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sustainability transition



Hot or Cool

Good Life in Kerava

Final Report

The Hot or Cool Institute is a public interest think tank working at the intersection of society and sustainability.

Our mission is to challenge the status quo, help society reimagine what is possible and enable systemic change towards resilient societies that thrive within ecological limits.

Acknowledgments

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1. Introduction

This report describes the methods and the results of the *Good Life in Kerava Residents' Panel*, the first ever deliberative mini-public that has set out to identify headline indicators to measure how well a particular society or community is doing. Over the course of three evenings, more than 30 randomly-selected residents of the town of Kerava in Finland met, reflected on the meaning of the good life, identified individual and then shared priorities, and discussed and ultimately selected five headline indicators to measure how well the town is doing.

The primary audience for this report is the City of Kerava itself, which has pledged to consider the recommendations made by the Residents' Panel and act upon them where possible.

However, this report will also be of interest to others (including statistical offices, local and national governments and deliberation practitioners) that are considering developing a set of headline indicators to go beyond GDP.

2. Background

2.1 The Beyond GDP agenda

Critiques of Gross Domestic Product (GDP) as a measure of success are as old as GDP itself. Even the creator of GDP, the economist Simon Kuznets, famously said in 1934 that "the welfare of a nation can scarcely be inferred from" it or any measure of national income. GDP does not account for income inequalities, it goes up as environmental damage increases, and – if taken as a measure of success – it implies that the only things that matter to humans are things that can be bought and sold on the market.

The last two decades have seen a flurry of activity critiquing GDP and proposing alternatives. These alternatives have not only come from academics, NGOs and 'radical' think tanks, but also from mainstream actors such as the OECD, and the European Commission, and from both right-wing and left-wing governments. Most recently, the UN set up a High Level Expert Group on Beyond GDP which recently proposed a set of 31 indicators (High Level Expert Group on Beyond GDP, 2026).

And yet GDP remains the key north star of policy and political debate, and many politicians still call for "growth, growth, growth" as their political priority. Beyond GDP dashboards with multiple indicators have been implemented in countries such as the UK, Italy or New Zealand, but have only made a marginal impact on policy and certainly not redefined what counts as progress (Hayden & Dasilva, 2022; Jackson, 2020; Mason & Büchs, 2023). Meanwhile, many of the challenges that GDP does not measure, and which have motivated calls for alternatives – climate change, rising inequality, and growing social discontent – continue apace.

2.2 Two challenges - complexity and democratic legitimacy

One way to understand this limited effectiveness is to recognize that indicators play at least two roles (Bauler, 2012). The most intuitive role is the 'instrumental' role, the direct role that indicators play in policy processes. This is reflected in the models used by policy analysts to assess the impacts of policies on key outcomes, such as GDP or CO2 emissions, targets and limits for indicators, or methods such as cost benefit analyses.

However, there is a second, more subtle way in which indicators are used, namely their 'conceptual' or indirect use. This is more about how indicators change the ways of thinking of policy makers, politicians and the wider public. For example Hirschman & Berman (2014) talk about how the development of GDP helped 'crystallise' the phenomenon of economic growth and made it a more political objective. Every time a politician claims that they will bring economic growth if they are elected, or the media reports on the lack of economic growth over the last quarter, the importance of achieving growth is cemented in the public debate, regardless of whether GDP is actually being used directly in policy decisions. It is this *conceptual* use of GDP which still remains strong, and relatively unchallenged by other indicators to date, with studies attesting to the lack of reference to Beyond GDP initiatives in the media (Abdallah, Hoffman, et al., 2024; Battaglia, 2023; Hák et al., 2012) and in political debates (Battaglia, 2025).

As Chancel et al. (2014) argue, GDP is unlikely to be dethroned if alternatives do not gain widespread conceptual use.

Based on a major EU research project on the use of Beyond GDP indicators (Whitby, Seaford, Berry, et al., 2014), we see two major factors that limit the success of Beyond GDP initiatives in terms of conceptual use: a) complexity and b) lack of democratic legitimacy.

Complexity

Most official Beyond GDP or wellbeing measurement initiatives are large dashboards such as the European Commission's Sustainable and Inclusive Wellbeing Dashboard (150 indicators), the UK's Measures of National Wellbeing Programme (currently 57 indicators) or the UN's High Level Expert Group on Beyond GDP recommendations (31 indicators). These dashboards are broad because they attempt to capture the multidimensionality of societal goals and serve the needs of multiple departments and specific policy areas from health to nature protection.

However, this complexity poses a problem for less specialised audiences that seek to get an overall picture from the dashboards, including the public and the media, but also senior politicians whose job it is to have an overview across multiple policy areas. Large dashboards do not highlight political priorities, nor do they allow an overall sense of whether things are going well or badly. Contrast this with GDP, which is a single number that provides a clear picture of whether there is progress or decline, and sets a clear political priority.

This problem of complexity has been identified in several projects assessing the impact of Beyond GDP or wellbeing initiatives (Hirvalammi et al., 2024; Whitby, Seaford, & Berry, 2014).

Part of the EU research project MERGE,¹ a recent survey of experts in the field including researchers, policymakers and NGO actors (Hirvalammi et al. 2024) identified the difficulty in interpreting multidimensional indicators as the biggest flaw in existing Beyond GDP metrics and models. This was echoed in a series of interviews with indicator producers, mostly people working in National Statistics Institutes (Abdallah et al., 2025), which identified complexity as a key challenge in advancing the use of sustainable and inclusive wellbeing frameworks.

The public also recognises this problem. As part of the UK Measuring National Wellbeing dialogue in 2011, a survey of the public found that the most popular approach to measuring wellbeing was to create a “small selection of indicators”, which was preferred to a large set of indicators (Evans, 2011).

Lack of democratic legitimacy

Perhaps even more problematic for Beyond GDP initiatives, is their current lack of democratic or political legitimacy and indeed public visibility. Although there do not appear to be any surveys directly assessing public awareness, the aforementioned lack of reference to such initiatives in the media (Abdallah, Hoffman, et al., 2024; Battaglia, 2023; Hák et al., 2012) make it highly unlikely that they have entered public awareness (Chancel et al., 2014; Whitby, Seaford, & Berry, 2014). Hirvalammi et al. (2024) identified increasing public interest as the most important driver that can push change towards Beyond GDP.

But even when the public is aware, they do not necessarily see alternatives as having political legitimacy. Even measures of subjective wellbeing, or happiness, are viewed by the media at least with some suspicion (e.g. O’Grady, 2020), despite advocates claiming that they have intrinsic legitimacy because these measures get at what people themselves feel and want (Stiglitz et al., 2009).

Democratic legitimacy is perhaps the most important element of political legitimacy. A particular policy or framework can be considered to have democratic legitimacy if it has been in some way endorsed by the public, either because it was a salient part of a successful party’s election manifesto or because the public has been directly involved in its development. In the context of Beyond GDP, this is important for two reasons (Charveriat et al., 2024).

Firstly, normatively: we would like to see our democracies pursuing objectives that have been endorsed by the public, as opposed to objectives that have not been endorsed by the public. The question of *who* chooses what we measure is important (Jany-Catrice, 2012). GDP was hoisted upon the world by a narrow group of (male) Western economists. Surely we can do better in the 21st century?

But secondly, there is also a strategic or instrumental argument for caring about the democratic legitimacy of new measures. Without democratic legitimacy, citizens are unlikely to support politicians proposing Beyond GDP measures or put pressure on those that aren’t proposing them. This might not be a problem if Beyond GDP was just a technocratic question, a question of changing statistical methods. It does not take a major demonstration or national strike to change the wording of a question in a survey. But if Beyond GDP is to really shift

¹ <https://mergeproject.eu/>. Funded by the European Union in the framework of the Horizon Europe Research and Innovation Programme under grant agreement N° 101132524

political priorities, then it is likely to face political resistance from some actors. In that case, political salience and democratic forces are necessary. As Mason & Büchs (2023) argue, *"winning further support from the public ...is ... likely to be an important element in advancing the wellbeing economy, as demand "from below" could be an important driver for stronger political action"*.

2.3 Rationale behind the Good Life in Kerava Residents' Panel

Section 2.2 has identified two key barriers to Beyond GDP transforming political debate: complexity and democratic legitimacy. How can they be addressed?

Achieving democratic legitimacy

Citizen participation and democratic principles are at the heart of the wellbeing economy approach (Abdallah, Laurence, et al., 2024; Wellbeing Economy Alliance, 2021).

Several Beyond GDP initiatives have sought to ensure democratic legitimacy by consulting citizens (see Charveriat et al., 2024 for a review). For example, the UK's Measures of National Wellbeing and Germany's *Gut Leben in Deutschland* (Living well in Germany) were both informed by national consultations including in-person events and online opportunities to submit opinions (Die Bundesregierung, 2017; Evans, 2011).

Other initiatives have included the Walloon Region's *Indices des conditions de bien-etre* (Conditions of Wellbeing Index),² the Wales we Want,³ Oxfam's Humankind Index in Scotland (Walker et al., 2012) and cities in France that have engaged citizens in developing indices of sustainable development. Most recently, the Economy for the Common Good have conducted a process to create a 'common good compass' in a neighbourhood of Vienna⁴ and are planning a larger scale process for the city as a whole later this year (albeit only with *non*-citizens).⁵

These initiatives are commendable in that they have strived to include citizens' or residents' perspectives in the definition of wellbeing or a good life. However there are several shortcomings.

