenarios.

In all cases, the scope of the analysis was the future of a territorial entity, including all of its functions, with a time horizon of at least 10 years. At the local level, a document analysis was combined with interviews with policymakers. The document analysis focused on documents regarding the scenarios and related strategic policy documents. The insights from this analysis were juxtaposed with the insights from the interviews. Because we were aware of the potential bias of in-depth interviews (for example, a retrospective attitude may suggest a process more linear than it actually was), we focused especially on the consistencies between the document analyses and the in-depth interviews. In the interviews, we used open questions, to gain a broader understanding of the issues mentioned in the research questions. We compared the findings of the case studies in the local public domain with two studies on the use of foresight at a *national* level (see [23,24]), with the aim of making clear to what extent the findings are indeed similar at a local level and what the potential differences are between the local and national level.

The two studies that examined the national level mainly involved semi-structured interviews with civil servants involved in strategic matters and with the users and commissioners of foresight studies. The first study conducted by the authors examined how Dutch departments use foresight to develop policy and strategy [23] ('policy foresight'). Thirteen interviews were conducted with strategists and policy-makers. The interviews consisted of two parts: (1) an analysis of what foresight means to the interviewees and (2) an analysis of the way policy and strategy processes take place. Although all thirteen ministries were involved, given the amount and diversity of (sub-)departments within each Ministry, the interviews were not representative of the Ministry in question in all cases. However, since the aim was to explore how foresight and strategy are related in policy processes at a national level, this was not a problem and we deliberately decided to interview all Ministries instead of focusing on one individual Ministry. In addition, a survey was conducted among civil servants involved with foresight, policy and strategy. The response rate was over 40% (120 surveys completed) with a large majority of the respondents (88%) working for Dutch Ministries (such as Justice and Agriculture, Nature and Food Quality). The other respondents worked for planning organisations and other organisations directly linked to the Dutch government and involved in long-term thinking and strategy processes.

The second study conducted by the authors at the national level [24] was aimed at discerning how Dutch departments use foresight to develop their own organisation ('organizational foresight'). In each Department (thirteen in total), one interview was conducted to obtain a broad view of how Dutch ministries deal with foresight and organisational development.

Both national studies were predominantly aimed at determining how policy-makers link studies of the future to policy development. Many interviewees referred to various projects and studies in which futures research was applied to policy and organisational development. This research approach is different from the research at the local level; in the local studies, the evaluation of futures research methods was considered predominantly in view of how they are used for and add value to policy-making, whereas the evaluation in the national studies the evaluation was more about how users applied these methods and how they valued these methods as such. Nevertheless, the findings at the local level can be put in perspective by comparing them with the findings at the national level, because in both analyses, our aim was to ascertain how futures studies methods are being used in practice by governments.

One of the authors of this article was actively involved in two of the four local case studies. In the The Hague case, the researcher trained the officials in the use of the scenario analysis method, while in the Overschie case, the researcher facilitated the scenario development and application process and was one of the authors of the scenarios. One of the authors conducted both national level inquiries that were used as data sources for this article. However, he was not involved from within the national government in the development and implementation of foresight methods for policy formation.

The initial results of the scan are presented in this article and will be elaborated in the coming years. However, the initial findings can already shed new light on the use of foresight methods and serve as a source of inspiration for new dialogues within the foresight research community.

### 3. Results

The insights from the local and the national case-studies are structured by the research questions.

### 3.1. How familiar and experienced are policy-makers with the use of the scenario analysis method?

In most cases, policy-makers at the local level are of the opinion that local organisations lack experience using scenario analysis methods. Especially at the level of city councils, it is hard to find examples of strategic policy activities using scenario analysis methods, and, even when scenario analysis is used, it is necessary to bring in external expertise. Some policy-makers mentioned that, when using foresight methods for the first time, it can be difficult to find out how these methods relate to other methods with which they may be more familiar (such as SWOT-analyses, benchmarks, trend analyses and sectoral prognoses).

