Subjective and Objective Measures in a National Wellbeing Framework

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Abstract

Since 2009, many governments have created national wellbeing frameworks to monitor the wellbeing of the national population. In New Zealand, Stats NZ maintains Ngā Tūtohu Aotearoa – Indicators Aotearoa New Zealand and the Treasury maintains the Living Standards Framework as well as He Ara Waiora. This review begins by placing population wellbeing within wider understandings of sustainability, drawing on the Treasury's two wellbeing frameworks. It then considers subjective measures of wellbeing, focusing on self-evaluations of life satisfaction, and objective measures of wellbeing, expanding on the capabilities approach introduced by Amartya Sen.

Keywords: subjective wellbeing, objective wellbeing, capabilities, waiora, Cantril ladder

Whakarāpopotonga

Mai i te 2009, kua hangā e ngā kāwanatanga maha he anga toiora i ō rātou whenua hei aroturuki i te toiora o te taupori o aua whenua. Kei Aotearoa nei, kei te tautiaki a Tatauranga Aotearoa i Ngā Tūtohu Aotearoa, ā, kei te tautiaki Te Tai Ōhanga i te Living Standards Framework me He Ara Waiora. Hei tīmatanga ake, ka whakanoho tēnei arotake i ngā inenga toiora ki roto i ngā māramatanga whānui atu o te toitūtanga, ka whakamahi i ngā anga toiora e rua a Te Tai Ōhanga. Kātahi ka whai whakaarohia ngā inenga taparoto o te toiora, mā te arotahi ki ngā aromātai whaiaro i whakapuakina mō te oranga ngākau, me ngā inenga tapatahi o te toiora, me te whakawhānui i te ara o ngā āheitanga he mea whakauru e Amartya Sen.

Ngā kupu matua: toiora taparoto, toiora tapatahi, pūmanawa, waiora, arawhata Cantril

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n 1982, Dame Marilyn Waring was in her third term as a member of the New Zealand Parliament. Responding to a survey of women in agriculture, Waring had learned that the United Nations System of National Accounts (UNSNA) excludes from its measure of gross domestic product important considerations for population wellbeing such as unpaid work within households and negative impacts of economic activity on the natural environment. In her political memoir, Waring (2019, p. 261) recalls how she asked a Treasury official if she could see the UNSNA rules, but not a copy was to be found in Australasia. After retiring from office in 1984, Waring therefore travelled to New York to research the UNSNA source material held in the Dag Hammarskjöld Library at the United Nations (Saunders & Dalziel, 2017). Based on that research, Waring (1988) wrote her influential critique that became a founding text of feminist economics globally (Bjørnholt & McKay, 2014) and of wellbeing economics in Australasia (Dalziel, 2019).

Two decades later, the president of France commissioned an enquiry into the measurement of economic performance and social progress. The main theme of the report was unequivocal: "The time is ripe for our measurement system to shift emphasis from measuring economic production to measuring people's well-being" (Stiglitz et al., 2009, p. 12). Since then, many countries have produced national wellbeing frameworks that present statistical indicators to monitor important domains of population wellbeing (Exton & Shinwell, 2018; Wellbeing Economy Alliance, 2017). Ngā Tūtohu Aotearoa – Indicators Aotearoa New Zealand is an example (Stats NZ, 2021a).

These developments are having an impact on the UNSNA, which is currently under revision for a major update in 2025. The review includes a work stream on economic wellbeing and sustainability to explore four issues: "unpaid household work, distribution of household income, expenditure and wealth, and environmental-economic accounting" (Advisory Expert Group, 2018, p. 1). The first and fourth issues were major themes in Waring's (1988) seminal text *Counting for nothing*. This work stream is restricted to material aspects of wellbeing with a clear focus on *objective* rather than *subjective* measures of wellbeing, since "the aim is not to measure well-being directly, but rather identify and present specific SNA elements linked to the well-being of households" (van Rompaey & Zwijnenburg, 2023, p. 12).