Firstly, in many cases, particularly the national level processes, there was no clear transparent process for converting the inputs from citizens into actual frameworks.

Secondly, with only two exceptions (the Scotland Humankind Index and the *Indicateurs de Bien-être Soutenable Territorialisés* (Territorial indicators of sustainable wellbeing) in Grenoble (Ottaviani, 2018), the citizens who participated were self-selecting, i.e. they were citizens who heard about the initiative through some channel or other and then chose to invest their time to participate in the process.

Whilst this is certainly the easiest option for initiative organisers to gather citizen perspectives, it has the major shortcoming that the citizens who self-select are unlikely to be representative

² <https://icpib.iweps.be/indice-conditions-bien-%C3%AAtre-wallonie.php>

³ www.thewaleswewant.co.uk

⁴ <https://austria.econgood.org/gemeinwohl-kompass-fuer-floridsdorf/>

⁵ <https://austria.econgood.org/demokratie-fuer-alle/>

of the general population. The factors that determine whether a particular citizen participates or not (do they hear about the initiative at all, do they consider it worthwhile to participate, do they have the time and resources participate, do they value their own opinion enough to participate) all tend to bias participants to be more educated, more likely to have disposable time (e.g. pensioners), more likely to be politically engaged and - depending on the framing – more likely to be supportive of a shift beyond GDP or wellbeing than the general public. This can lead to unrepresentative conclusions, meaning we cannot assume that the broader population would have chosen the same outcomes. It can also limit the *perceived* democratic legitimacy of the process, with the public suspicious as to whether the recommendations made by the citizens involved really represent the broader public opinion.

The other thing to say about the consultation processes to-date is that several have simply asked people to report their preferences or priorities through a survey (for example, the representative element of the Humankind Index consultation was a survey). Surveys like this capture individuals' initial opinions. However, given that few people have thought about the question of how to measure societal success, this is unlikely to be elaborately thought through. More effective are processes whereby citizens come together, have the opportunity to listen to experts present different approaches, and then discuss with their peers the approaches they think are best.

Lastly, the selection of indicators does not lend itself to a simple vote, selecting those indicators which are the most popular. Going beyond GDP requires a structured approach, whereby the framework is as important as the individual indicators (Jansen et al., 2024). For example, it might be that a survey would find both life expectancy and subjective health to be considered popular amongst citizens. However, depending on the size of the set of indicators that one wants, it might be better to only choose one of these, selecting another less-related indicator instead, even if it is less popular. Rather than voting on individual indicators, citizens should, if anything, vote on coherent *sets* of indicators.

All of these points highlight that a process to engage citizens in the development of a Beyond GDP framework and ensure democratic legitimacy must meet the following criteria:

1. There should be a transparent pathway from citizen recommendations to final decisions. This should be explicit before citizens are engaged in the process.
2. Citizens involved should be representative of the population at large.
3. The process should be deliberative, providing scope for interactive discussion and learning.
4. Citizens should be involved in selecting *sets*, not individual indicators.

Deliberative mini-publics (Dryzek et al., 2019; Gastil & Black, 2007; OECD, 2020) such as citizens' assemblies and residents' panels can meet these criteria. Deliberative mini-publics...

1. involve defining a clear mandate for the citizen group before the process, so that participants know what they are being asked and what power their recommendations have.
2. are selected based on sortition, or civic lottery. This is a multiple-stage process whereby everyone in the country or town in question has an equal chance of being

invited to participate, and then the final set of participants is selected using an algorithm to closely represent the demographics of the overall population.

3. take place over several days, ensuring participants have adequate time to discuss and learn. Typically experts are invited to provide input into deliberative mini-public processes.
4. can be designed to deal with complex questions.

In a report commissioned by the European Commission, Charveriat et al. (2024) propose that a deliberative mini-public such as a citizen panel could help inform the selection of indicators at the EU level. The Irish National Economic and Social Council have also proposed that a Citizens' Assembly would be suitable for refining the country's wellbeing framework (NESC, 2021).

The Good Life in Kerava Residents' Panel is the first initiative to take these recommendations forward, the first pure deliberative mini-public to address the question of how to measure societal success or Beyond GDP.

The deliberative wave

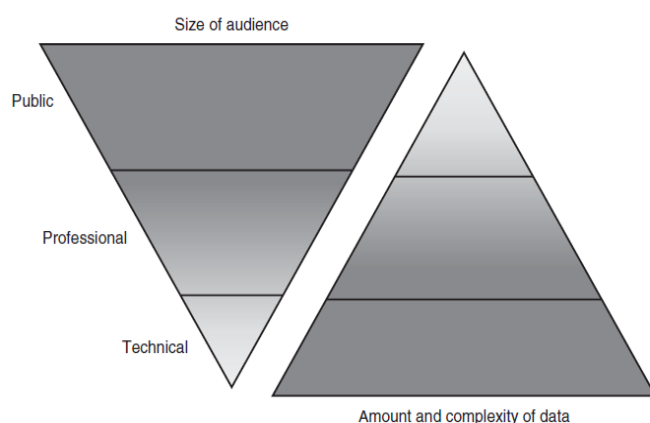
The Good Life Kerava Residents' Panel is the first deliberative mini-public addressing the Beyond GDP issue. But it is part of a growing movement to engage citizens in decision-making across the world. In 2020, the OECD published a report with the sub-title *Catching the Deliberative Wave* which documented hundreds of deliberative processes around the world (OECD, 2020). One of the most high profile citizens' assemblies was conducted in Ireland on the question of legalising abortion. Prior to the assembly, public opinion was against relaxing the rules on abortion. However, a citizens' assembly involving a representative sample of the population eventually made recommendations to relax the rules in some contexts, which was then approved through a national referendum.

Climate issues have been a frequent focus of citizen assemblies... the Knowledge Network on Climate Assemblies brings together best practice and trends. In developing the project in Kerava, we drew heavily on some excellent guides that have been produced to inform deliberative processes, such as Democracy Next's *Assembling an Assembly Guide* (Democracy Next, n.d.), Involve's *Deliberative Public Engagement: Nine principles* (Involve, 2008) and the newDemocracy Foundation's *Enabling National Initiatives to Take Democracy Beyond Elections* (newDemocracy, n.d.).

Avoiding complexity

Complexity can only be addressed by reducing the amount of information. This was reflected in a communication model developed by Statistics New Zealand as far back as 2004 (see Figure 1).

Figure 1. *Statistics New Zealand Communication Model. Source: Statistics New Zealand (2004)*



Whilst technical and professional audiences can benefit from large amounts of data, the public (and, we would argue, senior politicians) are best served with a small amount of data. Many Beyond GDP initiatives have attempted to simplify matters to one simple headline indicator: for example the Genuine Progress Index, the Happy Planet Index or indeed the idea of simply measuring subjective wellbeing. Whilst these have strong communication value, however, they are probably *too* simple to steer politics through multidimensional issues.

Instead, several initiatives are tending towards a sweet spot of between four and seven headline indicators (Charveriat et al., 2024; Colebrook, 2018; Heys, 2026; Jeffrey & Michaelson, 2015; Vladimirov et al., 2023), including initiatives being developed by the European Commission (Charveriat et al., 2024).

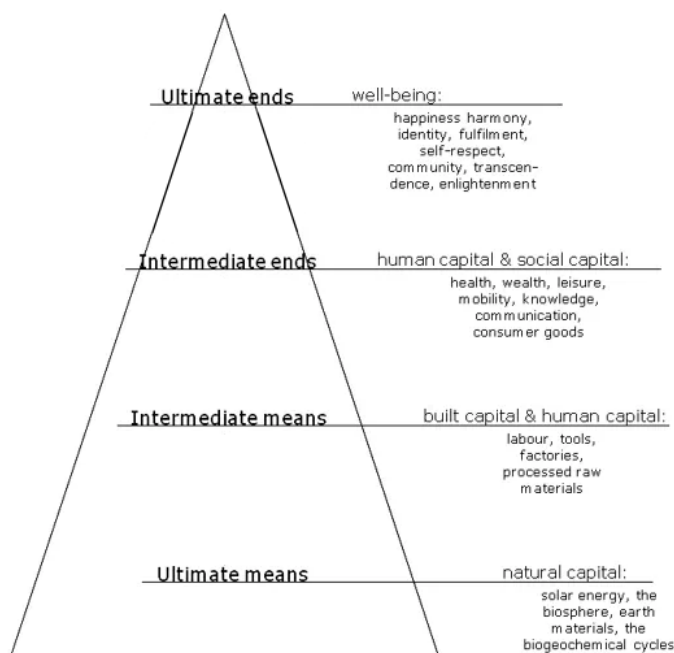
With too few indicators, it is not possible to capture the inherent tensions between sustainability and wellbeing. Too much more presents a challenge to the working memory capabilities of most people. It is relatively easy to remember a set of, for example, five things – e.g. the five pillars of Islam or the five senses. When organising break-out groups in workshops, participants are typically split into groups of around 6 people – participants find it relatively easy to connect with and to hold the perspectives of five other people in their minds.