By way of contrast, the national level inquiries showed that civil servants are relatively familiar with foresight methods, especially scenario analysis, which civil servants regard as their 'favourite'. The 'policy foresight' analysis showed that, in addition to scenarios (with which 99% of the respondents were familiar), most civil servants were also familiar with 'future essays', quantitative futures research, the Delphi method, game simulations and future workshops. However, despite its popularity, civil servants often find it difficult to accept the scenario method, because some of them believe that the government can approach the future in a predictive manner, since it is able to steer society, and thereby its future, to a considerable extent. This was illustrated in the 'organizational foresight' study, where only four out of nine studies were based on scenario thinking. However, in the different studies of the future in the 'organizational foresight' study, a more equal balance was found between expected, possible, and desirable futures, which was why both exploratory and predictive approaches to the future were adopted.

Especially at the national level, we see that foresight methods are performed in a participatory way, including external perspectives. Ministries increasingly call in external experts, both from the public and private sector, with the aim of gathering actual information to feed the scenario analysis, and to include representative and diverse perspectives. This means that an 'outside-in' perspective is increasingly being adopted, both from a content perspective and from a process perspective. The two national studies show that civil servants are increasingly knowledgeable about futures research methods, improving their ability to assess the quality of futures research projects that have been outsourced.

On the whole, we conclude that, at a national level, people are more familiar and experienced with foresight for policy-making purposes than at the local level. Nevertheless, at both levels, there are reasons for outsourcing foresight. However, at the national level, the motive is to increase objectivity, while at the local level, the motive is to bring in more outside expertise.

### 3.2. What are the motivations of policy makers for applying the scenario analysis method?

In all local cases, the main ambition was to use scenarios to raise awareness of a changing future and underpin new policies and visions. This motive is defined by Da Costa et al. [25] as the function of 'informing policy': the supply of anticipatory knowledge or 'intelligence', such as the dynamics of change, future challenges, risks and opportunities, strengths and weaknesses of the current system, visions for change, and possible options. The national 'policy foresight' study showed that studies of the future can be a source of inspiration for the development of new policy ideas, for agenda setting (i.e., deciding which topics will be relevant in the future), for picking up new signals (as a 'radar'), and, more generally, for formulating strategy and deciding what type of knowledge will become important in the future. The national 'organizational foresight' study indeed focused more on organisational issues, such as how to cooperate extensively with other (government and non-government) organisations and how to reposition the organisation in a fast changing society.

When we compare these motives to the foresight functions proposed by Da Costa et al. [25], we see that the function of informing policy is leading, both at the national and the local level. Other functions mentioned by Da Costa et al. [25], such as facilitating policy implementation (i.e., interpreting policy and strategy development as a continuous reflexive learning process) and embedding participation in policy-making, were mentioned less frequently.

One of the differences between the national level and the local level is that, at the national level, the reasons for using the scenario method tend to be more diverse than at the local level. At the national level, motives range from gathering inspiration for new policies to formulating specific strategic policies, whereas the focus tends to be more on identifying possible future issues at the local level.

The motives mentioned at both the local and the national levels are mostly content-related. We can draw a distinction between content-driven and process-driven motives for using the scenario analysis method in the different phases (see also the distinction between process-oriented and product-oriented development of scenarios [10]). In the case of content-driven motives, we can distinguish between motives such as (see also [1,2,4,5,12]):

- raising awareness about the future (a more generic application): to gain a better understanding of the future of the issue at stake, the degrees of uncertainty involved, the coherence of future developments, the speed of change of developments, etc.
- setting the agenda (agenda setting phase): to put (new) policy issues on the policy agenda
- designing policies (policy preparation phase): to build argumentation for a long term policy vision and policy strategies
- innovating (policy preparation phase): to gather inspiration for innovative policy visions and policy strategies
- testing policies (policy preparation phase): to gain insight into how future-proof and future-oriented policies really are
- evaluating policies (after implementation): to identify signposts to be monitored in order to determine whether policy assumptions develop in accordance with the intended direction and velocity of change

When the main motive for using foresight methods is not necessarily a desire to realise a concrete policy end-product (such as an agenda, vision or strategy), the motive is said to be process-driven. Examples of process-driven motives are:

- stimulating interdepartmental dialogue
- gathering support for ideas and policies
- developing a common cognitive frame of reference (a common ground of understanding) (see also [5,11])

Finally, all motives have to do with learning about the future, at an individual and group level [13,14].