That choice draws attention to a wider conversation about the strengths and weaknesses of subjective measures and objective measures for monitoring changes in a population's wellbeing; see, for example, the respective contributions to the Treasury's wellbeing report seminar series of Grimes (2022) and Saunders and Dalziel (2023). This conversation does not concern the definition of *wellbeing* itself, which at a high level of generality can be understood as people leading "the kinds of lives they value – and have reason to value" (Sen, 1989, p. 18). Rather the question is asked: Under what circumstances is it better to monitor changes in population wellbeing by asking persons to state their self-evaluation of items such as life satisfaction or happiness (subjective measures) or by using statistical indicators to record changes in requisite items of wellbeing such as good health, higher education and quality housing (objective measures)? The purpose of this review is to address this question.

The review proceeds in three parts. The first places population wellbeing within wider understandings of sustainability, drawing on two wellbeing frameworks used by the New Zealand Treasury. The second part considers subjective measures of wellbeing, focusing on stated self-evaluations of life satisfaction. The third part considers objective measures of wellbeing, expanding on the capabilities approach introduced by Amartya Sen. The review finishes with a brief conclusion.

National wellbeing frameworks

Although some national wellbeing frameworks restrict themselves to current population wellbeing (Federal Government of Germany, 2017), the New Zealand practice is to place current wellbeing within wider contexts that reflect concerns such as intergenerational sustainability and the flourishing of the natural environment in its own right. The national framework maintained by Stats NZ is a good example. Following recommendations from statisticians to the United Nations Economic Commission for Europe (2014), current wellbeing is one of three sets of measures in Ngā Tūtohu Aotearoa – Indicators Aotearoa New Zealand, alongside future wellbeing and the country's impact on the rest of the world. This practice invites analysts to consider implications of policy options on the wellbeing of future generations and on the wellbeing of natural ecosystems, independent of how these future implications might affect human wellbeing in the short term.

Further examples are two wellbeing frameworks used for policy advice by the Treasury – the *Living Standards Framework* and *He Ara Waiora*. These contextualise current wellbeing in different ways, reflecting their respective foundations in work at the Organisation for Economic Cooperation and Development (OECD) in Paris (King et al., 2018; OECD, 2011) and in accumulated mātauranga Māori (McMeeking, 2022; McMeeking et al., 2019). Their different approaches offer diverse insights for monitoring population wellbeing, which it is useful to discuss before the remainder of this review considers subjective and objective measures.

The Living Standards Framework

Figure 1 presents the current diagram used by Treasury to summarise its Living Standards Framework (The Treasury, 2021). It comprises four groups of items relevant to living standards. The top of the diagram focuses on 'our individual and collective wellbeing'. This is where the Framework's measures of current wellbeing are presented, organised into 12 domains: health; housing; knowledge and skills; environmental amenity; cultural capability and belonging; leisure and play; work, care and volunteering; family and friends; engagement and voice; safety; income, consumption and wealth; and subjective wellbeing. The remainder of the Living Standards Framework provides important context for those domains of current wellbeing.

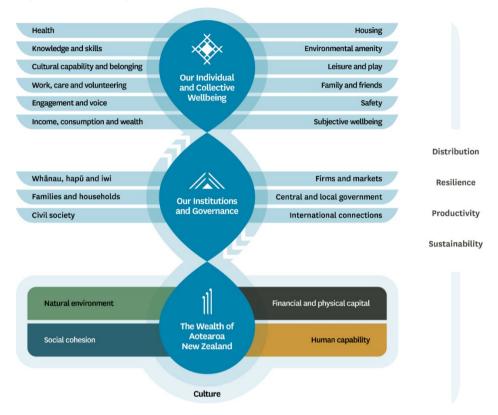


Figure 1: The Living Standards Framework

Source: https://www.treasury.govt.nz/information-and-services/nz-economy/higher-living-standards/our-living-standards-framework.

The middle section pays attention to 'our institutions and governance'. This feature creates a structure similar to that in Dalziel (2019, Figure 1, p. 480). It recognises that personal wellbeing is supported by collaborative actions in private sector and public sector institutions. Thus, there are reasons to monitor the vitality of these institutions. The list begins with 'whānau, iwi and hapū' and 'families and households'. This complements the value of 'family and friends' as a domain contributing to a person's wellbeing by paying attention to how these institutions are flourishing per se. When Stats NZ was consulting on a draft of its national wellbeing framework, family and whānau came through consistently as being important in most submission types (Stats NZ, 2019, p. 12), but this heading is not one of the selected topics. This is a significant gap in Ngā Tūtohu Aotearoa – Indicators Aotearoa New Zealand.

