

Summary of the Advisory Report of the Delta Programme Signal Group | 2022

March 2023



Climate change is everybody's business

The IPCC, the United Nations climate panel, published two important reports last year. They made it clear once again that anthropogenic climate change is disrupting nature in dangerous ways and affecting enormous numbers of people around the world. If greenhouse gas emissions are not reduced immediately and extensively, the IPCC expects us to reach approximately 2.8 degrees of warming by 2100.

It should be pointed out that the chair of the Signal Group, **Bart van den Hurk**, stresses that he is not pessimistic about the options available to the Netherlands to respond to climate change.

“We are certainly seeing developments that may lead to serious flooding and other adverse effects but we do not want to paint an apocalyptic picture of an imminent future in which our country is completely engulfed by the sea. The Signal Group wants to follow the facts in a down-to-earth way and conduct a reality check on the policies in place. With respect to building homes in areas that are susceptible to flooding, we don't adopt a position. However, we do stress the need for a position to be adopted.”

The Signal Group monitors signals from science and society that may affect the strategy of the Delta Programme, interprets those signals and provides advice about them. On 10 November 2022, the Signal Group sent its annual advisory letter to the Delta Commissioner. This time round, it identified three signals:

- **need for more grip on volatility**
- **spatial developments**
- **importance of social resilience**



Signal 1: grip on volatility

Climate change is a reality: more understanding and measures needed

Because of more extreme climate events, there seems to be a growing realisation among the Dutch that climate change is a present-day reality that demands action. Climate change leads to more unpredictable and extreme weather: high temperatures, intense and prolonged rainfall, and long periods of drought. These effects have consequences of their own: for example, prolonged drought leads to low river water levels, interfering with waterborne transport, and in turn to shortages of commodities in different places along the chain. Sequences like this are known as *domino* or *cascade* effects: an event leads to a succession of other events, which often occur faster or in more intense form. Dutch people need insights and concrete measures to get to grips better with this complexity.

Another factor here is that focusing on emergencies and the short term may divert attention from the long-term implications of climate change.

Recommendation to visualise cascade effects and transform them into practical measures, and also to keep an eye on the long-term impacts of climate change

The Signal Group advises the sponsors of delta scenarios and crisis management organisations to include the cascade effects of climate change in the scenarios used in crisis response.

Crisis response organisations must be given the opportunities and resources to visualise those cascade effects in concrete terms. Those insights must then be transformed into practical measures. Because that will make it possible for the Netherlands to prepare for the unknown and allow us to deal better with uncertainty, complexity, interaction and the unpredictability of what happens all at the same time during and after extreme weather events.

The Signal Group advises the Delta Commissioner to stay on course and to continue to keep an eye on the long-term impacts of climate change. That should not result in lessons being ignored that can already be learnt from experience with extreme weather. Indeed: those lessons can be useful for the inclusion of long-term agendas during and after the response to crisis. Furthermore, when plans are being made to cope with sea level rise of 2 to 3 metres, the impact that preparations will have on spatial planning should not be overlooked.



Signal 2: spatial developments

Pressure to build new housing in vulnerable areas is increasing

In an implementation programme of the National Environment Planning Vision (NOVEX), all government authorities are working together on a plan for the spatial planning of the Netherlands. This plan includes avoiding areas where there is land subsidence when developing new housing locations. Building will not be permitted, or only subject to conditions, in areas that are needed to retain water for times of water shortages and when water levels are high.

Municipalities have only limited space for new housing, even though demand is enormous. So not building in vulnerable areas is a challenge and building in areas considered to be 'unfavourable for building' is on the increase.

The Signal Group sees that most new construction work is located in existing residential areas but the number of people living there is declining. In addition, the pace of the hardening of the land surface is exceeding the objectives set out in European directives. Because the built-up area is increasing in size, there is less room for climate-resilient design (climate-resilient here means: protected from the effects of climate change).

Recommendations relating to spatial planning

The risk of flooding and severe problems with excess water in unfavourable or vulnerable areas is determined in part by the height of these areas. **The Signal Group's recommendation for Statistics Netherlands (CBS) and the Netherlands Environmental Assessment Agency (PBL)** is to explicitly include elevation data when monitoring building in vulnerable areas. Monitoring means: long-term measurements that can serve as a basis for determining policy success. **Policymakers are urged** to check carefully whether building more in areas that are not actually suitable is still in line with the long-term strategy for the distribution of housing in the Netherlands.

The recommendation for national government, and provincial and municipal authorities is to set standards for the amount of green space and water around homes that can serve to reduce the impact of climate change to some extent.



Signal 3: social resilience

New backlogs in the adaptation of homes to climate change are looming, the gap between the goals of the Delta Programme and households is growing

The Signal Group is seeing an increasing disparity: at a time when banks are granting higher mortgages to homeowners who manage to reduce their energy consumption, there is a decline in purchasing power in households in social housing that are already struggling to keep up with climate adaptation investments. High gas prices and inflation are leading to new backlogs that are further restricting the capacity to adapt homes to climate change. In addition, many people are openly turning their back on government and politics, increasing the distance between the goals of the Delta Programme and the possibilities of individual households.

Recommendation: engage with a broad group of citizens, make the narrative on climate change and the planning of our country more inclusive

People with low levels of education and low incomes would not yet seem to be in the picture for the Delta Programme. **The Signal Group advises the Delta Commissioner, the government, CBS and PBL, as well as crisis response organisations** to look for ways of communicating that will reach a broader group of citizens. This is also important with a view to providing people with better information during a crisis. Social resilience means: the ability of individuals and groups to cope with both short-term shocks and gradual change. In terms of climate change, this means coping with both the extreme events occurring now – such as heat waves, water shortages and extreme rainfall – and long-term developments such as higher salt levels in the soil, changes in land use and land subsidence. The Signal Group advises studying psychological and sociological processes that contribute to social resilience in the area of climate adaptation. Older people living alone and households in social housing should also be included in the transition to climate-resilient housing. The narrative with respect to climate change and the planning of the Netherlands needs to be more inclusive.

Improvements in information about preventing and coping with crises at the municipal level, should lead to residents and businesses being better informed about climate risks. Ultimately, that should lead to a society that is more resilient and therefore able to respond robustly when times require it.

Credits

Summary of the Advisory Report of the Delta Programme Signal Group Opinion sent to the Delta Commissioner on 10 November 2022.

The full text of the advisory report can be found (in Dutch) on:

<https://www.deltaprogramma.nl/documenten/publicaties/2022/11/10/adviesbrief-signaalgroep-2022>

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The Delta Programme Signal Group is a group of scientists who monitor signals for the Delta Commissioner about new developments relating to climate change and related issues. Increasingly, it also includes important societal and socio-economic signals in its recommendations. You can find more about what the Signal Group does, the experts in the group, and the recommendations issued in recent years by clicking [here](#).

The Delta Commissioner leads the Delta Programme. That programme brings together a range of government authorities and organisations to work together on protecting the Netherlands against high water and flooding, to safeguard adequate supplies of fresh water, and to contribute to climate-resilient spatial planning for our country.