### 3.3. How are the results used in the strategic policy process, in which phase?

The results of the cases made it clear that, at the local level, it is still difficult to connect the insights of a scenario exercise to different steps in a strategic policy process. Scenario exercises themselves are mostly seen as a project, not as an ongoing strategic process. It appears to be a huge step for policy-makers at the local level to link scenario insights to the agenda-setting and policy preparation phases. An effort has been made, as part of this research, to identify some of the levers and barriers related to this linkage problem (see below).

The national level 'policy foresight' studies showed that foresight can play three different roles: (1) signalling new developments, (2) inspiring civil servants to come up with new ideas for policy and strategy, (3) setting the agenda. Agenda-setting seems to be important both at the local and national level. Apparently, when the time to make a decision comes closer, other issues and (political) interests start playing a role as well. Also, in the 'organizational foresight' study, the various foresight studies of the future carried out by the government departments are designed to form initial ideas and opinions about organisational change. They are not used to make decisions about different strategic options. Overall, futures research appears to play a role in the early phases of the strategic policy processes, agenda setting and (in part) policy preparation.

On comparison, it appears that the connection between the results of the scenarios and the strategic policy-process is closer at the national level than it is at the regional level. At the national level, the connection is especially close at the start of the policy cycle, although this connection becomes looser later on. At the local level, it seems to be difficult at any phase in the policy cycles to use the results of scenario studies in an optimal way.

### 3.4. What is the added value of using foresight methods in strategic policy processes according to policy-makers?

To a large extent, the added value of using the foresight method as perceived by policy-makers at the local level is process-related. Local policy-makers indicated that they saw the inter-sectoral approach as one of the main process-related benefits of using foresight methods. By the look of things, this inter-sectoral approach is unlikely to be taken for granted within local governmental organisations. The use of foresight studies stimulated mutual learning processes, allowing participants to learn from each other's perspectives on the future and providing them with a common foundation for future policies. In other words, the spin-off of the foresight exercise was the creation of a common understanding, which relates to the function of reconfiguring the policy system, as mentioned by Costa et al. [25], which in turn implies that foresight exercises can lead to the reconfiguration of a policy system and increase its ability to meet major challenges.

Nevertheless, there were also content-related benefits: foresight methods stimulate the user to take future developments and changes into account in a *structured* way. When these methods are not used and strategic policies have to be developed, future-related assumptions are made in an intuitive and opaque way. By using more systematic methods, policy-makers are forced to be transparent about the assumptions underlying their policies and clearly indicate the factors and/or developments they consider relevant.

Learning to think in terms of alternative futures was seen as an eye-opener, especially at the local level. In the past, some local policy-makers experienced a tendency among politicians to underpin policies by most likely scenarios. By using scenario analysis methods, they learned to look at alternatives, which was seen as a new way of thinking in most organisations. Another notable result from the local level case studies is that the respondents did not perceive the potential added value of foresight studies for policy innovation (see, also, the conclusion by [26]).

When we compare the local level results to the two national 'policy foresight' studies, it becomes clear that there is a greater focus on content at the national level, while local policy-makers are more process-oriented. In addition, we discovered a kind of connection paradox at the national level. On the one hand, the long lead time of strategy processes makes the use of foresight methods necessary. On the other hand, this leads to a certain level of disappointment, due to a lack of short-term implications. Generally speaking, it is difficult to assess the impact of a foresight exercise by making a direct connection with a specific strategic decision. As a result, the precise added value is often debated among users of national foresight studies (i.e., the civil servants at the different ministries). Nevertheless, there is a consensus among the same civil servants that there is a definite need to adopt a structured approach to long-term developments.