The diagram's third section gives a broad definition of the wealth of Aotearoa New Zealand. It goes beyond the measures of economic wealth found in the UNSNA (physical capital, financial capital and intellectual property) to include the state of the natural environment, the strength of social cohesion and the depth of human capability. From the Framework's earliest version (Gleisner et al., 2012, Figure 12, p. 230), the Treasury has represented total wealth as 'the four capitals', following the example of the OECD (2011). The 2021 revision responds to criticisms of the term capital outside economic capital (see Waring, 2018). The diagram also develops its previous versions by adding 'culture' as an all-encompassing term "to emphasise that all aspects of our wealth, our institutions and our wellbeing are cultural – culture is in every part of the framework" (The Treasury, 2021, p. 3). Thus, cultural knowledge is not presented as a separate item of wealth, but is an aspect of all four elements (see Dalziel et al., 2019).

The fourth group in the diagram is a list of four analytical prompts to draw policy attention to sustainability, productivity, resilience and distribution. The Treasury explains that "the prompts are provided to encourage and support analysts to explore the different levels of the framework through the lenses of these different criteria" (The Treasury, 2021, p. 3).

Thus, the Living Standards Framework emphasises institutions and a broad understanding of wealth for current and future wellbeing. Other wellbeing frameworks in the public sector share these features. Te Puni Kōkiri (2016), for example, presents an Outcomes Framework for the Whānau Ora programme, which lists seven foundations of whānau wellbeing: self-managing; living healthy lifestyles; participating fully in society; confidently participating in te ao Māori; economically secure and successfully involved in wealth creation; cohesive, resilient and nurturing; and responsible stewards of their natural and living environments. Also under the Environmental Reporting Act 2015, the Ministry for the Environment and Stats NZ report on the state of different aspects of the natural environment every six months and on the environment as a whole every three years (see, for example, Ministry for the Environment & Stats NZ, 2022).

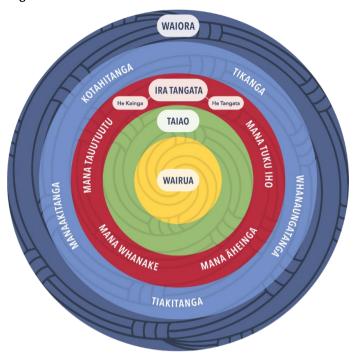
He Ara Waiora

He Ara Waiora is a wellbeing framework initially developed with widespread consultation among Māori by the Tax Working Group in 2018 and 2019. A prototype was published in O'Connell et al. (2018). A second version (McMeeking et al., 2019) was used in the Treasury's review of COVID-19 impacts on wellbeing in 2020 (Cook et al., 2020) and in the New Zealand Productivity Commission's (NZPC) inquiry on breaking the cycle of persistent disadvantage (NZPC, 2021, pp. 2–4). Figure 2 presents a third version, used in the Treasury's first wellbeing report (The Treasury, 2022a).

He Ara Waiora reflects principles derived from mātauranga Māori (Cook et al., 2020, p. 33), which "can be described as an expanding knowledge continuum containing both old and new Māori knowledge, building on a foundation of traditional wisdom and practices" (Martin & Hazel, 2020, p. 46). There is a large and expanding literature that engages with distinctive characteristics of mātauranga Māori. Durie (2005, p. 303), for example, observed that mātauranga Māori "recognizes the interrelatedness of all things, draws on observations from the natural environment, and is imbued with a life force (mauri) and a spirituality (tapu)"; see also Solomon (2005). The Māori language, te reo Māori, is preeminent in this process (Matamua, 2018, p. 5; Mercier, 2020, p. 60) as is evident in Figure 2. The Treasury (2022a, p. 19) warns that none of the concepts in He Ara Waiora translate directly into English terms, explaining that 'waiora', for example, is "a term that can be loosely translated as

'wellbeing' but that has no direct equivalent in English". This paper therefore does not attempt to translate the terms in Figure 2, referring the reader to McMeeking et al. (2019) and Cook et al. (2020).