With that in mind, the project set out to create a set of five indicators.

Ensuring conceptual coherence

A third concern also shaped this project, albeit to a lesser extent. One of the central critiques of GDP is that it does not provide a useful analysis of means and ends. This is indeed one of the founding concepts of ecological economics (Daly, 1973), with a further distinction sometimes made between ultimate means and intermediate means, and ultimate ends and intermediate ends (see Figure 2, based on the Daly-Meadows Triangle).

Figure 2. Means and ends-framework in ecological economics. Based on Meadows (1998)



The Good Life in Kerala project focuses on the ultimate ends. In doing so, care needs to be taken to make sure participants understand the distinctions between ultimate ends, intermediate ends and means.

2.4 Wellbeing economy in Finland

Finland has been at the forefront of efforts to put an alternative vision of progress at the centre of policy-making. The Department of the Deputy Prime Minister developed the Findicator data set in 2009, and in 2019 Finland used its presidency of the EU Council to push forward a statement on the Economy of Wellbeing for the EU. Finland is one of the five Wellbeing Economy Governments.

The Wellbeing Economy Dashboard created by THL (the Finnish Institute for Health and Welfare) is the product of a thoughtful well-resourced process to create a small policy-relevant dashboard for the nation as a whole. The 15 indicators arranged into three pillars provide a good overview (although it is still too early to determine their potential impact on policy).

At the municipal level, Finnish members of the Healthy Cities Network have actively promoted wellbeing economy themes. Municipalities in Finland have strong and mandatory processes that support the use of wellbeing data in planning, with strategic wellbeing reports and plans serving as a key tool to guide decision-making toward improving residents' wellbeing. In addition, municipalities have advanced participatory budgeting, strengthening residents' influence in financial planning. For some, wellbeing objectives are concretized as part of municipal financial documents, ensuring that economic decisions strategically support wellbeing goals. Furthermore, the use of the *HYTE-kerroin* (health and wellbeing coefficient) incentivizes municipalities and wellbeing service counties to invest in preventive and health-promoting actions. This coefficient is linked to state funding: the more effectively a

municipality or wellbeing service county promotes health and wellbeing through measures such as reducing inequalities and improving population health the greater the financial allocation they receive. This positions municipalities as significant actors in implementing the wellbeing economy at the local level, and therefore key actors in exploring new ways to measure wellbeing.

2.5 Context in Kerava

Kerava is town of 39,000 people in the Uusimaa region of southern Finland. It is part of the Greater Helsinki region, 30km away and well served by suburban trains. Kerava is a demographically diverse town that has been associated with a range of public perceptions and stereotypes over time. Today it is known for being innovative and forward-thinking.

The City has recently adopted a new City Strategy for 2026 to 2029 with resident wellbeing at its heart . This Strategy is built on three foundations: a balanced economy, an enthusiastic and skilled workforce and a focus on Keravan resident wellbeing (including loneliness, safety and basic services); and has three focus areas: children and young people, a vibrant Kerava and a sustainable Kerava.

Kerava was selected as the first pilot city for this project after responding to a call put out on the Finnish Healthy Cities Network (coordinated by the Finnish Institute for Health and Welfare - THL). As well as the centrality of wellbeing in the City's existing strategy, the project also has synergies with the City's values in terms of resident participation. Further, the City is planning a new residents' survey in the autumn, which offers the opportunity to collect data that residents identify during the Resident's Panel to be of importance.

2.5 Project Objectives

This project represented the opportunity to work towards several complementary objectives.

For the City of Kerava, it allowed the creation of a small set of meaningful indicators that reflect residents' priorities. These would allow the city to assess how well it is doing in terms of those priorities, and to inform future work to improve wellbeing. As noted above, the Panel was also intended to inform the new residents' survey scheduled for later this year.

From a communication and democracy perspective, the project also gave the City the opportunity to listen to residents, and to demonstrate that they listen to residents.

For Hot or Cool and the wider Beyond GDP world, the project provided the first opportunity to test how a participatory process could inform the selection of a small set of headline indicators. As we will discuss in Section 5, this led to invaluable learning which will be used to inform future processes.

3 Methodology

The project used a deliberative citizen participation process to identify indicators that reflect what residents consider important for a good life in Kerava. The process combined citizen deliberation, expert input, and indicator assessment over three workshops. Participants were recruited to reflect a broad cross-section of Kerava residents and worked in facilitated small groups throughout the process.

This section briefly outlines the methodology for the Residents' Panel. It describes how the participants were approached and selected and outlines the flow of the workshops.

3.1 Participant selection - sortition

Participants were selected through a process known as sortition (or democratic lottery).

Invitation letters were sent to 900 adults residents randomly selected from the City register. The invitation described the purpose of the Panel and the commitment required from participants. It highlighted that all participants would receive a €120 voucher for their participation.

145 residents responded expressing their interest, completing an online form with questions about their age, gender, employment status, native language, education level and postcode. This 16% response rate is higher than typical for processes like this (Saloranta, 2025) and indicates that residents in the city deemed the topic to be of interest.

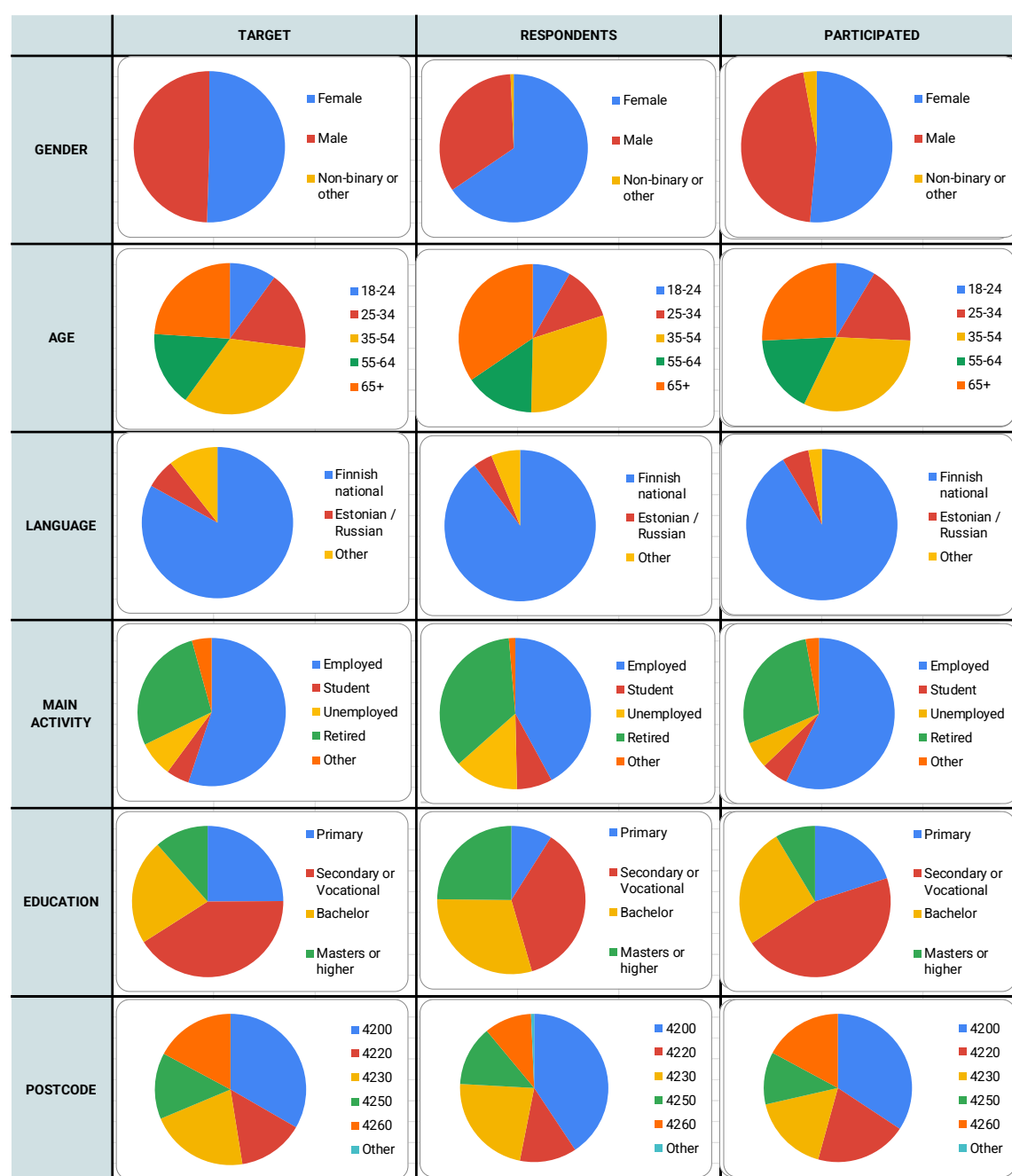
Thanks to the Sortition Foundation, we were able to use the Open Democratic Lottery Platform⁶ to semi-randomly select a set of 40 people from this pool of 145 residents that best matched the overall demographics of the town as a whole (Figure 3).