Finally, in all the local case studies, the policy-makers indicated that future exploration methods were used in a suboptimal fashion. In retrospect, they felt that insights from future analyses could be better connected to and embedded in on-going policy development processes. For example, combining insights from a future analysis with the development of a policy vision and various strategies was seen as a sluggish process. Scenarios are also meant to test the robustness and

flexibility of strategies, which was not how they were applied in most case studies (with the exception of The Hague), because of a lack of time or expertise. In the strategic policy documents, we discovered that this connection between scenarios and strategies is also (in part) lacking. Often, it was unclear how the insights from the foresight study were applied in the policy analyses. The same is true at the national level. The two studies of national foresight activities indicate that there is room for improvement, especially when it comes to connecting national foresight studies to decision-making.

### 3.5. Which levers and barriers do policy-makers perceive in applying foresight methods to strategic policy processes?

We tried to determine why foresight methods are not used to their full potential (as expressed, for example, by [25]) by exploring which levers and barriers were encountered by policy-makers involved in the in-depth interviews.

#### 3.5.1. Knowledge and skills in the organisation

An important barrier with respect to the decision to use foresight methods at all, especially at the local level, is the low level of knowledge and expertise, making it difficult for policy-makers to know which types of scenario analysis methods and scenario frameworks are suitable to the needs of the strategic policy process. For example, policy-makers who are inexperienced in the use of foresight methods may find it difficult to decide which type of scenarios to develop/use and whether to develop new scenarios or use existing ones. They have no clear guidelines that take the dynamics of the policy landscape and different stages of strategic policy processes into account. When people are not familiar with the scenario analysis method, steering elements are sometimes implemented in the scenarios, as a result of which the concrete added value of the scenarios for the purpose of visioning and strategy development can end up being obscured.

According to the policy-makers at the local level, another challenge is to know which information sources they should use to develop the scenarios themselves. Some policy-makers found it difficult to assess the quality of the sources of information regarding future developments. Especially when policy-makers are confronted with various sources of information that are contradictory in terms of the future developments they describe, it may be difficult for them to decide which sources to use and in what way.<sup>1</sup>

Furthermore, designing and facilitating the development and use of scenarios requires skills that were lacking when local organisations decided to conduct a foresight study for the first time. These skills are related to communicating the idea, results and added value of the foresight method for strategic policy-making, and facilitating the process of gaining support of policy-makers and politicians for the method and the results of the foresight process. Consequently, although external expertise was brought in, the perception at the local level was that, in addition to external assistance, policy-makers should also be able to implement and communicate the foresight method and insights themselves. In all case studies, external organisations specialising in foresight assisted in developing and/or applying the future analysis, by introducing the theoretical background of the method and/or by delivering content for the foresight analysis. One of the lessons learnt with respect to external assistance was that, ownership of the scenarios was unclear in some cases. Policy-makers indicated that they want to remain in control during the development (and use) of the foresight study. When this buy-in happens too late in the process, there is less internal support, and policy-makers and politicians will not experience the added value of the scenario analysis.

Generally speaking, civil servants at the national level find it easier to gain access to high quality information and determine the quality of the information, possibly because they are more involved in strategic issues than in operational issues in comparison to local civil servants. Also, because national policies are often the most important guideline for local policies, the national civil servants have an interest in making sure that they are well-informed about the relevant stakeholders and issues, which explains why, at this level, the necessary skills are better developed than at a local level. To summarise, national level policy-makers seem to be better equipped to conduct foresight studies than their counterparts at the local level.

#### 3.5.2. Timing of the foresight study

Both at the local and national level, policy-makers indicated they consider the timing of a future study to be a crucial success factor when it comes to making optimal use of its results. The optimal timing is related to the reason for conducting a future study. If it is to increase awareness about the future and inspire agenda-setting, the timing of the scenarios will be different compared to a situation where the motive is to test policies by means of scenarios (the latter will take place at a later stage in the policy process). One of the policy-makers said that “(f)uture studies should match the biological rhythm of strategic policy processes in local and regional policy contexts”. As was highlighted in the analysis of the *Stuurgroep Toekomstonderzoek* (Steering Committee Future Research) [27], foresight studies work better when combined with policy processes rather than as a stand-alone process.