Figure 2: He Ara Waiora



Source: https://www.treasury.govt.nz/information-and-services/nz-economy/higher-living-standards/he-ara-waiora.

Instead, this section focuses on the structure of Figure 2 in a similar way to the discussion of Figure 1 earlier. He Ara Waiora comprises five nested circles. The diagram represents the dynamic ways in which the components interact by overlaying a spiral pattern or takarangi over the five circles. The unity of the diagram can also be seen in the inner and outer circles, which are labelled wairua and waiora, respectively. Both terms begin with 'wai', which represents water in te reo Māori. Wai is profoundly important in Māori world views, as can be expected for communities whose ancestors in the 13th century created the mātauranga needed to cross the vast Pacific Ocean (Matisoo-Smith, 2012; Anderson et al., 2014).

The third circle, labelled 'ira tangata', represents the domain of human actions and relationships, understood intergenerationally with individual and collective elements. The Treasury notes that "the wellbeing of the collectives such as iwi, whānau/families and communities is therefore vital" (Cook et al., 2020, p. 34). This domain contains four elements focusing on different aspects of the Māori concept of mana. Each element can be

associated with statistical measures in the Living Standards Framework, in the Whānau Ora Outcomes Framework, and in Ngā Tūtohu Aotearoa – Indicators Aotearoa New Zealand (see McMeeking, et al. (2019) for further details).

Crucially, ira tangata is underpinned in the framework by the natural and living state of the world, represented in the circle labelled Taiao. This emphasises that environmental wellbeing is independent of, and prior to, wellbeing in the human domain (McMeeking et al., 2019, p. 17). Hence, "humans have responsibilities and obligations to sustain and maintain the balance of relationships with Te Taiao to ensure abundance for current and future generations" (The Treasury, 2022a, p. 19). This is summarised by Cook et al. (2020, p. 33):

The concept of wellbeing is not human-centric in He Ara Waiora. Rather, the wellbeing of Te Taiao is paramount and a determinant of human wellbeing. Humans have responsibilities and obligations to sustain and maintain the wellbeing of Te Taiao, which is inextricably linked with the wellbeing of the people. Rights and obligations relating to the natural world particularly apply where iwi, hapū and whānau hold mana in a particular area to which they are tied by whakapapa.

Juhi Shareef and Teina Boasa-Dean have made a similar emphasis in their reimagining of the doughnut model of Raworth (2017) by placing planetary boundaries on the doughnut's interior (see Shareef, 2020).

Surrounding ira tangata is the circle of principles (or key values or means) associated with the promotion of wellbeing: manaakitanga, kotahitanga, tikanga, whanaungatanga and tiakitanga. The second version of the framework included the first four of these items, with tiakitanga now confirmed in the third version depicted in Figure 2. Further discussion of these principles, and how they are applied by the Treasury in developing policy advice, can be found in Cook et al. (2020, pp. 34–36). This feature is distinctive in its New Zealand context, but an interesting comparison is section 5 of the Wellbeing of Future Generations (Wales) Act 2015, which is headed 'The sustainable development principle'. This section sets out five key values that public bodies in Wales must take account of in their actions, such as "the importance of balancing short term needs with the need to safeguard the ability to meet long term needs" (National Assembly for Wales, 2015, p. 5).

An important public policy example consistent with the approach in He Ara Waiora is the National Policy Statement for Freshwater Management 2020. This statement sets out three objectives, defining the first priority to be "the health and well-being of water bodies and freshwater ecosystems" (Ministry for the Environment, 2023, p. 10). The second priority is the health needs of people (access to fresh drinking water, for example) and only then is there consideration of the ability of people and communities to provide for their social, economic and cultural wellbeing in the present and in the future. Furthermore, freshwater management is required to give effect to the fundamental concept of *te Mana o te Wai*, defined as:

Te Mana o te Wai is a concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment. It protects the mauri of the wai. Te Mana o te Wai is about restoring and preserving the balance between the water, the wider environment, and the community. (Ministry for the Environment, 2023, p. 5)

Within that definition, te Mana o te Wai encompasses six principles that are also set out in the policy statement: mana whakahaere, kaitiakitanga, manaakitanga, governance, stewardship, and care and respect (Ministry for the Environment, 2023, p. 5).