After seven of the original 40 selected participants did not respond to the second stage invitation, we invited five further participants, with a final selection of 35 participants. The figures below show how these participants match the overall demographics of the town. They also highlight why the two stage sortition process is necessary. Simply including anyone who expressed interest in the initial invitation would have led to a Panel that would have not accurately represented the town – there would have been too few men, too few people with lower education, too many older people, not enough minorities, and too many retired and unemployed people.

Thanks to the sortition process, the final sample closely matched the overall population in all but one way – we aimed to have four participants whose native language was neither a Finnish national language nor Estonian or Russian (Finland's closest neighbours and most established minorities). Although we selected five in the initial sortition process, only one of them participated in the end. This indicates how some hard-to-reach groups may need extra encouragement or motivation to participate in processes like this.

⁶ <https://www.sortitionfoundation.org/introducing-the-open-democratic-lottery-platform>

Figure 3. Demographic composition of the target population, respondents, and final panel.



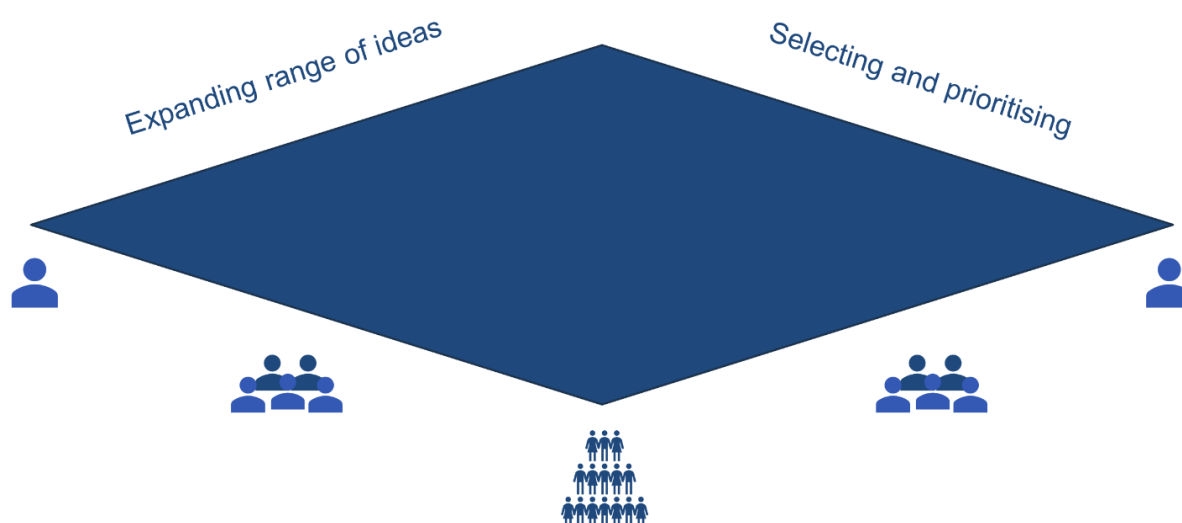
3.2 Process

The Residents' Panel met on three evenings over the course of four weeks, for about three hours each time. Broadly speaking the structure was as follows:

- Workshop 1 – Participants identified (through individual reflection and brainstorming) outcomes which they saw to be part of the good life.
- Workshop 2 – Participants began narrowing down the list of outcomes and categorising them into themes, concluding in a manageable list for which indicators could be proposed and data collected.
- Workshop 3 – Participants selected five indicators from those proposed.

In this way the process followed the diamond structure (Figure 4), whereby ideas were first gathered uncritically, before beginning a process of selection and prioritisation.

Figure 4. The deliberative process from idea generation to indicator selection (original work by authors)



Terminology is critical when talking about how to measure the good life or societal success. Although we were not always successful, we sought to distinguish between three levels of categorisation when it comes to measuring the good life:

1. **Themes:** broad areas such as health or nature.
2. **Outcomes:** more specific outcomes specified by participants such as 'living without ailments' or 'access to nature'.
3. **Indicators:** how specific outcomes could be measured, e.g. healthy life expectancy or the percentage of people living within 300m of green space.

Broadly speaking, the process aimed to encourage break-out groups to choose themes first, before focusing on outcomes, and *then* on indicators.

Workshop 1

The first workshop began with an introduction and welcome from Kerava City council and presentation given by a Finnish wellbeing expert on the Beyond GDP agenda. The presentation explained the problems of relying on GDP and briefly mentioned some of the initiatives around the world that are seeking to address these problems. It concluded by explaining the rationale beyond the Residents' Panel and the goal of identifying just five indicators. Participants were also introduced to the distinction between means and ends, albeit using different terminology, referring to *resources* – ultimate means, *human systems* – intermediate means and ends, and *outcomes* – ultimate ends. This framework was developed by The Centre for Well-being (2011).

After an icebreaker, participants were asked to imagine that they were in the mythological underworld of Hades, reflecting on how their life had gone. They were asked to individually reflect on the question "what would make you feel you had had a good life?", before being brought together in six breakout groups to share their answers.

This initial sharing led to a set of outcomes which participants considered to be important to the good life, which they then set about clustering on flipchart papers.

It was only after participants had already had the opportunity to express their perspectives that we gave an input, presented by a second Finnish wellbeing expert, introducing some of the existing frameworks for understanding wellbeing (Abdallah & Mahoney, 2024; Fabian, 2022; Hough-Stewart et al., 2019; Lomas & VanderWeele, 2023; Martela, 2024; Seligman, 2018; Vittersø, 2025). This was framed as a 'sense check' – participants were encouraged not to abandon their original ideas, but rather to consider integrating some of the ideas from the presentation into what they had already decided on.

At the end of the workshop the breakout groups (these breakout groups were consistent through most of the process) each presented their key reflections to the plenary. These reflections, and the flipchart papers from the group work, were the main outputs from the first day. Participants were also encouraged to write any questions they have for the organisers for the next day. These questions could be about the topic of the Panel or the process itself.

Workshop 2

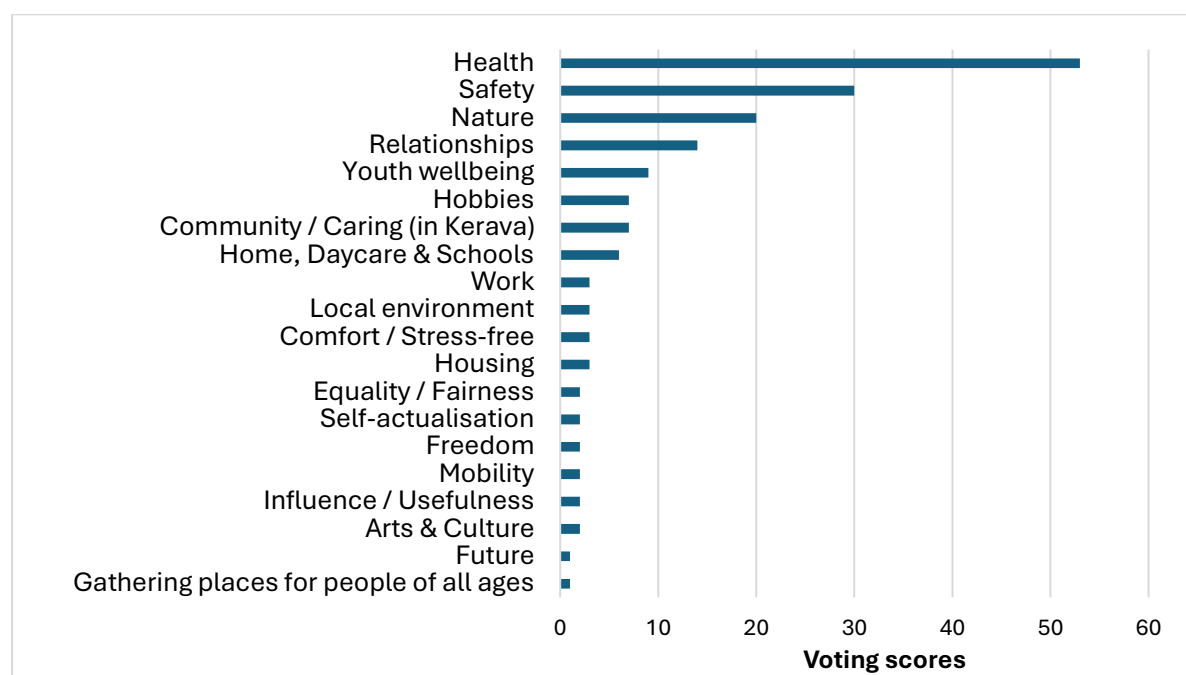
After responding to the questions from the participants and a warm-up activity, the participants were presented with the main results from Workshop 1: this was a slide listing the 17 themes that emerged from the first workshop across all six breakout groups. These included, for example, health, safety and nature. Under each theme, specific outcomes were also listed, for example 'a safe childhood' or 'peace' under safety.

The breakout groups then had a moment to refresh their memories and reflect on the themes that had emerged from the Panel overall and to propose any additional themes. They were then introduced to three criteria with which they should assess the themes. These included: i) whether the theme reflects an outcome or a process; ii) the policy relevance of the theme; and iii) whether the theme was relevant to the majority of the population of Kerava, or just a specific group. These criteria were not intended as exclusion criteria, but rather to help inform participants in the remaining steps.

