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The Rising Importance of the Goal Formulation Phase within Innovation Policy

Goal formulation processes within various types of Dutch innovation policies

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The Issue

The grand challenges of the 21st century and their wicked nature require changes in innovation policies and governance. 'Governance through goals' perspectives (such as mission-oriented innovation policy) are highlighted as a way to resolve these grand societal challenges. 'Governance through goals' perspectives are goal-setting policies that function by setting goals and then defining the instruments needed to reach them (Goetheer et al., 2018). Additionally, goal-setting for wicked problems requires the engagement of stakeholders outside the government to reach these goals (Binder & Tews, 2004). Therefore, another trend within governance is the shift from a more centralized and closed form of governance to a more collaborative form of policy-making that includes the private sector (Ansell & Gash, 2008). These shifts in governance change *how* governance is done and with *who*. These shifts increase the importance of understanding how the formulation processes impact the course of innovation policies. Therefore, this research focused on two research gaps: (1) how goal formulation can be effective and ensure the direction of innovation activities necessary to solve societal problems and (2) how formulation processes can impact the course of innovation goal-setting policies.

Research Design

This research focuses on three goal-setting policies within the Dutch government. The first is the topsectors policy, which includes the nine Dutch sectors with high economic potential. The second case is the climate agreement which consists of the Dutch goals needed to reach the Paris agreement (Rijksoverheid, 2019a). Finally, the last case is the mission-driven topsectors and innovation policy (MIP), the Dutch version of mission-oriented innovation policy (Rijksoverheid, 2019b). For these three Dutch cases, this comparative case study looks at the goal formulation processes and their influences on the goal characteristics.

Main Findings

First, a framework was built on the similarities between the three 'governance through goals' perspectives: mission-oriented innovation policy, national target setting and global target settings. By combining the three perspectives, four goal characteristics were established: striking a balance between ambition and achievability, enacting stakeholders, societal desirability and directionality. The framework and established goal characteristics provide the guidelines needed to direct the formulation processes towards a desired end-goal. Our findings confirm that the presence of these goal characteristics is important for goal effectiveness. This empirically supported framework provides a prescriptive guideline for formulation processes.

Secondly, the research findings highlight both the delicateness of formulation processes and how a multitude of internal and external influences may impact the goal characteristics and, as a result, the course of the goal-setting policies. This research combined evolutionary governance theory and the notion of the transition arena to establish a prescriptive framework of internal and external influences. The internal and external influences show that the design of formulation processes can positively or negatively impact the goal characteristics and thus, their effectiveness. *Table 3* shows an overview of all the internal and external influences found per characteristic. It shows that decisions concerning *how* formulation processes are done and with *who* can improve or hinder the processes.

Policy Implications

By combining multiple literature strands, this research established a guideline for policy makers on how to formulate missions and goals. Policy makers need to acknowledge the impact formulation processes may have and consider how to account for these. Investing more time and resources in the formulation processes could contribute to long term benefits.

This research recommends that policy makers focus on five aspects of the formulation processes. First, it is recommended that the formulation process begins with a thorough screening of necessary parties (that are needed to reach the set goals). A stakeholder analysis can help with inviting the right persons to formulate goals and thus, ensure the enactment of stakeholders (as representation leads to enactment). Incorporating the right stakeholders is necessary to gain and maintain their support and commitment. Additionally, if innovation policies are aiming to resolve societal problems it is recommended that civilians are represented in the formulation processes. Societal support is necessary for the legitimization of formulated goals addressing societal challenges and for facilitating implementation (Bengtsson et al., 2018; Wesseling et al., 2020)

Secondly, experience with goal-setting processes seems to stimulate goal formulation processes. In addition, in-depth knowledge about the problems seems to benefit the formulation processes, so investigating the present knowledge and experience within the formulation group is recommended. Actors who have previously formulated goals may help with providing a clear direction and actors who recognize current problems may help with framing the right direction.