Taken together, the Living Standards Framework and He Ara Waiora illustrate the importance of contextualising human wellbeing within wider frameworks. The following sections discuss how policy advisers are using subjective and objective measures for monitoring the wellbeing of a national population.

Subjective measures of wellbeing

The introduction drew on Sen (1989) to suggest that wellbeing can be understood as the people leading the kinds of lives they value, and that they have reason to value. This leads to the idea that a good wellbeing indicator can be obtained by asking people to self-evaluate their life satisfaction. An example is the question in the Gallup World Poll (Gallup, 2021, p. 53):

Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?

The question introduces the survey participant to what is termed the *Cantril ladder* (see Cantril, 1965). It can be expressed in other, similar ways. The Stats NZ General Social Survey, for example, asks participants to look at a card showing numbers listed from 0 (labelled 'completely dissatisfied') to 10 ('completely satisfied') and report "How do you feel about your life as a whole?" (Stats NZ, 2021b). Because this reports an internal view of life satisfaction, it has been called the *happiness approach to wellbeing* (Helliwell et al., 2022; Layard, 2011; MacKerron, 2012).

The Cantril ladder is an example of a *self-anchoring scale* (Kilpatrick & Cantril, 1960), which means each participant creates their own measure (or brings their own ladder). Thus, participants must first imagine what 'best possible life' or 'completely satisfied' means for them, and they must also imagine the length of their ladder. Given their answer to that second question, participants then self-evaluate their current life satisfaction.

Note the first concept reflects *ambition* for a better possible life, in the sense used by Fry and Glass (2019). This needs to be considered when using life satisfaction data to compare subjective wellbeing between groups. To illustrate, Stats NZ (2022) draws on the General Social Survey 2021 to observe that "older people remained the most satisfied with their lives, with a mean rating of 8.0 for people aged 65 years and over, and a mean rating of 8.3 for those aged 75 years and over", compared with a mean rating of 7.7 for the total population. It is possible that this observation reflects people reducing their ambition (and so shortening the ladder they wish to climb) as they move past the age of entitlement to New Zealand Superannuation.

Consequently, subjective wellbeing measures work best for policy advice when people have similar opportunities for ambition and when groups are not subjected to social discrimination that limits their life possibilities (Dasgupta, 2005; Khader, 2011; Sen, 1987). A good example is the impact of unemployment on life satisfaction, where Dalziel et al. (2018, p. 96) provide references in support of the claim "that one of the strongest findings in the wellbeing literature is that unemployed people generally report lower values for happiness and life satisfaction than do employed people, influenced by a range of personal and social factors" (see also Stats NZ, 2022).

Another illustration of the power of the subjective wellbeing measure in policy settings is a recent study of public housing and wellbeing by Grimes et al. (2023). Based on a survey within the Wellington urban area, the study found that "public housing tenants have higher wellbeing, on average, than do private tenants" (Grimes et al., 2023, p. 2), a finding consistent with a previous study by Anastasiadis et al. (2018). Furthermore, Grimes et al. (2023, p. 2) found that "wellbeing increases for private tenants as their length of tenure increases", implying that "laws which increase security of tenure for private tenants (as exist in many jurisdictions in Europe) may have an important wellbeing impact for private tenants."

Some analysts propose that policies should be designed to maximise this measure, treating life satisfaction as a rough proxy for individual utility used in traditional social welfare functions (Grimes, 2022, slides 11–12). This has become feasible with new methods for including subjective wellbeing in cost-benefit analyses (Frijters & Krekel, 2021). Our own view is that this overlooks important issues associated with the use of self-anchoring scales for measurement, such as adaptive preferences and aspirations resting on misinformation (Dalziel et al., 2018, pp. 32–33). Furthermore, this measure cannot record for analysts today the stated life satisfaction of future generations (Saunders & Dalziel, 2023, slide 16). Hence there is room for objective measures.

