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Office of Research – Innocenti

Innocenti Report Card 17

Executive Summary

Places and Spaces

Environments and children's well-being

UNICEF Innocenti's seventeenth *Report Card* examines how the world's richest countries are faring in providing healthy environments for children. Do children have clean water to drink? Do they have good-quality air to breathe? Are their homes free of lead and mould? How many children live in overcrowded homes? How many have access to green play spaces, safe from road traffic?

Data show that a nation's wealth does not guarantee a healthy environment. Far too many children are deprived of a healthy home, irreversibly damaging their current and future well-being. As this report looks beyond children's immediate environments to the world at large, a more complex picture is revealed. The unsustainable consumption levels of relatively child-friendly countries threaten both children worldwide and future generations.

What kind of world will they inherit? The report shows that no country has a consistently good environmental record. All countries need to take action – locally and globally – by providing all children with safe and healthy environments, both for today and tomorrow.

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THE LEAGUE TABLE

The league table of environmental conditions that affect children's well-being covers three pillars, or dimensions, of environmental impact on children, in 39 countries that are members of the Organisation for Economic Co-operation and Development (OECD) and/or the European Union (EU):

- **The world of the child** – the direct and tangible effects of children's interface with the environments around them, such as consumption of air and water and exposure to hazardous substances;
- **The world around the child** – the natural and built environments with which children interact directly, such as green spaces and car traffic;
- **The world at large** – broader aspects of the physical and policy environments surrounding children's microsystems at the regional, national and global levels, such as greenhouse gas emissions or electronic waste.

Spain tops the league table, followed by Ireland and Portugal. Although none of the three countries leads across all dimensions, all three managed to provide good environmental conditions for children while having a low to average impact (among this group of countries) on the global environment.

Countries rank differently across the three dimensions and none has consistently high or low scores across all three. The presence of wealthy countries in some of the bottom positions (such as the United States and Belgium) indicates that national prosperity is no guarantee that children will grow up in a healthy environment. Furthermore, while present-day environments appear relatively child-friendly in nations like Canada and Australia, their unsustainable consumption patterns threaten the future of children on both a national and a global scale.

Figure 1: A league table of environmental conditions that affect children's well-being

Overall ranking	Country	World of the child	World around the child	World at large
1	Spain	8	13	13
2	Ireland	6	4	20
3	Portugal	25	9	9
4	Cyprus	15	17	10
5	Finland	1	2	30
6	Italy	7	16	14
7	Iceland	3	1	32
8	Slovenia	19	14	16
9	Germany	13	6	22
10	Sweden	4	10	26
11	United Kingdom	11	12	23
12	Netherlands	12	8	27
13	Japan	2	21	25
14	Norway	5	5	35
15	New Zealand	24	15	17
16	France	14	27	18
17	Switzerland	21	3	33
18	Hungary	34	22	6
19	Austria	9	19	29
20	Czechia	26	23	21
21	Estonia	27	11	28
22	Lithuania	32	24	15
23	Croatia	29	33	5
24	Denmark	18	26	34
25	Slovakia	31	29	11
26	Greece	22	35	8
27	Poland	30	31	7
28	Canada	17	7	38
29	Malta	33	18	24
30	Australia	10	20	37
31	Latvia	36	30	12
32	Republic of Korea	16	32	31
33	Chile	35	37	3
34	Israel	23	36	19
35	Bulgaria	37	34	4
36	Belgium	28	25	36
37	United States	20	28	39
38	Costa Rica	38	38	1
39	Romania	39	39	2

Note: The ranking is calculated as follows: (1) a z-score for each indicator was calculated (reversed where necessary so that a higher score represents a more positive condition); (2) the mean of the z-scores within each dimension was calculated; (3) the z-score for each mean was calculated and served as a basis for ranking a given dimension; (4) the mean of the three ranks was calculated and served as a basis for the final ranking. If two countries had the same average of three ranks, the average of z-scores was used to determine their position. Countries are ranked on a dimension if they have data for at least two of the three indicators. Four OECD/EU countries are not included in the ranking: Colombia is excluded due to missing data on the 'world around the child' dimension, while Turkey, Mexico and Luxembourg are excluded as they are extreme outliers on at least one indicator (z-scores below -4.0).