The next step was an initial vote, on the overall themes that had been to this point identified (at this point there 18 candidate themes). Participants had five votes which they could assign as they wished – for example all to one theme, across five different themes, or a mix.

Out of this process, seven themes emerged as the most popular (with at least 7 votes each): health, safety, nature, relationships, youth wellbeing, hobbies and community & care (see Figure 5).

Figure 5. Wellbeing themes from the initial vote.



At this point participants were split into new breakout groups, based on the themes they had voted for. These thematic groups were provided with information on the different specific outcomes that had been mentioned to that point within that theme and asked to propose one or two outcomes that could be used as proxies for the topic overall. This led to 12 proposals which were presented to the Panel as a whole.

After this, participants returned to their original breakout groups and were asked to make an initial selection of five outcomes out of these 12, the initial sets. These six proposals of five outcomes each were presented in plenary.

Workshop 3

The research team had two weeks in between Workshop 2 and Workshop 3 to review the outcomes that had been included in these initial sets and identify indicators that could be used to measure them. In doing so, preference was given to indicators which either already existed for Kerava or which could be collected in the survey that would be administered in the autumn. In the latter case, it was important that – even if the question had not been collected at municipality level – there was data at the national level to allow a comparison between Kerava and Finland.

In some cases, the proposals made by the participants were judged to be process focussed (intermediate means or ends), rather than outcome focussed (i.e. ultimate ends). For example, one of the outcomes proposed was the number of young people receiving psychological support. In these cases we sought to identify an indicator of the ultimate outcome which we felt the participants wanted to improve (in this case, youth wellbeing).

The result was a set of 17 indicators which were presented to the participants at the start of the third workshop. Participants were presented with three bits of information. Firstly, a precise definition of the indicator. Secondly some data using the indicators, for example comparing Kerava to other parts of Finland, Finland to other countries, or a temporal trend. Thirdly, an indicative evaluation of the indicator based on three criteria: i) whether the indicator measured an outcome or a process; ii) whether the indicator is relevant for the population as a whole; and iii) whether data is already available for Kerava.

After this presentation, participants returned to their breakout groups to decide which five indicators to propose in their set. These sets were then presented to the plenary, and then participants voted individually and anonymously for their preferred sets. Participants had to vote for their top three sets, ensuring that there was an incentive for groups to try to encourage other groups to vote for their set. Sets were given four points for each first place, three points for each second place and two points for each third place.

4 Final indicator set

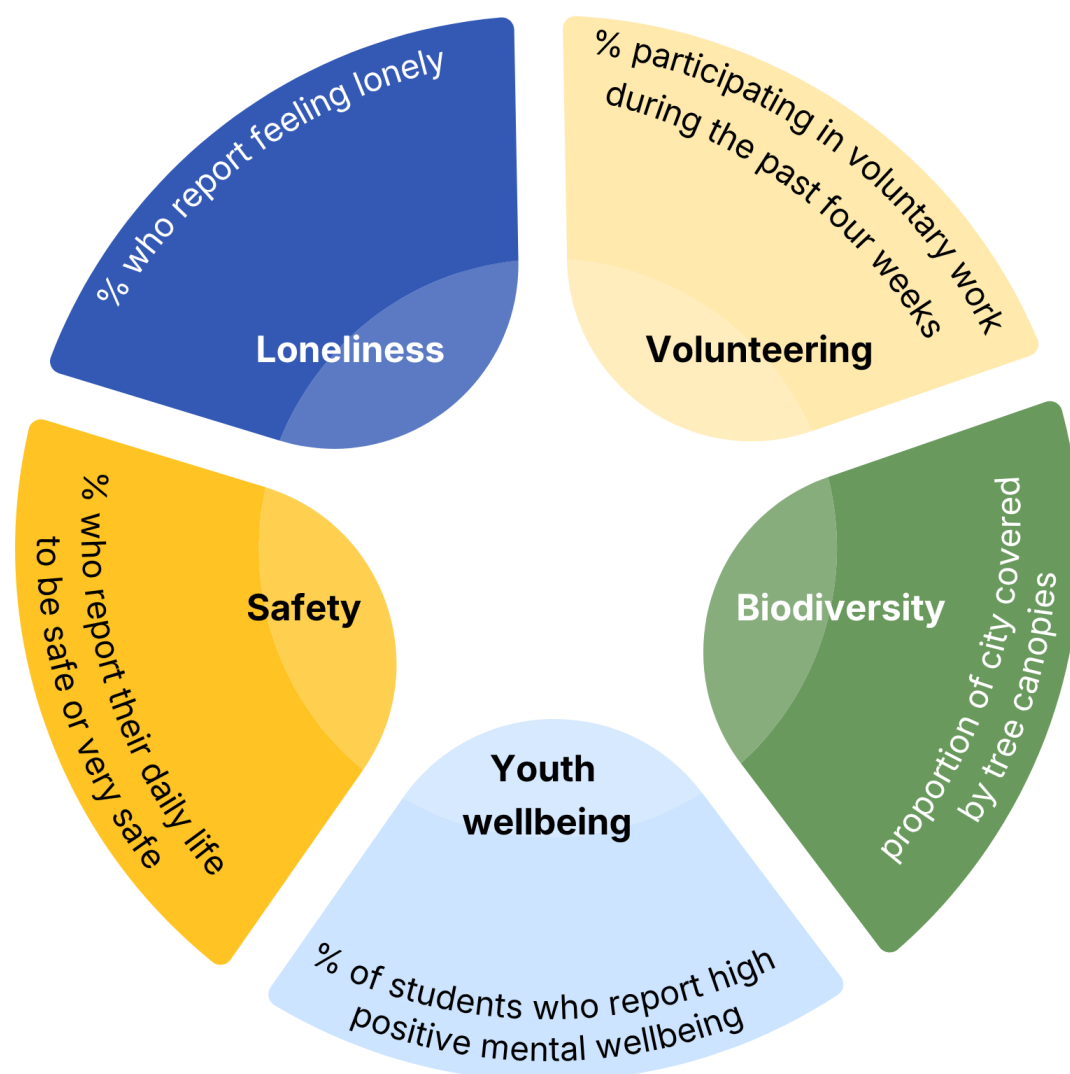


Figure 6. Good Life in Kerava indicator set

This chapter presents the direct outcomes of the project, namely the set of five indicators of a good life in Kerava selected by the Residents' Panel.

The participatory process resulted in the selection of five indicators that together capture key dimensions of a good life in Kerava. The indicators were chosen through a multi-stage process that combined residents' perspectives with an assessment of the indicators' relevance, measurability, and suitability for long-term monitoring.

The five selected indicators measure safety, youth wellbeing, biodiversity, loneliness, and volunteering (Figure 6). Together, these indicators reflect priorities identified by residents and represent social, environmental, and community dimensions of wellbeing. Table 1 summarises the selected indicators, their measurement approach, and the rationale for their inclusion.

Table 1. Final indicators of good life in Kerala selected through the participatory process, including their measurement approach and justification for selection

Theme/ "Outcome"	What is measured?	Why was it selected?
Safety	Perceived safety in daily life: The share of residents who report their daily life to be very safe or safe (%).	Perceived safety was seen as a fundamental aspect of wellbeing that affects everyone. Participants considered it important that people feel safe in their everyday lives throughout the day, just not at night.
Youth wellbeing	Positive mental wellbeing: The share (%) of students in grades 8–9 and first and second year students in upper secondary and vocational education reporting high positive mental wellbeing.	Youth wellbeing was seen as essential for a thriving community, especially as young people's experiences today shape their future opportunities and quality of life. Participants felt that positive mental wellbeing is a more comprehensive indicator than life satisfaction. It was also seen as important for preventing social exclusion and avoiding the emergence of a "left-behind" generation.
Biodiversity	Canopy coverage: The proportion of the city area covered by tree canopies, including the relative shares of forest, agricultural, and built environments.	Biodiversity was seen as important for wellbeing, benefiting both people and the environment. Tree canopy coverage was seen as a meaningful way to reflect the presence of nature within the city.
Loneliness	People who feel lonely: The share of residents who report feeling lonely (%).	Loneliness was identified as a key contributor to wellbeing, as social connection and a sense of belonging were considered essentials for a good life. The share of people who feel lonely was selected because loneliness can affect everyone, making it an important indicator of community wellbeing and social inclusion. Already existing indicator.
Volunteering	Participation in volunteering: The share of people aged 15 years or older who have participated in voluntary work during the previous four weeks.	Volunteering was selected because participants valued caring for others and contributing to the common good. Participation in volunteering was selected because it reflects people's active involvement in supporting their community and strengthening social connections.

The final indicator set reflects a broad understanding of wellbeing that extends beyond traditional economic or service-related measures. The selected indicators span social, environmental, and community dimensions of wellbeing, with participants placing particular emphasis on social relationships, community participation, and the role of nature in everyday life. The inclusion of biodiversity alongside loneliness and volunteering highlights the importance residents attached to both environmental quality and social connectedness as foundations of a good life in Kerala. Together, the indicators reflect a shared vision of wellbeing developed through the participatory process and provide a concise, locally relevant framework for understanding and monitoring wellbeing in the city.

