

Measuring the Impact of Climate Assemblies Through Participant Surveys

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Abstract. Climate assemblies provide a platform for citizens to deliberate and contribute to solutions for pressing environmental issues. Understanding their impact on participants is essential for evaluating their effectiveness and shaping future assemblies. This study presents the findings of surveys conducted among participants of two Climate Assemblies in Riga and Edermunde. The surveys aimed to assess participants' understanding, engagement, and outcomes of their while exploring involvement, opportunities improvement. Findings revealed that participants generally felt well-supported by the materials provided and valued satisfactorily the inclusivity of the discussions. However, feedback also highlighted areas for improvement, ensuring balanced representation underrepresented groups and optimizing the learning phase for greater clarity and engagement. The survey responses also pointed out that participants found the climate assembly useful in helping them understand and think critically about climate issues, suggesting that climate assemblies can significantly empower citizens to engage critically with environmental challenges. This study's findings will inform the design and execution of future assemblies, ensuring they remain effective platforms for citizen engagement in addressing climate change.

Keywords: climate change, citizen assembly, climate adaptation, crowdsourcing

1. Introduction

In the face of increasing concern about climate change, the need for inclusive, participatory approaches to environmental governance has become important. Climate assemblies—deliberative forums that engage citizens directly in climate policy discussions—have emerged as a promising mechanism to bridge the gap between expert knowledge, policy-making, and public perspectives (Elstub et al. 2021). By involving randomly selected,

demographically diverse participants in structured discussions and decision-making processes, these assemblies aim to foster informed debate, civic empowerment, and socially legitimate recommendations. The impact of climate assemblies is related to: a) statelevel actions, such as policy changes or resource allocation by politicians and civil servants; b) civil society, including assembly participants, the public, media, businesses, NGOs, and advisory bodies and c) structural changes, like shifts in democratic processes and economic models (e.g., towards sufficiency economics) (Demski, 2024). This study contributes to the investigation of participants' perceptions of the assembly, changes in their understanding of climate issues and levels of concern during two Climate Assemblies (CAs) held in Riga, Latvia and Edermünde, Germany, within the framework of the Horizon Europe-funded CLIMAS project.

2. Materials and Methods

Two questionnaires—distributed before and after the climate assemblies-were used to assess participants' views on various aspects of the process, including the preparatory materials, expert presentations during the learning phase, facilitation, the deliberation process, and the inclusivity of participation. This study focuses specifically on evaluating the impact of the assemblies on participants' attitudes toward climate change. Therefore, only responses related to this objective are discussed. The analysis examines the perceived personal impact of climate change, and changes in participants' critical thinking. It should be noted that the number of responses differs between the pre- and post-assembly surveys, primarily due to some participants being absent during the final session. The responses were analyzed with descriptive statistics and graphs using excel and SPPS software.

3. Results and Discussions

The demographic data collected from the CAs in Edermünde and Riga reveal both similarities and variations in participants composition. In terms of gender balance, both assemblies maintained equal representation, with slight fluctuations: female participation in Edermünde decreased from 50.00% pre-assembly to 44.44% postassembly, while in Riga, it remained relatively stable (52.94% to 51.61%). Male representation correspondingly increased in Edermünde and remained almost unchanged in Riga. Age distribution shows a broader engagement of older participants in Edermünde, while Riga's participants age profile was more equally distributed across workingage groups. The responses to the question "How concerned are you about the possible effects of climate change for yourself personally?" indicate a generally high and slightly increasing level of concern among participants in both Riga and Edermünde. In Riga, prior to the assembly, 38.24% of respondents stated they were "very concerned" and 8.82% were "extremely concerned," while 47.05% expressed lower levels of concern. Post-assembly, responses shifted toward a more nuanced distribution, but with a notable reduction in the proportion of those minimally concerned—0% responded "not at all concerned" compared to 11.76% pre-assembly. Additionally, 48.39% of respondents post-assembly identified as "very" or "extremely concerned," indicating a slight overall increase in higher levels of concern. In Edermünde, concern was already high prior to the assembly, with 42.86% "very concerned" and 21.43% "extremely concerned." These levels remained consistent after the assembly, with 44.44% "very concerned" and "extremely concerned." Importantly, proportion of respondents expressing low or no concern dropped to 11.11% post-assembly from 14.28% preassembly ("not at all" and "little concerned"). Overall, the data suggests that participation in the assemblies slightly increased individuals' awareness and concern regarding the personal impacts of climate change. The post-assembly responses to the question "To what extent do you feel your understanding of climate change impacts has changed as a result of your participation in this assembly?" suggest that the citizens' assemblies contributed to varying degrees of learning among participants, with a substantial share reporting moderate to strong gains in understanding (Figure 1). In Riga, 67.74% of respondents indicated that their understanding had changed at least "somewhat," with 29.03% selecting "somewhat changed," another 29.03% "very changed," and 9.68% "significantly changed." A smaller portion of participants reported only minor or no change, with 19.35% choosing "a bit changed" and 12.90% "not at all changed." In Edermünde, responses followed a similar trend, with 72.22% of participants reporting at least "somewhat" improved understanding—38.89% "somewhat changed," 33.33% "very changed," and 5.56% "significantly changed." Fewer participants reported only slight or no change, (5.56% "a bit changed" and 16.67% "not at all changed"). These results indicate that both assemblies were effective in enhancing participants' awareness of climate change impacts.

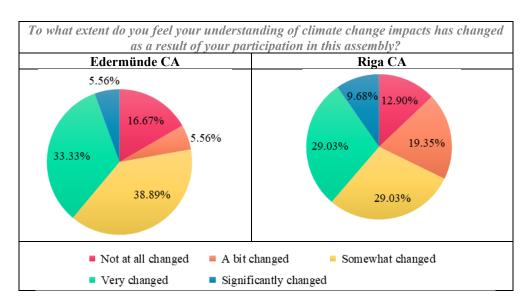


Figure 1. Participants view in understanding of climate change impacts following the climate assembly.

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