Thirdly, after assembling the formulation group, it is recommended that scenario-building activities are incorporated. The mission-formulation group may benefit from scenario building, as it may allow them to properly visualize the desired end-goal. Furthermore, it helps to find potential side effects of the desired end-goal. Moriarty (2005) agrees with the benefits of scenario building, however, the process of scenario building can be complex and thus, Moriarty (2005) advises that a maximum of five scenarios be researched.

Fourthly, after completing activities focusing on scenario building, it may help to include an evaluation of relevant, former policy processes. Most innovation policies are built upon former policies. Therefore, making room for the evaluation of these policies and goals may ensure the learning aspect of path dependency. It provides an opportunity for policy makers to implement or remove certain aspects of former policy processes and thus, to build upon experiences from former (goal-setting) policies.

Lastly, throughout the entire formulation process it is recommended to stick close to a shared governance structure. The combination of equal decision making and reaching a consensus improves the feeling of ownership and thus, the enactment of the stakeholders present. It is recommended that policy makers create an open environment, reach consensus by equal decision making and limit the influence of powerful actors.

Further Reading

This policy brief is based on a Master Thesis (available here) written for Utrecht University and the Dutch Ministry of Infrastructure and Watermanagement. For more information, please contact the author lisamaramulder@gmail.com).

References

Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. *Journal of public administration research and theory*, *18*(4), 543-571.

Bengtsson, M., Alfredsson, E., Cohen, M., Lorek, S., & Schroeder, P. (2018). Transforming systems of consumption and production for achieving the sustainable development goals: moving beyond efficiency. *Sustainability science*, *13*(6), 1533-1547.

Binder, M., & Tews, K. (2004). Goal formulation and goal achievement in national climate change policies in Annex-I countries.

Moriarty, P., Batchelor, C., & Laban, P. (2005). *Using visions, scenarios and strategies within the EMPOWERS planning cycle for IWRM* (No. 4). EMPOWERS Working Paper.

Goetheer, A, van der Zee, F, de Heide, M (2018) De staat van Nederland Innovatieland 2018. Missies en 'nieuw' missiegedreven beleid

Rijksoverheid (2019a). *Klimaatakkoord.* Retrieved on 18 December 2019, from: https://www.rijksoverheid.nl/onderwerpen/klimaatakkoord/documenten/rapporten/2019/06/28/klimaatakkoord

Rijksoverheid (2019b). *Kamerbrief over missiegedreven Topsectoren- en Innovatiebeleid.* Retrieved on 18 December 2019, from: https://www.rijksoverheid.nl/documenten/kamerstukken/2019/04/26/kamerbrief-over-missiegedreven-topsectoren-en-innovatiebeleid

Wesseling, J. H., Larue, P., Janssen, M. J., Wanzenböck, I., Penna, C. R., Goetheer, A., ... & Hill, D. (2020). *Mission-Oriented Innovation Policy workshop series: Observations from workshop 1–Scoping an Agenda setting.*

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Table 1. Overview of the main results of this research by summarizing the effect of empirically and theoretically established influences per goal characteristic.