Objective measures of wellbeing

Alfred Marshall's famous textbook that guided neoclassical economics for a generation began by stating that economics "examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of well-being" (Marshall, 1920, p. 1). Later definitions added that economics is also concerned with the non-material requisites of wellbeing (Robbins, 1932). This leads to the idea that people who have limited access to material and non-material requisites that others take for granted will have constrained capabilities for creating and sustaining wellbeing (Sen, 1989; Nussbaum, 2000; Robeyns, 2005). Thus, policy advisers can gain insights into capabilities for wellbeing by monitoring statistical measures of requisites people need to lead valued lives. Because these measures involve observed data (rather than stated self-evaluations), they are termed objective measures of wellbeing.

An early and influential example is the Human Development Index (HDI), first published in United Nations Development Programme (1990).

That report understood human development as having two sides: "the formation of human capabilities – such as improved health, knowledge and skills – and the use people make of their acquired capabilities – for leisure, productive purposes or being active in cultural, social and political affairs" (United Nations Development Programme, 1990, p. 10; see also Stanton, 2007). The HDI is an index number that amalgamates statistical measures of life expectancy at birth, expected and attained years of schooling, and gross national income per capita.

A key issue for this policy approach is deciding how to determine which objective measures will be monitored. McMeeking (2022, slide 4) observes that the Universal Declaration on Human Rights has been an influential source. Article 25, for example, states in the gender-exclusive language of its day, "Everyone has the right to a standard of living adequate for the health and wellbeing of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control" (United Nations, 1948, Article 25; see also Human Rights Commission, 2018). Martha Nussbaum has been a leading voice for a rightsbased approach (Nussbaum, 1997, 2001, 2003, 2011). She argues that there are some capabilities for wellbeing that are fundamental entitlements of all humans, including life, bodily health, bodily integrity, senses, imagination and thought, emotions, practical reason, affiliation, other species, play and control over one's environment.

The founder of the capabilities approach, Amartya Sen, is also concerned about justice (Sen, 2009), but emphasises the importance of communities exercising agency in determining the requisites of their wellbeing through their own reasoned processes (Sen, 2004). These processes can vary from community to community and may include independent governance, public meetings, written submissions, feedback postcards, representative surveys (online, telephone and postal), online polls, targeted workshops, focus groups and expert groups (Exton & Shinwell, 2018, pp. 13–15). During the preparation of Ngā Tūtohu Aotearoa – Indicators Aotearoa New Zealand, for example, there was a nationwide public consultation involving online submissions, an online poll and postage-paid postcards (all available in English and in te reo Māori), accompanied by 61 community engagements and 19 technical workshops (Stats NZ, 2019,

pp. 9–12). The Treasury also ran engagement programmes in the preparation of both its wellbeing frameworks (The Treasury, 2018a; McMeeking, et al., 2019).

Because multiple factors influence wellbeing, and because communities within a country have diverse understandings of what is needed to lead a valued life, the number of objective measures in a national wellbeing framework can be large. Hence, a common practice is to create an online dashboard where policy advisers, and all citizens, can access the measures. Thus, Ngā Tūtohu Aotearoa – Indicators Aotearoa New Zealand has a dedicated portal¹, which at the time of writing presented 109 wellbeing indicators organised into 22 topics. The Treasury has similarly created a dashboard² for its Living Standards Framework (The Treasury, 2018b, 2022b). This presents indicators for the three main levels of the Framework (see Figure 1): 62 indicators for the 12 domains of our individual and collective well-being, 18 indicators for our institutions and governance, and 23 indicators for the wealth of Aotearoa New Zealand.

Like a vehicle dashboard, measures recorded in a national wellbeing framework can be monitored to indicate potential problems in people's access to the requisites of wellbeing (Saunders & Dalziel, 2023, slide 26). Thus, the Treasury is required to report on the state of wellbeing in New Zealand every four years. Its first report identified significant issues (The Treasury, 2022a, p. 2):

One of the most striking insights is that our younger people fare less well on many measures than older people. Compared to many countries, many of our older people are doing well. Younger people fare less well on many metrics.