CONCEPTUAL FRAMEWORK

UNICEF Innocenti Report Cards have led the way in comparing children's well-being across rich countries. *Report Card 16* introduced a multi-level framework that put the child at the centre. Child outcomes – physical health, mental well-being and skills – are affected by the world of the child, the world around the child and the world at large. *Report Card 17* takes this approach a step further. As the current state of the environment is shaped by past actions, and is already shaping what lies ahead, we add a time perspective to the model: the world we inherit and the world we leave behind.

Figure 2: Conceptual framework

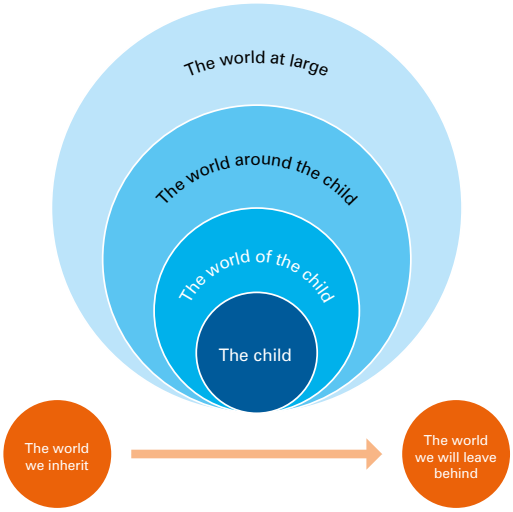
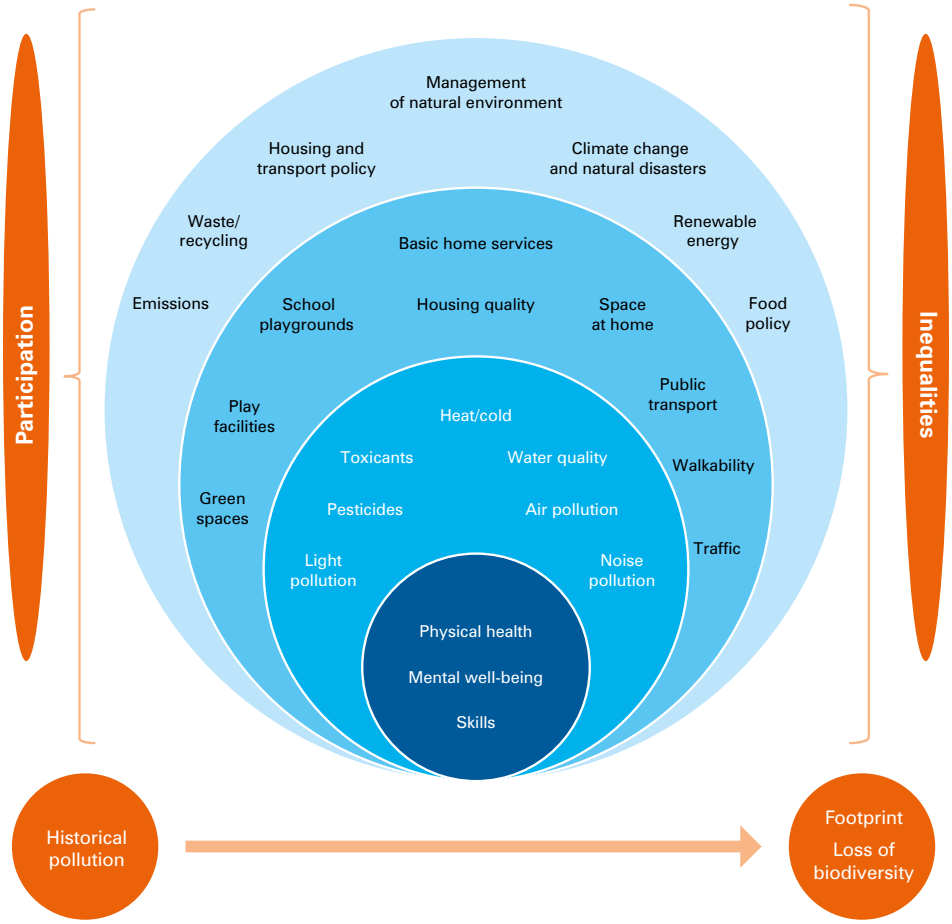


Figure 3: Topics covered in this Report Card



THE WORLD OF THE CHILD

Many children are breathing toxic air both outside and inside their homes. Colombia (3.7) and Mexico (3.7) have the highest number of years of healthy life lost (per 1,000 children under 15) due to air pollution, while Japan (0.2) and Finland (0.2) have the lowest.