Characteristic	Factors found to be of influence:
Striking a balance between ambition and achievability	● *Presence activities analyzing the future:* scenario building is an important aspect of formulation processes as it helps with visualization of the desired end goals, leading to a positive influence on striking a balance between ambition and achievability. ● *Presence of integration*: activities to integrate and communicate between groups working on societal problems seems to have a positive effect on the characteristic of striking a balance between ambition and achievability, however the ability to do this seems to be missing. ● *Level of restrictions:* it seems that a low level of restrictions could lead to a higher level of ambition by providing the freedom to discuss different potential trajectories, measures and desired end goals. But, the opportunity of having no restrictions should be grasped and thus having low restrictions doesn't directly implicate a higher level of ambition. ● *Presence of fearful actors:* feeling afraid about the implications of the goals seems to create hesitance which impacts the level of ambition of formulated goals. In this research only governmental actors experienced this feeling of being afraid. ● *Risk-taking:* different types of actors seems to handle risks and thus level of ambition differently. A mix between risk seeking, bearing and averse actors is important as there are actors looking out for achievability and ambition. However, if there is a powerful risk averse actor present it seems to have significant negative implications on the level of ambition. ● *Governance path dependence and creation:* path dependence has a positive effect on achievability when it has a learning function. It can have a positive or negative influence on ambition, when path creation is accepted it can have a positive influence. When path creation is limited the freedom to differentiate from former agreements is restricted, which may have a negative influence on the level of ambition.
Enacting stakeholders	● *Elements process impacting enactment:* jointly creating a vision between public and private parties appears to decrease insecurities and thus increases the willingness to take risks. This seems to have a positive influence on the enactment of stakeholders. Secondly, slow phases during the formulation processes appears to lead to actors distancing themselves from the process and potentially leads to problems with the enactment of these actors. There are two phases which require extra attention of process supervisors. Thirdly, a driver seems to be an important actor leading to the enactment of stakeholders outside the formulation group. ● *Emotions and feelings:* feelings of commitment and ownership seem to be important for the enactment of stakeholders. There are different ways to ensure or lose commitment during formulation processes. ● *Power:* reaching consensus seems to be important for the enactment of stakeholders. If powerful actors overly push their own interests without reaching consensus, actors may not feel committed to reach the goals, and thus, this influences their enactment. However, a powerful group formulation supervisor can help with ensuring external activities to reach the goals. ● *Trust:* trust built by former interactions seems to have a positive influence on the enactment of stakeholders. For actors who know each other's interests and abilities it is easier to reach consensus. Reaching consensus will lead to a sense of ownership, which seems to benefit the enactment of stakeholders. ● *Heterogeneity:* representation seems to lead to necessary commitment from stakeholders. A troubling underrepresentation of civilians and knowledge institutes is found. Secondly, lacking experience and/or knowledge about formulating goals can lead to an unclear direction which appears to be hindering the enactment of stakeholders. ● *Size of formulation group:* large formulation groups (over 15 members) can hinder the formulation, which appears to have a negative influence on the enactment of stakeholders. As processes are slowed down, this seems to lead to actors distancing themselves from the process. It is not clear if and how a small formulation group may have impacted the enactment of stakeholders or other goal characteristics. ● *Governance structure:* a shared governance structure seems to have a positive effect on the enactment of stakeholders by creating an open environment to reach consensus and equal decision-making.
Societal desirability	● *Emotions and feelings:* governmental actors feeling afraid can use societal desirability as an excuse to lower ambitions. Lowering these ambitions can negatively affect the societal desirability of goals, as goals may be ineffective in resolving societal problems. ● *Trust:* it is uncertain if and how trust impacts societal desirability, as no clear answers were provided by interviewees. ● *Heterogeneity:* it remains unclear if the assignment given to the formulation group or the composition may impact the societal desirability of formulated goals. ● *Personal objectives:* no influence of personal objectives was found on societal desirability, however certain aspects of the formulation processes may have led to little room for an influence. ● *Presence/Absence potential side effects:* scenario building can help find potential side effects. Focusing on potential side effects may preserve the societal desirability of formulated goals.
Directionality	● *Presence/Absence actors:* when assembling the formulation group it seems to be important to have two types of actors present to ensure a clear direction of change. First, actors who have experience with formulating goals may help with providing a clear direction. Secondly, actors who know which problems need to be addressed by the goal and have sufficient knowledge about these problems. If these actors are not present the formulation group can incorporate other formulation members or let external parties research the problem. Prior to starting formulation processes it seems to be important to analyze the formulation group on current knowledge and experience with formulation processes in order to properly account for potential influences on directionality. ● *Personal objective:* personal objectives seem to influence the motivation of formulation group members. However it remains unclear if and how this motivation may have impacted the directionality of formulated goals. ● *Path dependence and creation:* former determined ambitions, goals and agreements seem to influence the directionality of newly formulated goals. This is normal when focusing on wicked problems which will be relevant for some time. It appears that a 50/50 balance of new goals and former goals is a suitable ratio. This allows room for path creation, but also ensures room for former goals which have not yet been resolved and still have the support of stakeholders.