

A person wearing a bright red protective suit and black boots is crawling on a snowy surface. They are leaving a long, winding trail of dark, muddy snow behind them, which contrasts sharply with the surrounding white snow. The person is positioned in the upper left quadrant of the image, moving towards the center.

A STATEMENT OF
THE FINNISH ACADEMY OF
SCIENCE AND LETTERS

**BENDING,
BUT NOT
BREAKING**

**From the
coronavirus
pandemic to
strengthening
Finland's
crisis resilience**



OBJECTIVES AND TIMELINE

- Invited a group of experts in late May 2020, first meeting in June
- Aim: to report around the end of the year how to look beyond the crisis
- Worked August – December 2020
- Report launch 8 February 2021

- A small team – 10 world class researchers from different fields:
Biology, Neuroscience, Immunology, Environmental Physics, Linguistics,
Philosophy, Physics, Medicine, Social Policy, Education
- No economists?
Invited for consultation

GROUP OF EXPERTS

CHAIR

Anna Mauranten

President of the Finnish Academy of Science and Letters,
Professor Emerita of English at the University of Helsinki

MEMBERS

Eva-Mari Aro

Academician, Professor Emerita of Molecular Plant Biology,
University of Turku

Riitta Hari

Academician, Professor Emerita of Systems Neuroscience and
Brain Imaging, Aalto University

Sirpa Jalkanen

Academician, Professor of Immunology, University of Turku

Markku Kulmala

Academician, Professor of Aerosol and Environmental Physics,
University of Helsinki

Arto Mustajoki

Professor Emeritus of Russian Linguistics, University of Helsinki

Risto Nieminen

Academician, Professor Emeritus of Physics, Aalto University

Ilkka Niiniluoto

Academician, Professor Emeritus of Philosophy, University of Helsinki

Kari Raivio

Chancellor Emeritus, University of Helsinki

Jorma Sipilä

Professor Emeritus of Social Policy, University of Tampere

Kirsi Tirri

Professor of Education, the University of Helsinki

SECRETARIES

Pekka Aula

Secretary General of the Finnish Academy of Science and Letters

Jaakko Kuosmanen

Academy secretary

Rosa Rantanen

Science coordinator

IN SEARCH OF A NEW GENRE

- Previously: reports, booklets, typically from one specialist domain
- This report was to be short, readable, and multidisciplinary

SECTIONS

- 1.** To survive a crisis, we need in-depth knowledge of different crisis types
- 2.** The coronavirus pandemic is linked to the climate and environmental crisis
- 3.** Social prerequisites for strengthening crisis resilience
- 4.** The role of scientific knowledge in crisis resilience
- 5.** Building crisis resilience through multilateral strengthening of communication capabilities
- 6.** Social sensitivity
- 7.** Mental security of supply: education and culture



SUBSECTIONS WITH SENTENCE HEADINGS

TO SURVIVE A CRISIS, WE NEED IN-DEPTH KNOWLEDGE
OF DIFFERENT CRISIS TYPES

- The coronavirus pandemic can be defined as a crisis that is predictable but has unknown characteristics
- Coronavirus crisis aftercare has been discussed since the early stages of the pandemic, but the aftercare phase will not begin until the spreading of the virus has stopped
- The coronavirus crisis must be managed on a national level, but it is not possible without international cooperation



SEVEN OBJECTIVES THAT STRENGTHEN FINLAND'S CRISIS RESILIENCE

- 1.** Finland must take a more assertive approach to international cooperation and commit itself to proactive cooperation in the fields of politics, the economy, science and resolving the environmental crisis.
- 2.** Finland must take more effective action to improve the climate and the environment.
- 3.** Education needs to be reformed at all levels to promote diversity and wide variety of skills.
- 4.** Communication capabilities must be developed, and more education should be provided in this field.
- 5.** Economic incentives must encourage stronger commitment to the principles of sustainable development.
- 6.** A scientific advisory mechanism based on the expertise of the independent scientific community must be established in Finland. This will improve our crisis resilience and ability to act quickly when necessary.
- 7.** The share of Finland's GDP that is directed to research, development and innovation must be increased to 8% by 2035.

IN SUM: INTERLINKED THREADS RUNNING THROUGH THE WHOLE

- The pivotal role of broad, multidisciplinary knowledge in constructing and maintaining resilience in society
- Environmental concerns: climate change and biodiversity
- Mental well-being (“Mental Security of Supply”) through social inclusion, education, art, and confidence in policy makers
- Strong communication capabilities
- An economy which builds on research-based innovation and sustainability

THANK YOU!