Younger people fare worse than older people in three priority areas: mental health, educational achievement and housing quality and affordability. The latter is particularly the case for those who do not own their homes. ...

The report also identifies a number of risks to future wellbeing. In addition to declining youth educational performance, increasing psychological distress and poor-quality rental housing, these risks include climate change, the preponderance of natural hazards in New Zealand such as earthquakes, volcanoes, floods and fires, and increasing geopolitical destabilisation.

Conclusion

This review began with Member of Parliament Marilyn Waring receiving the results of a survey of women in agriculture in 1982 and asking her policy advisers why important aspects of the lives of these women were not reflected in the country's primary measure of economic performance – gross domestic product. Four decades later, creators and users of national wellbeing frameworks continue to face the multi-faceted challenge of ensuring their chosen statistical measures authentically represent the lived experiences of diverse communities in the general population. Furthermore, this challenge is nested within other urgent challenges, such as scientific awareness of the damage current economic activity is doing to the natural environment (including the global climate crisis) and hence to the wellbeing capabilities of future generations.

The sections of this review have discussed three ideas that aim to contribute to meeting the challenge of designing reliable and insightful national wellbeing frameworks. The first is the practice of placing measures of current population wellbeing within wider contexts of sustainability and environmental flourishing. Ngā Tūtohu Aotearoa – Indicators Aotearoa New Zealand has this feature, as do both frameworks used by the Treasury for its policy analysis – the Living Standards Framework and He Ara Waiora – drawing on their different sources in the OECD and in mātauranga Māori.

The second important idea is the use of subjective measures of wellbeing, particularly those calculated by asking representative samples of people how they self-evaluate their life satisfaction on a self-anchoring scale. This measure recognises the agency of people in determining the kind of life they value, within their particular social settings. Hence, significant differences in this measure among groups within the national population is an indicator that public policy attention may be required.

The use of a self-anchoring scale means subjective wellbeing measures are less useful for monitoring increased capabilities for wellbeing over time, which leads to the third important idea – the use of objective measures of wellbeing. Again recognising the agency of persons and communities in creating wellbeing, objective measures focus on the material and non-material requisites of wellbeing as defined by communities. Properly designed, a dashboard of objective measures can be used to identify

potential wellbeing issues where public policy may have a distinctive role in addressing.

All three ideas are contributing to new understandings of population wellbeing. An important research stream, for example, is exploring connections between different wellbeing measures. Thus, Stats NZ (2022) identified from the General Social Survey four measures strongly related to reported subjective wellbeing: excellent or very good health; more than enough or enough money to meet everyday needs; not felt lonely in the last four weeks; and no major problems (cold, damp, mould) with their home. The mean overall life satisfaction rating was 6.0 on the Cantril ladder for those who reported that none of those standards are met in their lives, compared with 8.6 for those who reported all four are true. Thom and Grimes (2022) have analysed impacts of land confiscations during colonisation on measures of contemporary cultural wellbeing and physical health of Māori. That study finds that "higher land retention within an iwi's rohe at the end of the nineteenth century is supportive of contemporary cultural wellbeing outcomes, while confiscation is linked to higher contemporary rates of smoking" (Thom & Grimes, 2022, p. 1).

Finally, ongoing questions remain about the balance between using resources for current wellbeing and respecting sustainability and environmental flourishing for future generations. In this context, the Living Standards Framework and He Ara Waiora allows the Treasury "to explore wellbeing from different cultural perspectives and knowledge systems", which helps "to build the Treasury's capability to ensure that wellbeing and te ao Māori are woven into policy development with integrity" (Cook et al., 2020, p. 1). Clarifying different perspectives on values and principles can support transformative action that goes beyond current pathways (Lee & Romero, 2023, p. 4) motivated by a commitment to being good ancestors for future generations (Wakatū Incorporation, 2020). Hence, this is another example where research in Aotearoa New Zealand at the interface between Western science and mātauranga Māori is creating new knowledge for mutual benefit (Ruru & Nikora, 2021; Saunders et al., 2023).

Notes

1 https://statisticsnz.shinyapps.io/wellbeingindicators/

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