Additional detail on the workshop findings is provided in the annexes. Annex Table A1 summarises the themes and topics identified during Workshops 1–2, Annex Table A2 presents the prioritised themes and group selections from Workshop 2, and Annex Table A3 provides further information on all proposed indicators, including definitions, indicator questions, and data sources. Table A4 presents the sets proposed by each group and the results of the final vote.

5 Learnings and reflections

As noted in section 2.5, one of the objectives of this project was to develop and test a new participatory methodology for indicator selection. This chapter will highlight the learnings that can be taken forward from the process, drawing on three inputs:

1. Sortition and invitation process
2. Participant evaluation (including evaluation survey and qualitative interviews)
3. Observers' notes

The chapter will then include the project team's internal reflections to draw specific lessons for future projects.

5.1 Sortition and invitation process

We had the fortune of conducting the project with a city that had a resident register, making it easy to randomly select residents for invitation. The time frame that we gave to invited residents seemed reasonable, and the response rate of 16% was very high. This high rate is likely to be the result of a combination of a) generally higher response rates in Nordic countries like Finland; b) the small geographical focus and c) interest in the topic in question.

Having said that, we did not sufficiently anticipate the number of people who initially expressed interest and were then selected through the sortition process, but then either pulled out or did not respond to the final invitation. As a result, the final panel was a bit smaller than it could have been (35 members instead of up to 40). Furthermore, we were unable to successfully replace residents who had been selected to ensure a fair representation of ethnic minorities. This is an example of where oversampling in the initial round of invitations might have been preferable.

After sending emails to people who had expressed interest in participating, but were not selected through the final stage of sortition, the City received some messages from people saying that they were disappointed not to be able to participate. We decided to amend the process slightly by inviting these people to submit their answers to three questions via email, and including their responses in the input to the Panel in the first workshop. This felt like a good ad-hoc solution, but one that could have been built into the plans from the beginning.

5.2 Participant evaluation

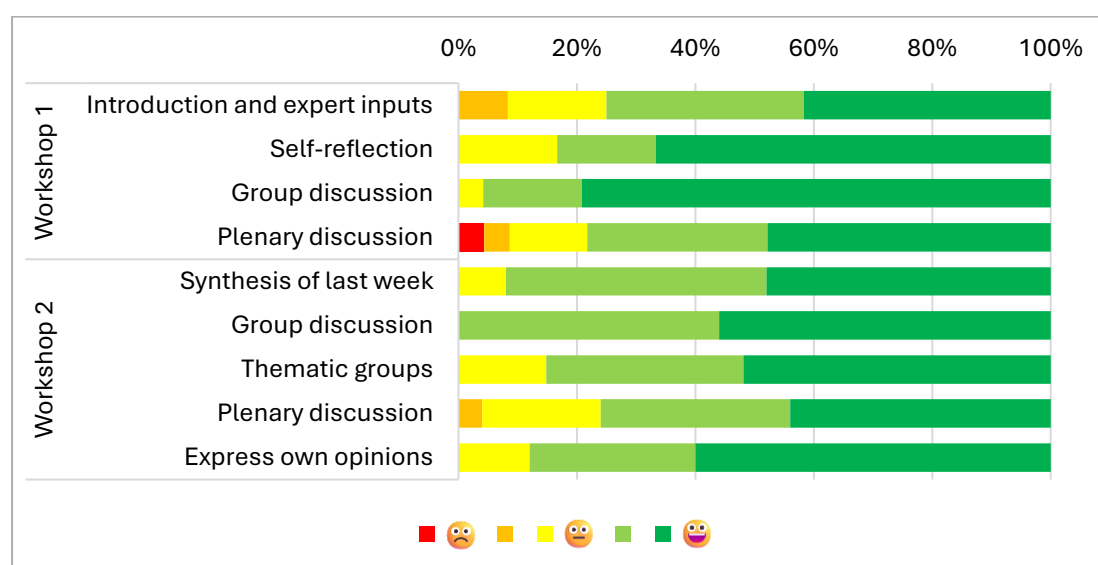
Participants were asked to complete a quick survey at the end of each workshop including both closed- and open-ended questions. A few participants were also interviewed after the final workshop to get their reflections on their experiences of the process.

Quantitative results

Figure 7 presents the quantitative survey results across the three workshops and Figure 8 the participants' overall evaluation of the process. Overall, participants evaluated the process very positively. Activities in the first two workshops received consistently high ratings, with group discussions emerging as the most appreciated element. Participants also reported that they learned something new during the process, felt they had sufficient information to participate in discussions, and experienced a respectful atmosphere where different viewpoints could be expressed.

Feedback from the final workshop was similarly positive. Participants were satisfied with the panel's final recommendations and rated both the usefulness and enjoyment of participating highly. Most also agreed that the final recommendations reflected the diversity of views within the panel and supported the wider use of citizen panels in decision-making. Although a few participants felt that some individuals occasionally dominated discussions, this was not considered a major issue overall.

Figure 7. Distribution of workshop feedback responses (%), n=20.



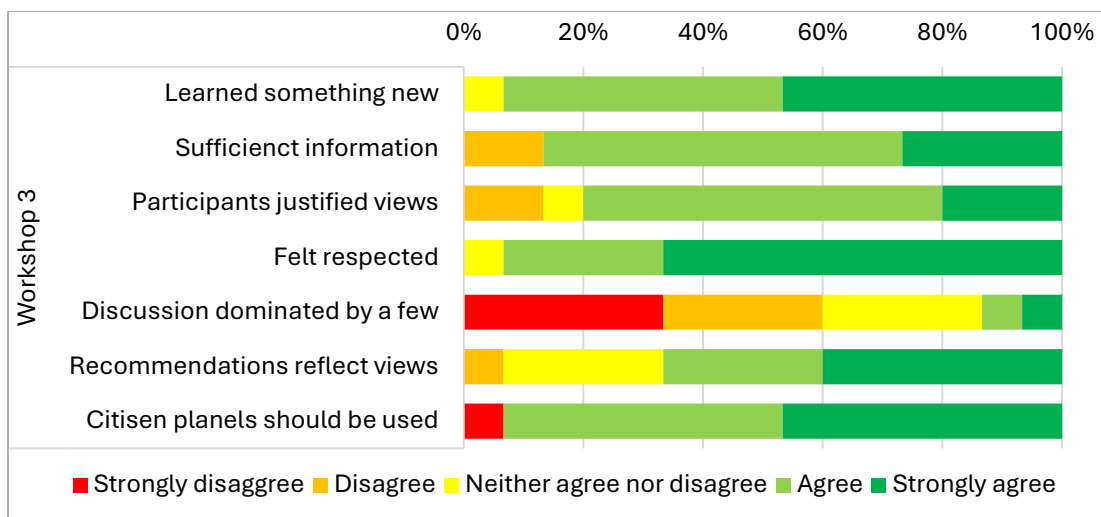
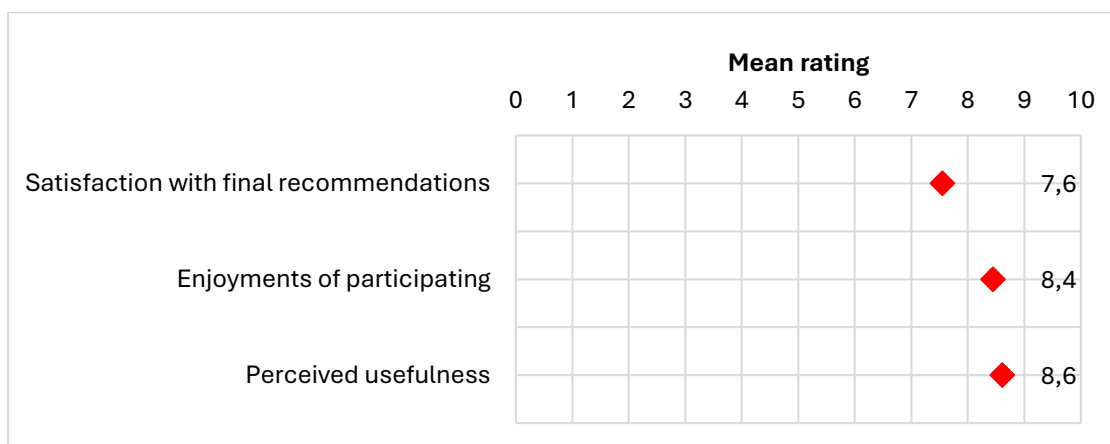


Figure 8. Overall workshop evaluation: participant ratings for satisfaction with the selected indicators, enjoyment of participation, and perceived usefulness (0–10 Scale; n = 20). Tick mark values represent the mean rating for each question.



Open-ended survey questions

The open-ended survey responses reinforced these findings. Participants consistently highlighted the quality of the discussions, the opportunity to exchange views with people from different backgrounds, and hearing the reasoning behind others' opinions. Many also appreciated discovering how much common ground existed regarding what constitutes a good life. Small-group discussions were repeatedly identified as one of the most valuable aspects of the process.

Suggestions for improvement were relatively few. The most common recommendation was to allow more time for group discussions and deliberation, as some participants felt rushed when selecting and justifying indicators. Others suggested clearer instructions for some tasks, greater opportunities to develop indicators rather than selecting from pre-defined options, and a follow-up session to discuss how the City's final decisions relate to the panel's recommendations.