Most local policy-makers indicated that the foresight process took more time than they initially expected. This was due, in part, to the longer duration of the development phase, particularly the time needed to generate support and commitment among policy-makers (and politicians). Consequently, there was less time to learn from the foresight study in a strategic

<sup>1</sup> Particular issues arise in the case of quantitative forecasting models, which are often perceived as black boxes by policy-makers. In these cases, contradictory information may indeed emerge as a consequence of different assumptions across models.

way. Policy-makers were disappointed as a result of this, because it conflicted with the widely held belief that futures research methods are instruments that speed up the development new strategic policies.

At the national level, the duration of the process does not appear to be a major issue. Initiating new foresight processes just before a new Minister or Secretary is installed is seen as a good moment, because as a result civil servants are well prepared to discuss the new policies with the new Ministers and Secretaries. At the end of a cabinet period, there appears to be a kind of power vacuum, which enables civil servants to think and write about certain future issues that were deemed politically inappropriate by their previous political masters.

### 3.5.3. Organisational and cultural embedding

Another barrier has to do with the level of embedding of future-oriented thinking and acting. Two levels of embedding were identified: organisational embedding (especially at the level of operational structures and procedures) and cultural embedding.

In the local cases, policy-makers concluded that one of the key challenges with respect to organisational embedding is to find appropriate operational models and procedures to ensure that a strategic way of thinking and the insights generated by future analyses are integrated into the various strategic levels and sectoral departments of their organisation. The results of the analysis of local level foresight processes make it clear that policy-makers struggle with implementing future-oriented thinking and acting within the current organisational structures. They felt that the ambition of exploring the future in an integrated way could conflict with existing organisational structures, which are often sectorally organised. That is to say, the results of foresight studies are of course not necessarily bounded by organisational structures. For instance, possible future economic issues can be related to social and technological issues, while (local and national) governments are often organised along these thematic pillars. This makes it difficult for policy-makers from different government organisations to relate the results of studies of the future to decision-making and policy development, because they are bound to their own organisation.

On several occasions, interviewees at the local level noted that, to embed the paradigm of future-oriented policy-making successfully within their organisations, they would need to address and transform the existing organisational culture. Civil servants indicated that, in their view, the existing culture tends to have a short-term focus, which can clash with the long-term perspective of most foresight studies. Da Costa et al. [25] stated that a lot of effort and commitment is needed for policy-makers to switch from dealing with short-term issues towards a more long-term and holistic approach. Policy-makers feel that future-oriented policy-making can thrive in a culture where openness and innovation are encouraged and change is embraced rather than opposed. They also had the impression that future-oriented policy-making is by its nature a kind of well-informed policy-making. However, by contrast, the policy-related processes in which they are involved on a daily basis are characterised as processes of a more intuitive nature.

With regard to the level of embedding, local policy-makers mentioned that managerial commitment from the start of a future exploration trajectory is a crucial success factor when it comes to applying the results of an analysis. Expectations need to be managed at the beginning and throughout the foresight study, so that ownership and support for the methods being used and the results can grow. According to policy-makers, the challenge is to present and communicate a foresight study in such a way that it is recognisable for politicians and that it can also be translated into a meaningful analysis within a strategic context [29–31].

The analysis of the two national foresight studies also showed that, although the futures research processes are relatively transparent and rational in nature, the organisational embeddedness and (subsequent) use is not a fully rational process and depends on other factors, some of which are 'political' (e.g., the status of a certain Minister or Secretary in the cabinet) in nature, while others are more 'accidental' (e.g., a certain incident puts a certain topic on the agenda).

At the national level, government commitment was also emphasised, albeit with an interesting nuance when it comes to the interaction between the Ministry and Parliament: the "support at the top is a necessary condition, though not a sufficient one", as one interviewee put it. Although many Ministers were indeed quite fond of futures studies, Members of Parliament often argued that they should focus much more on short-term matters. It was also concluded that, at the national level, government commitment is not the only success factor. Indeed, many foresight studies were set in motion by politicians, making them the most important users of the studies. In many foresight studies, the role of the civil servants was to carry out the foresight study and let the politicians draw the conclusions. However, this also allowed politicians to ignore the foresight study, because not drawing conclusions means that there is no connection between the foresight study and the policy development process.