Safe water, sanitation and handwashing facilities are still not fully implemented in 13 countries. Most years of healthy life lost are in Colombia (2.3 years lost per 1,000 children), Mexico (2.2) and Turkey (1.9).

In the world's richest countries, 1 in 25 children is poisoned by lead, a toxicant responsible for more deaths than malaria, war and terrorism, or natural disasters. Lead can enter children's bloodstreams while they play, dress up or paint a picture, for example. Lead not only affects children's bodily functions, but has adverse effects on attention span, memory, and planning and problem solving.

Pesticide pollution – linked with leukaemia and developmental delays – can harm children's nervous, cardiovascular, genitourinary, digestive, reproductive, endocrine, blood and immune systems. In Czechia, Poland, Belgium, Israel and the Netherlands, more than 1 in 12 children live in areas with a high pesticide pollution risk.

Noise pollution – highest in Malta, the Netherlands and Portugal – is linked to various adverse health effects, including poor birth outcomes, stress, reduced cognitive functioning and inhibited school performance.

THE WORLD AROUND THE CHILD

Damp and mould are major environmental risk factors within the home that contribute to upper respiratory infections, asthma and bronchitis. In Denmark, France, Spain, the United Kingdom, Iceland, Hungary and Portugal, more than one child in five is exposed to damp and mould; in Cyprus and Turkey, the proportion is over one in three.

In seven countries, more than one household in four, suffers from overcrowding – which has adverse effects on children's learning outcomes.

Having a quiet space of one's own provides both privacy and a good environment in which to study. In an average country, one in seven 15-year-olds lacks their own desk and a quiet place to study. More than 30 per cent of 15-year-olds in Chile, Mexico and Colombia did not have these basic facilities.

Green spaces, listed by the World Health Organization as among the social determinants of health, correlate positively with young people's life satisfaction. Finland leads in terms of urban green spaces, followed closely by Iceland and Lithuania. Cities in Israel and the Republic of Korea are the least green.

