
How can Mission Oriented Innovation Policies be applied in Nordic regions?

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“Local mission approach as a challenge based multi-level building block for sustainable development”

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Abstract

Today, we are facing several grand societal challenges. In recent years, the concept of Mission-Oriented Innovation Policies (MOIPs) has gained significant attention in political and academic discussions. MOIPs represent a supposed shift in innovation policy, focusing on addressing grand societal challenges and promoting transformative change. In recent literature a large consensus has been formed that successful implementation of the MOIPs require implementation at different geographical levels ranging from the European to the local levels. The local levels depend on place-sensitive perspectives at the both the vertical and the horizontal levels, however, exactly how remains largely unclear and, as of yet, up to the local levels.

This lack of empirical evidence has resulted in substantial criticism with a core critique being the risk of place blindness. This argument has been raised by several scholars who have argued for basing the MOIPs in the local context (Wanzenböck et al. 2020). A core feature of the argument is that applying a one-size-fits-all policies to innovation efforts is not feasible at best, and risk damaging regions by disregarding existing regional specificities and capacities (Tödtling & Trippl, 2005). This argument has also been raised in relation to MOIPs more specifically, where economic geographers have centred the discussion on the validity of MOIP by questioning its recognition of geographical variety in the approach, and whether or not sufficient geographical knowledge is accounted for (e.g., Coenen et al. 2015).

Morisson et al. (2023) builds on the same critique of place-blindness and argue that complex nature of the new generational of innovation policies aimed at solving societal challenges, poses challenges for less-developed European regions. They argue that these regions are more likely to be unsuccessful in the

implementation of MOIPs due to their comparatively lower institutional and governance capacities. In response to this challenge, Morrison et al. (2023) advocate for the adoption of a so-called Small Wins-strategy as a means to empower less-developed regions and involve them in mission-oriented efforts aimed at addressing location-specific societal challenges. The Small Wins-strategy centres on the implementation of small-scale, bottom-up initiatives driven by a shared mission to tackle complex and persistent problems. Tödting et al. (2022) also calls for the recognition that regions possess varying capacities for transformative change and challenge-oriented innovation. In response, they contend that the Regional Innovation System (RIS) approach needs a comprehensive re-evaluation to better inform the development of the next generation of regional innovation policies. It advocates for an alternative perspective on innovation that is inspired by recent advancements in mission-oriented and transformative innovation policies. This alternative perspective introduces the concept of 'challenge-oriented RISs' (CoRISs), which stands in contrast to traditional RIS interpretations. CoRISs embrace a more critical stance toward innovation, emphasize the direction of change, invite new innovation stakeholders at various territorial scales, and prioritize the practical application and scaling up of innovations within and beyond regional boundaries.

Recent literature has also argued that certain national contexts are not suitable for implementation of MOIPs, due to their more incremental-based innovation modes rather than more radical, science and technical-based innovation modes. These countries include countries like Scotland and the Nordic countries (Brown 2021). Brown (2021) critically assesses MOIPs, particularly in the context of the Scottish National Investment Bank (SNIB). It argues that the mission-oriented approach adopted by SNIB lacks clarity, transparency, and alignment with the Scottish innovation system's demands. This approach may lead to policy entrenchment, reinforcing existing weaknesses. Instead, the article argues for a "diffusion-oriented" approach better suited to break the "low productivity, low innovation equilibrium" in Scotland due to its incremental nature as well as a stronger focus on the Doing-Using-Interacting (DUI) innovation mode, which the author argues are more widely adopted in countries, i.e., Scotland and the Nordic countries, compared to the radical, scientific and technologically-based (STI) innovation mode more widely adopted in countries, i.e., the US and England, and which the author argues is the more prevalent approach for MOIP. Brown (2021) emphasizes the need for customized regional innovation policies that align with local innovation ecosystems, advocating for context-driven rather than mission-driven policies specifically in the low innovation intensive contexts, i.e., Scotland. One of the arguments raised in the paper is that the unclarity in objectives and implementation tools make it difficult to achieve territorial awareness in the MOIPs and that for low-innovation intensive regions and countries will benefit more from the capacity building that comes with the diffusion-oriented policies.

A diverging idea is that, to be successful, MOIP need to be spatially targeted to a specific context. Therefore, it is necessary for policymakers to acquire a thorough understanding of the geographical-specific context in which they are operating (Kattel & Mazzucato, 2018). The idea of spatial understanding is also present in the framework developed by Grillitsch et al. (2023). The framework aims at enabling regional policies that both foster sustainability and act as an innovation driver. Grillitsch et al. (2023) argue that to achieve this, there is a need to enhance institutional capacity for regional development strategies that can effectively navigate and balance multiple, occasionally conflicting, societal objectives. In a similar line of the literature Bugge et al. (2022) explore the role of regional innovation systems in mission-oriented innovation within the context of addressing grand challenges and transformative change. Using a case study of electrifying ferries in Western Norway, it highlights that the mission's success was largely attributed to leveraging existing regional resources, actors, and structures to create new economic opportunities. Lastly, some authors argue that successfully rolling-out of MOIPs requires engaging the local civil society the role of citizen engagement (Jütting 2020); Mazzucato & Macfarlane 2019, p. 25). However, there is little clarity about the tools needed to achieve this democratic goal.

Nordic countries are beginning to adopt MOIP-approaches at an increasing intensity. For instance, Sweden initiated with two pilot sectors, mobility and food, with a thorough process of stakeholder involvement to contribute to the framing and implementation of missions. This paper sets out to examine how different Nordic countries incorporate MOIP-perspective at different geographical levels. Empirical research is

necessary, first, to identify what characterizes existing innovation policies in different Nordic countries and regions; and second, to assess whether innovation policy is in fact moving towards the mission-approach, or if missions can be considered as an extension of, rather than a substitute for, conventional regional innovation policy as Hassink et al. (2022) suggest. We take point of departure in Finland, Sweden, and Denmark, three countries that share many similarities in their innovation structures, but who also have had been identified as having significant differences (e.g., Finland has pursued predominantly a science-driven strategy; Sweden a technology-based strategy, and Denmark a user-driven, market-based strategy (Asheim, et al. 2011). In Sweden, the Swedish innovation agency, Vinnova, have published their own roadmaps and handbooks, aiming to combine the efforts of authorities and industries across sectors. In other Nordic countries, missions-oriented approach may be more implied than explicit. For example, in Finland, there is no one organization with the mandate to execute innovation via missions, but organizations such as the governmental organizations VTT and Sitra are regarded as mission-oriented actors due to them directing their resources on specific themes (Lankinen & Järvensivu 2022).

To shed more clarity, the next stages of our research will consist of a policy review of national innovation policy frameworks in selected Nordic countries and empirical research on selected Nordic regions to identify how are innovation policies, including missions, operationalized sub-nationally. Fieldwork and are currently being conducted with key actors across the three countries. Preliminary findings showcase the role of national variations in innovation structures for successful implementation of MOIPs, but also the role of key stakeholder involvement at the different geographical levels within the national contexts. Empirical evidence shows a common discrepancy between goals set at national and sub-national levels, while at the same time, regions often find themselves more in sync with EU goals. In addition, there seems to be insufficient instruments to align innovation efforts from regions in Nordic countries with national ones (e.g. missions' programmes set by Sweden's Innovation Agency – Vinnova - have no clear guidelines for their implementation at sub-national levels). The aim of forthcoming empirical work is to uncover whether policy tools grounded in the missions' approach introduce innovative and potentially impactful measures to regions, and how can policy design be adapted to innovation modes, which differ according to countries' and regions' traditions, institutional frameworks, and development paths.

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