

A short summary of the book

2052 – A Global Forecast for the Next Forty Years

Jorgen Randers¹

The Limits to Growth study in 1972 addressed the grand question of how humanity would adapt to the physical limitations of planet Earth. Its authors, of whom I was one, offered these projections about the time period we have now entered:

- During the first half of the twenty-first century the ongoing growth in the human ecological footprint will stop.
- Humanity's resource use and environmental impact will be brought down to levels that can be sustained in the long run.

We wrote that these milestones would come to pass in one of many ways—for example through catastrophic “overshoot and collapse” or through well-managed “peak and decline.” In *2052*, I offer my status report—driven by curiosity, and a desire to understand whether, knowing what we know, humanity will rise to the occasion and effectively address the unprecedented challenges we now face. So, *2052* represents my forecast for the next forty years, and based on the projections of other scientists, futurists, and thinkers.

And, here in a nutshell is what I concluded. The process of adapting to the limitations of the planet has indeed started. Over the next forty years, efforts to limit the human ecological footprint will continue. Future growth in global population and GDP will be constrained in surprising ways, by rapid fertility decline as a result of urbanization, productivity decline as a result of social unrest, and continuing poverty among the poorest 2 billion world citizens. At the same time there will be impressive advances in resource efficiency and climate-friendly solutions. There will also be an increased focus on human well-being rather than on per capita income growth.

Still, based on the extensive database that underpins *2052*, it appears that the human response will be too slow. The most critical factor will be greenhouse gas emissions from human activities. These emissions will remain so high that our grandchildren most likely will have to live with self-reinforcing, and hence runaway, global warming in the second half of the twenty-first century.

Main messages of 2052

- The global population will stagnate earlier than expected because fertility will fall dramatically in the increasingly urbanized population. Population will peak at 8.1 billion people just after 2040 and then decline.

¹ Jorgen Randers is professor at the Norwegian Business School BI and co-author of *The Limits to Growth* in 1972, and its two sequels. His most recent book, published in May 2012, is *2052 - A Global Forecast for the Next Forty Years*, also a report to The Club of Rome.

- The global GDP will grow more slowly than expected, because of the lower population growth and declining growth rates in (gross labour) productivity. Global GDP will reach 2.2 times current levels around 2050.
- Productivity growth will be slower than in the past because economies are maturing, because of increased social strife, and because of negative interference from extreme weather.
- The growth rate in global consumption will slow because a greater share of GDP will have to be allocated to investment—in order to solve the problems created by climate change, resource scarcity, and biodiversity loss. Global consumption of goods and services will peak in 2045.
- As a consequence of increased social investment in the decades ahead (albeit often involuntary and in reaction to crisis), resource and climate problems will not become catastrophic before 2052. But there will be much unnecessary suffering from unabated climate damage around the middle of the century.
- The lack of a dedicated and forceful human response in the first half of the twenty-first century will put the world on a dangerous and unstoppable track toward self-reinforcing global warming in the second half of the twenty-first century.
- Slow growth in per capita consumption in much of the world (and stagnation in the rich world) will lead to increased social tension and conflict, which will further reduce orderly productivity growth.
- The short-term focus of capitalism and democracy will ensure that the wise decisions needed for long-term well-being will not be made in time.
- The global population will be increasingly urban and unwilling to protect nature for its own sake. Biodiversity will suffer.
- The impact will differ among the five regions analyzed in the book: the United States; the other OECD nations (including the European Union, Japan, and Canada among other industrialized nations); China; BRISE (Brazil, Russia, India, South Africa and ten other big emerging economies); and the Rest of the World (the 2.1 billion people at the bottom of the income ladder).
- The most surprising loser will be the current global economic elite, particularly the United States (which will experience stagnant per capita consumption for the next generation). China will be the winner. BRISE will make progress. The Rest of the World will remain poor. All—and particularly the poor—will live in an increasingly disorderly and climate-damaged world.
- The world in 2052 will certainly not be uniform or flat—the sentiment and conditions in the five regions will differ dramatically.