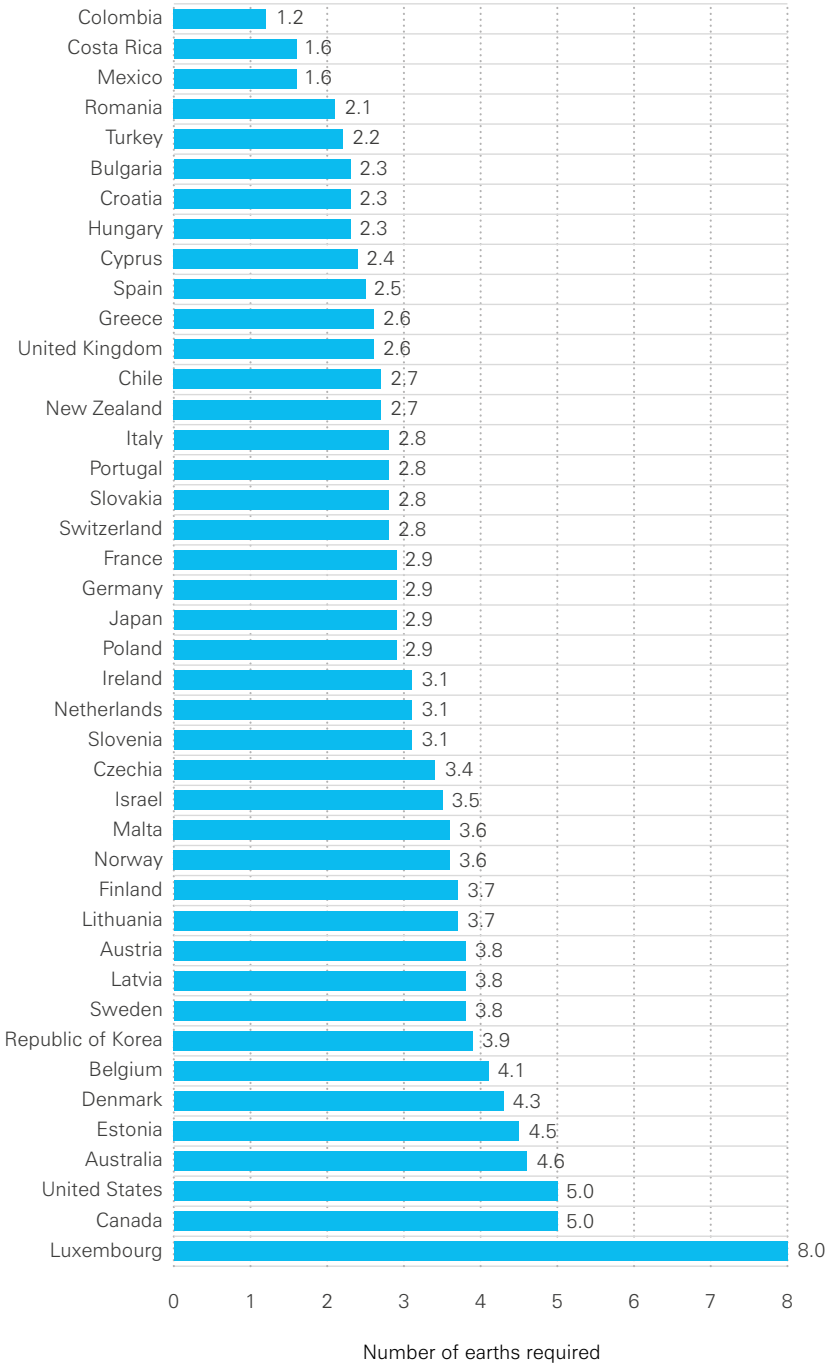
Traffic accidents are among the leading causes of child death around the world. In an average country, 1.34 years of healthy life are lost per 1,000 children due to traffic accidents – ranging from less than one year (0.65) in Sweden, Iceland, Malta and Ireland to over three years in Colombia, Turkey and Mexico.

THE WORLD AT LARGE

Some rich countries have a particularly detrimental environmental impact on the earth, relative to their population size. If everyone in the world lived like the average person from *Report Card* countries, we would need 3.3 globes to sustain these lifestyles: ranging from 1.2 in Colombia to 8 in Luxembourg. Carbon dioxide (CO_2) emissions of rich countries are not sustainable. On average, 9 metric tonnes of CO_2 per person are generated each year, from the countries analysed in the report. The carbon footprint of an average citizen of Luxembourg is over 36 metric tonnes per year, which is more than the combined footprints of a person from the seven countries with the lowest consumption.

In 1997, the Kyoto Protocol committed the industrialized countries and economies in transition to reducing greenhouse gas emissions. Since then, the four biggest polluters – Australia, Canada, Luxemburg and the United States – have emitted more than 380 tonnes of CO_2 per citizen, while six countries kept their respective emissions under 100 tonnes.

Figure 4: Number of earths required to sustain current consumption



Note: The ratio of a country's ecological footprint of consumption to its biocapacity in global hectares per person. Data not available for Iceland. Data for 2018 (2017 for Canada).
Source: Global Footprint Network. <https://www.footprintnetwork.org/licenses/public-data-packagefree/>, accessed on 23 February 2022.

Across rich countries, waste production increased from an average of 484 kg per person in 2010 to 529 kg per person in 2019. These averages mask a huge gap between approximately 336 kg in Japan and Poland to 960 kg in Canada. In 25 countries, most waste is still neither recycled nor composted.

The fastest growing type of waste is electronic waste (e-waste): rich countries generated 53.6 million tonnes in 2019, and this is expected to double by 2035. E-waste contains hazardous substances such as mercury, cadmium and lead, which damage the human body and brain, taking the highest toll on children. E-waste serves as an example of how environmental factors are linked across time and geography – as some of this hazardous waste ends up harming children in the Global South.