Interviews

The interviews provided further insight into participants' experiences. A recurring theme was the opportunity to engage with people from different backgrounds and perspectives.

"I got to meet a lot of different people. Even though I've lived in the same city for a really long time, we all have very different circles and backgrounds. It was an interesting experience." — Male 29

Despite the diversity of participants, discussions revealed a high degree of agreement on the key elements of a good life. Participants frequently notes that they were surprised by the extend to which they shared common priorities ad values.

"It was nice to notice that even in such a large group, people ultimately had such a similar way of thinking." — Female 45

The process also encouraged participants to move beyond their individual circumstances and consider wellbeing from a broader community perspective. Facilitators observed that participants increasingly shifted from discussing what was important for themselves to considering what would benefit residents as a whole. This was particularly evident in discussions about young people, where participants reflected on the needs of future generations rather than only their own circumstances.

"At first ... I naturally thought about what is important for someone my age. But gradually I started thinking about the whole group." — Female 60+

Participants generally reported positive experiences of the process and felt that different viewpoints were heard and respected. Several highlighted the constructive atmosphere of the discussions and the opportunity to engage with residents from different backgrounds.

"This is exactly the kind of influence people should have more of. Real grassroots influence reaching higher levels." — Female 44

One participant also described how the group dynamics supported broad participation:

"Everyone got their voice heard. And if someone hadn't said anything, there was always someone who checked in: 'What do you think?'" — Female 44

At the same time, the process generated valuable lessons for future applications. Participants and facilitators noted that some concepts and instructions could be clarified further, particularly when moving from individual perspectives to community-level thinking. Time constraints were also frequently mentioned, with both participants and facilitators expressing a desire for more time to discuss and justify indicator choices.

Overall, it appears that residents found the process meaningful, enjoyable and respectful. They valued the opportunity to exchange perspectives, felt that their views were heard, and identified only minor improvements, mainly related to time allocation and the clarity of some tasks.

5.3 Observer notes

To complement the participant surveys and interviews, independent observers assessed the quality of deliberation during selected small-group discussions across the first two workshops. Observations focused on five dimensions of deliberative quality: participation equality, justification of viewpoints, reference to shared values, respect, and constructive deliberation.

Overall, the observer notes closely aligned with participants' own evaluations. Discussions were generally respectful and constructive, with participants listening to one another, building on each other's ideas, and treating different viewpoints with respect. Observers reported very few disagreements, and where different perspectives emerged, they were discussed in a constructive manner.

Participation was generally well balanced, although a small number of participants were more vocal while some – particularly younger participants or those with migrant backgrounds – were initially more hesitant to contribute. In several cases, facilitators or fellow participants actively encouraged quieter members to share their views, highlighting the importance of active facilitation in ensuring broad participation.

Participants typically justified their views using personal experiences, but as the process progressed, discussions increasingly shifted towards considering the wellbeing of Kerava residents as a whole. Observers also noted that some tasks, particularly those involving indicator selection, were initially difficult to understand and required additional facilitator support. These findings mirror the participant feedback, which highlighted the value of clearer instructions and more time for discussion in future applications of the methodology.

5.4 Overall reflections and learnings

The results suggest that participatory indicator selection is a feasible and valuable approach for developing locally relevant wellbeing indicators. The process enabled residents to contribute their experiences and priorities while building a shared understanding of what constitutes a good life in Kerava.

Aside from the comments from participants and observers, our own reflections highlighted three further issues that could be learnt from.

Firstly, we became more and more aware over the course of the process how important terminology is. One of the first steps in the process was for participants to reflect personally what a good life is, and this generally led to a focus on outcomes / ultimate goals, as intended. However, over the course of the workshop, and in particular on the second day, we found the breakout groups beginning to focus more on what they felt were the important policy processes needed to achieve these outcomes (e.g. psychological support for young people). Perhaps if we had spent more time explaining the distinction between ultimate goals, intermediate goals and means (for example showing Figure 2 from this report, which was not shown to the Panel), this slide from outcomes to processes could have been avoided. In any case, we included a diagram making the distinction more explicitly at the beginning of the third workshop and this seemed to rectify things somewhat.

Related to this, we were aware that we as organisers had a clear distinction between 'themes' (e.g. safety) and 'outcomes' (e.g. peace or feeling safe in your daily life), but that participants may not have always understood this distinction. More work could have been done to reinforce the terminology.

Secondly, participants struggled to meaningfully assess the policy relevance of themes in the criteria assessment task (workshop 2). It may have been too ambitious to expect participants to be able to do this without more preparation. In future, this process could be conducted by policy-makers and then provided as an input to participants.

Thirdly, we were surprised that no health indicators were included in the final set of indicators selected, given that health was – by a long way – the most popular theme in the dot voting exercise in workshop 2. This may have been an unintentional artefact of the aforementioned slide towards processes and outputs as opposed to outcomes. By the end of workshop 2, the most popular proposed health-related outcome concerned 'access to care', particularly waiting times and access to treatment. Although an indicator reflecting access to healthcare was initially identified for workshop 3, it was recognised that it was not a true outcome measure and that the City of Kerava limited influence over healthcare provision, as responsibility lies with the wellbeing service county.

Shortly before Workshop 3, the proposed health indicator was replaced with the 'morbidity index', which measures the level of morbidity in a municipality or region relative to the national average, taking into account the prevalence and impact of several major disease groups. However, participants did not choose this indicator because it was perceived as too indirect and difficult to relate to everyday experiences of health and wellbeing. While the morbidity index is a robust population-level health outcome indicator, participants appeared to find it less relevant to the local context, as morbidity outcomes are influenced by a wide range of factors beyond the direct control of the municipality. This may reflect the broader challenge encountered during the process whereby participants often gravitated towards policy-relevant means and services rather than ultimate outcomes. As a result, although health was considered highly important, no health-related indicator was ultimately included in the final set.

Based on all this, the following lessons for future processes can be drawn:

1. Oversample hard to reach demographics, such as those with an immigration background, or low education level.
2. Pay more attention to the preparation of the expert input to ensure that it is appreciated by participants.
3. Build in more time... 3 sessions with 8 hours in total was just about manageable, but tight. Participants would have appreciated having more time. This would also have ensured that tasks could be explained more clearly. Furthermore, further sense-checks may have been helpful to ensure that the process produced the best outcomes.
4. Clarify terminology – broad themes vs. specific outcomes vs. indicators
5. Carefully explain the distinctions between ultimate end, intermediate ends, and means.

6 Next steps (for the City of Kerava)

6.1 Potential uses of the indicators in municipal decision-making

The selected indicators can be viewed not only as measures of wellbeing but also as a reflection of what residents consider important for a good life in Kerava. Because the indicators were developed through a deliberative process that combined residents' perspectives with expert input, they represent a considered expression of local priorities.

Experiences from wellbeing frameworks and wellbeing governance initiatives in Finland and internationally suggest that such indicators can play a range of roles in policy-making beyond monitoring alone. The examples below draw on approaches used in wellbeing governance and policy development in other jurisdictions.⁷

- 1. Communicating resident priorities.** The indicators provide a concise way of communicating residents' priorities and wellbeing concerns to municipal decision-makers.
- 2. Informing strategic planning and resource allocation.** The indicators could complement existing wellbeing reporting and support the development of wellbeing-oriented objectives, targets, and investment priorities.
- 3. Supporting integrated policy-making.** The indicators span multiple policy areas and may encourage collaboration across departments around shared wellbeing goals.
- 4. Assessing the wellbeing impacts of policies and services.** The indicators could provide a framework for considering how policies, programmes, and services are expected to affect residents' wellbeing.
- 5. Monitoring progress over time.** Regular measurement of the indicators would allow Kerava to track changes in wellbeing and identify emerging trends.
- 6. Understanding differences within Kerava.** Where data availability permits, the indicators could be analysed by demographic group or geographical area to identify inequalities in wellbeing outcomes.

6.2 Taking the recommendations forward

The selected indicators provide a practical foundation for monitoring wellbeing in Kerava. Together, they offer a concise set of measures that complement existing monitoring systems while reflecting priorities identified residents through the citizen panel process. Several of the selected indicators are already measured through existing municipal or national monitoring systems. For example, tree canopy coverage in the city's planned areas is included as an official indicator in Kerava's 2026–2029 City Strategy – while others may require the development of new monitoring practices.

⁷ Proposals based on a review of reports on wellbeing in policy. e.g. Korhonen, Malkamäki & Hiilamo (2025) Finland's Governance Model for the Wellbeing Economy; Gaukroger (2025) Budgeting for wellbeing: International approaches; Aked et al. (2010) The role of local government in promoting wellbeing; Civic Wellbeing Partners (n.d.) Santa Monica Wellbeing Index Replication Guide.

The City of Kerava will review the citizen panel's recommendations as part of its strategic and wellbeing work and assess how the selected indicators can be integrated into existing monitoring systems and reporting processes, including the wellbeing report and wellbeing plan. Where suitable data already exist, the indicators can be incorporated into regular reporting, while additional data collection may be considered where needed.