To summarise, at both the national and local levels, the environment in which futures studies are conducted is complex, and politically sensitive factors that can have a major impact on the way the results of the studies are used. Support from the (political) top of the organisation can be very helpful in countervailing these non-rational forces.

### 3.5.4. Leadership and confidence

According to the local level interviewees, the impact of a future study depends to a significant degree on who is involved. With regard to the initiator and coordinator, the success of the future analysis depends partly on their level of leadership. Policy-makers also indicate that leadership depends on the degree of confidence among colleagues with regard to the future analyses (for example because of the proven quality of their work); this success factor not only applies to the roles of the initiator and the coordinator, but also to the developers of the future study. It was also indicated, however, that leadership is

a fragile factor. If this 'foresight champion', i.e., the initiator and main developer of the foresight-study, should decide to leave the organisation, support for the project may diminish or vanish completely.

The national level analysis also shows that foresight is a 'human affair', meaning that, despite the importance and wide range of methods, the quality is also determined by the status, credibility and expertise of the people involved. National level results stress that the presence of a strong man/woman, task force or ambassador is required to make sure that the foresight study has an impact.

To summarise, at both the national and local levels, a kind of 'future champion' plays an important role in the development of the foresight process and its application to strategic policy-making. However, it would appear that these 'future champions' are easier to find at the national than at the local level.

#### 4. Synthesis and conclusions

We can conclude that the use of futures studies methods at the local and the national level differ, most significantly because of differences in the level of experience with foresight methods. At the local level, there is less experience with foresight methods: thinking in terms of alternative futures and taking longer-run uncertainties into account is a rather new area of expertise that is still not broadly incorporated into the workings and cultures of local policy organisations. There is evidence of learning-by-doing, as people explore and discover how to use the insights of foresight studies in strategic policy processes. At the national level, there is more experience, as a result of which foresight studies are incorporated to a greater extent in daily routines and have a greater impact on strategic policy processes.

The lack of experience at the local level can be related to some of the barriers mentioned above. In appropriate timing of the foresight study has been deemed a factor contributing to the failure to apply the insights of a foresight study. The same may apply to the level of embedding with regard to the organisation and the organisational culture; when there is more experience, the future-oriented way of thinking and acting has been embedded on a wider scale at the different levels mentioned above.

It is interesting to see that, at the local level, process-oriented effects of using foresight methods were emphasised, while, at the national level, greater emphasis was placed on content-related issues. There were also similarities with regard to the implementation of foresight studies and the use of foresight insights, for example the important success factors of leadership and confidence in the process. The same is true for the different reasons for using foresight methods in strategic policy processes, which may be explained by the fact that both organisational levels are related to each other from a governmental and political perspective. Both levels operate in each other's sphere of influence, although the national level arguably has more influence.

In the end, we can also conclude that, at both levels, the authors feel that foresight studies are not used optimally (see [32]). An important challenge has to do with connecting the outcomes of futures research to decision-making processes. Da Costa et al. [25] also conclude that foresight results can only be taken on board by policy-makers if they are fully in step with the policy-making process, in terms of their timing, cultural compatibility and usability. Decision-making practices have to be deconstructed in order to 'prepare the field'. According to Da Costa et al., it is very important to position foresight studies within the complex process of building and connecting to other activities, such as on-going planning, which are already in place.

Despite the similarities between the national and the local level, it is doubtful whether foresight is identical at both levels, and the prefixes 'local' and 'national' do not serve any purpose with regard to foresight studies. Different methods of foresight (for example different types of qualitative scenarios) are available, different reasons and motives for setting up a foresight study may be legitimate, different ways of using foresight studies are possible, and, finally, there are many different local and national government organisations, each with their own mandate, nature, structure, problems and opportunities. The national and local level foresight studies indicate that it is difficult to determine levers or barriers that are valid in every case, which is why a contingency view on designing foresight studies is highly recommended.

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