Some wealthy countries that rank high on the world around the child dimension, such as Norway and Switzerland, are among those that consume and waste the most electronics: Norway generates 26 kg of e-waste per person, and Switzerland 23.4 kg per person, each year.

So far, only two rich countries – Iceland and Norway – have succeeded in deriving the majority of their energy from renewable sources.

OVERARCHING THEMES

Inequalities in how environments affect children are evident, not only between but within countries. Poor households face higher risks when it comes to indoor air pollution, access to safe and clean water and homes that are dark. Among 31 European countries, poor households with children were more than twice as likely to be overcrowded and have difficulties keeping their home warm as non-poor households with children. Children living in poorer households face much greater risk and harm, and tend to live in poorer-quality neighbourhoods with fewer places to play.

While children should not bear the burden of rescuing the planet, inaction by world leaders has prompted adolescents and young people to lead climate strikes around the world. To continue influencing today's decisions, children and young people must be supported with knowledge, skills and opportunity. Many children still do not receive education on global issues, such as climate change. On average, only 76 per cent of children reported that they were aware of, or were very familiar with, climate change and global warming, with the highest rates of awareness in the Republic of Korea (88 per cent).

Young people feel distressed about the health and future of the planet. A survey covering six high-income countries reported that nearly half of all young people are worried about the environment to an extent that is affecting their daily functioning and life satisfaction. Some 6 in 10 believe that their governments have failed them, with regard to the environment. Two in five have doubts about becoming a parent in the future, due to the climate crisis.

RECOMMENDATIONS

Children need healthy and safe environments in which to flourish. Rectifying the injustice and damage, and realizing children's environmental rights, requires policy action at all levels. International cooperation is needed to find global solutions, but individual countries can and should also tackle problems to improve the environments in which children live and develop:

1. Focus on children now, to protect their futures

Today's environmental problems are costing children healthy years of life. In most cases – including with waste and pollution – the same issues that are damaging the planet in the long run are also damaging children's lives today. **Governments at the national, regional and local level** need to lead on improvements to children's environments today, by reducing waste, air and water pollution, and by ensuring high-quality housing and neighbourhoods where children can live, develop and thrive.

2. Improve environments for the most vulnerable children

The COVID-19 pandemic has revealed and exacerbated stark inequalities both between and within countries. Children in poor families tend to face greater exposure to environmental harm than do children in richer families. This entrenches and amplifies existing disadvantage. To reduce inequalities, **national, regional and local governments and authorities** should prioritize investments designed to improve the quality of housing and neighbourhood conditions for the poorest families, so that all children have environments that are fit for them to grow up in.

3. Ensure that environmental policies are child sensitive

Governments and policymakers should make sure that the needs of children are built into decision making. Children are more affected than adults by certain environmental risks, because their bodies are still developing; and the needs they have of their environments are distinct. All countries should ensure that policies are child sensitive, in accordance with the United Nations Convention on the Rights of the Child. Examples can be taken from those governments that have already implemented child rights impact assessments for all policies – and from the many governments that are presently seeking to make their environments more child friendly. Adaptation to climate change should also be at the forefront of action for both governments and the global community, and across various sectors from education to infrastructure. Efforts should be child sensitive and include the construction of children's adaptive capacity.

4. Involve children, the main stakeholders of the future

Children will face today's environmental problems for the longest time; but they are also the least able to influence the course of events. Adult decision makers at all levels, from **parents to politicians**, must listen to their perspectives and take them into account when designing policies that will disproportionately affect future generations. Through examples such as child and youth parliaments and citizens' assemblies, children should be involved in environmental debates and decisions, and in designing their immediate environments.

5. Take global responsibility, now and for the future

Environmental impacts have no respect for national borders. Air pollution produced within one country harms neighbouring countries and the entire world. Policies and practices must safeguard the natural environment on which children depend. **Governments and businesses**, through regulations and/or incentives, should identify and mitigate their global impact on the environment. **Governments** should take effective action now to honour the environmental commitments they have made to the Sustainable Development Goals, including to reduce greenhouse gas emissions by 2050.

for every child, answers