The citizen panel may also inform future rounds of the Kerava Barometer. This could include the incorporation of questions related to the selected indicators and wellbeing themes identified by residents, thereby strengthening future monitoring of wellbeing and quality of life in Kerava.

The citizen panel provides a tested model for representative resident engagement in Kerava. The experience gained through the citizen panel reflecting the city's demographic diversity can support future participation initiatives and help ensure that residents' perspectives continue to inform municipal planning and decision-making.

The City of Kerava is responsible for deciding how the panel's recommendations will be taken forward. The recommendations will be considered as part of the city's strategic and wellbeing work and implemented where feasible. To ensure transparency, the City of Kerava has committed to informing panel participants during 2026 about how the recommendations have been considered and how the results of the process will be used.

Annexes

Table A1. Themes and topics emerging from Workshops 1–2 and their relative prominence in Workshop 1

Workshop 1: Clustered themes and topics from Workshop1 and their relative prominence in groups and plenary discussion	Relative prominence	Theme	Topics
	Themes that emerged across all or almost all groups and were presented in plenary.	Health	Healthcare services, mental health
		Safety	Predictability, safe childhood, peace
		Nature	Closeness to nature, sufficiency
		Relationships	Family, friends, children, social interactions, support, love
		Future	Aspirations, stability/continuity, future generations
		Work	Meaningful work, economic security, future of work
	Other themes identified in group discussions and presented in plenary	Influence / Usefulness	Feeling useful, using skills, participation, meaningful work and activities, sense of achievement, self-worth, self esteem
		Hobbies	Fun, experiences, satisfying activities, sport
		Mobility	Car-free mobility
		Freedom	Freedom of speech, respect of other's freedom, freedom of choice
		Community, Caring (in Kerava)	Pride in Kerava, community spirit, community support
	Only identified in participant's written notes	Self-actualisation	Achieve dreams, inner piece, self-love, trying new things
		Local environment	Noise, cleanliness, attractive city centre
		Comfort, Stress	Calm, easy life, low stress
		Housing	Affordable, safe home
		Equality, Fairness	Services, minorities, healthcare
		Other	Empathy, appreciation, happiness
Workshop 2: New themes that emerged in the group discussions		Youth wellbeing	
		Places to gather for people of different age	
		Residential segregation	
		Art and culture	
		Home, early childhood education, and schools	
		Daily routines	

Table A2. Workshop 2 outputs: prioritised themes, refined topics, and group selections

Prioritised Themes	Topics	Refined and suggested topics by thematic groups
Health	Healthcare services	Access to care (waiting times, and access to treatment in general)
		Reliability (quality of care, medical errors etc)
Safety	Mental health	
	Predictability	
	Safe childhood	
	Peace	Measured safety Perceived safety
Nature	Closeness to nature	
	Sufficiency	
		Biodiversity (share of fields, forests, asphalt, etc)
Relationships	Family	
	Friends	
	Children	
	Social interactions	
	Support	
	Love	
		Has help been available when needed?
Hobbies	Fun	
	Experiences	
	Satisfying activities	Number of participants and participation rates in groups Applied for /granted subsidies
	Sport	
Community, Caring (in Kerava)	Pride in Kerava	
	Community spirit	Sense of belonging / experiences on loneliness, i.e. Not feeling lonely
	Community support	Sense of belonging (Willing to act for the benefit of others)
Youth wellbeing		Number of young people receiving support
		Leisure opportunities available for young people, both in quantity and in terms of opening hours

Note: Indicators highlighted in purple were selected topics by the end of Workshop 2.

Table A3. Proposed indicators based on selected topics (“Outcomes”) outcomes identified by participants in Workshop 2.

No.	Theme	Topic	Indicator Name	Definition	Indicator / Question	Source
1	Health	Access to Healthcare	Unmet Healthcare Needs	Measures the share of people who have not received the healthcare or services they needed, for example due to long waiting times, financial barriers, or distance to services.	Self-reported unmet healthcare needs due to waiting times, cost, or distance	Eurostat (hlth_silc_08)
2	Health	“Life Without Pain and Worry”	Morbidity Index	Measures the morbidity of the population relative to the national average using a composite index of major disease groups. Higher values indicate a greater prevalence of illness.	Morbidity Index (national average = 100).	THL (ind. 5641) *
3	Safety	Measured Safety	Crimes Against Life and Health	Measures the number of violent crimes and other offences against life and health reported to the police relative to the population size.	Police-recorded crimes against life and health per 1,000 residents.	Official Statistics Finland (OSF) (2026)
4	Safety	Perceived Safety	Feeling Safe After Dark	Measures the share of residents who feel unsafe when walking alone in their neighbourhood after dark.	Percentage of respondents reporting feeling unsafe or very unsafe when walking alone in their neighbourhood after dark.	European Social Survey (all rounds)
5	Safety	Daily Feeling of Safety	Measures how safe people feel in their everyday lives and local environment.	Share of residents who perceive their daily life as very safe or safe (%).	Daily Feeling of Safety	THL (ind. 5569) *
6	Youth Wellbeing		Positive Mental Wellbeing	Measures the share of young people who experience positive mental wellbeing, resilience, and positive emotions in everyday life.	High positive mental wellbeing among students in grades 8–9 and first- and second-year upper secondary and vocational students (%).	THL (ind. 4715, 4716, 4717) *
7	Youth Wellbeing		Life Satisfaction	Measures young people's overall satisfaction with their lives.	Life satisfaction among 11-, 13-, and 15-year-olds (scale 0–10).	THL (ind. 4811, 4700,4701,4702) *
8	Youth Wellbeing		Participation in Hobbies	Measures the share of young people who participate in hobbies or organised leisure activities at least once a week.	Share of 14–18-year-olds participating in a hobby at least once a week (%).	THL (ind. 24-27) *
9	Nature		Accessibility of Green Areas	Measures the share of residents who have access to a suitable recreational green area within 300 metres of their home.	Share of the population with access to recreational green space within 300 metres (%).	Kerava City Strategy 2026-2029

10	Nature		Connection to Nature	Measures how frequently people spend their leisure time in nature.	<i>"How often, if at all, do you engage in outdoor nature-based activities during your leisure time, such as hiking, birdwatching, swimming, skiing, other outdoor activities, or simply relaxing in nature?"</i> (Several times a month or more often.)	International Social Survey Programme - 2020
11	Nature		Forest Biodiversity	Measures the ecological value and biodiversity of forests within the city's forest areas.	Forest biodiversity index (scale 0–1).	Geospatial Data for Kerava
12	Nature		Tree Canopy Coverage	Measures the proportion of land area covered by tree canopies.	Share of city area covered by tree canopy, including forest, agricultural, and built environments.	Kerava City Strategy 2026-2029
13	Hobbies		Sports Facilities Availability	Measures the availability of sports and recreational facilities relative to the population size.	Number of sports facilities per 1,000 residents.	Lipas.fi (n.d.)
14	Community and Caring		Loneliness	Measures the share of residents who experience loneliness or a lack of belonging.	Share of residents who report feeling lonely (%).	THL (ind. 4284) *
15	Community and Caring		Volunteering	Measures participation in voluntary activities that benefit others.	Share of people aged 15+ who have participated in voluntary work during the previous four weeks (%).	Official Statistics Finland (OSF) (2021)
16	Community and Caring		Perceived Helpfulness in the Neighbourhood	Measures whether residents feel they can receive help and support from people in their local area.	<i>"Do you feel that people in your neighbourhood help one another?"</i>	European Social Survey / CRONOS3
17	Community and Caring		Trust in Others	Measures the extent to which people feel they can trust other people.	<i>"Would you say that most people can be trusted?"</i>	European Social Survey (all rounds) / Eurostat

Note: Indicators highlighted in green were included in the final selected indicator set.

** THL indicators are sourced from the Sotkanet Statistics and Indicator Bank maintained by the Finnish Institute for Health and Welfare (THL). Detailed indicator descriptions, metadata, and time series are available at <https://sotkanet.fi/sotkanet/en/index>*

Table A4. Proposed sets from breakout groups and vote results

Group	Indicator	1st places	2nd places	3rd places	Score	Ranking
1	Canopy coverage	9	5	3	57	3
	Positive mental health					
	Persons who feel themselves lonely (%)					
	Perceived safety in daily life					
	People helpful (to what extend do you feel that people in your local area help one other)					
2	Canopy coverage	5	1	4	31	5
	Morbidity index					
	Perceived safety in daily life					
	Life satisfaction					
	Activities per 1,000 residents					
3	Perceived safety in daily life	5	12	6	68	1
	Positive mental health					
	Canopy coverage					
	Persons who feel themselves lonely (%)					
	Share of persons having done voluntary work in the course of four weeks, population aged 15 or over					
4	Morbidity index	4	3	2	29	6
	Perceived safety in daily life					
	Participation in leisure activites					
	Activities per 1,000 residents					
	Persons who feel themselves lonely (%)					
5	Perceived safety in daily life	3	7	5	43	4
	Life satisfaction					
	Participation in leisure activites					
	Activities per 1,000 residents					
	Persons who feel themselves lonely (%)					

6	Perceived safety in daily life	6	4	12	60	2
	Positive mental health					
	Forest biodiversity					
	Persons who feel themselves lonely (%)					
	Activities per 1,000 residents					

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