

## **Main findings of the IPCC AR6 WG II: Impacts, Adaptation and Vulnerability**

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Dear Excellencies, Ministers, Secretaries,

I am standing here on behalf of 270 scientists from 67 countries -- We assessed more than >34,000 scientific papers, which resulted in >3600 pages of assessment text.

And what did we find?

The scientific evidence is unequivocal – climate change is already affecting the lives and livelihoods of billions of people, entailing losses and damages.

Any further delay in concerted global action will miss the brief and rapidly closing window to secure a livable future. We have to act today -- and tomorrow.

And, stronger than in previous reports this one—the Assessment Report 6—offers solutions to the world.

I structured the talk in 4 parts. So, let's get to...

### **Part 1: How well are we adapting to a changing climate?**

Adaptation action has increased since the last assessment but progress is uneven and we are not adapting fast enough.

At least 170 countries and many cities include adaptation in their climate policies and planning.

However, there is an increasing gap between adaptation action taken and what's needed.

At the current rate of planning and implementation, this gap will continue to grow.

***Takeaway #1: Impacts, losses and damages increase, if we are not speeding up adaptation.***

### **Part 2: What can be done? What are options that are feasible, and effective?**

Foremost, nature offers significant untapped potential, not only to reduce climate risks, but also to improve people's lives and livelihoods.

Strengthening biodiversity can improve pest control, pollination, and carbon storage. Conservation, protection and restoration can help natural forests to adapt. Restoring wetlands and rivers, and creating no-build zones helps temperature regulation, flood protection and effective water management.

Agroforestry is a climate-resilient way of growing food and creating wildlife habitat.

Also in urban areas it is effective to bring nature back into the cities. We found that using nature and engineering approaches together is particularly important.

Think, for example, about the uni-directionally used spaces in cities, like parking lots, roofs on buildings, shopping malls. Establishing or restoring parks, green corridors, ponds and wetlands – as well as urban agriculture can all be woven in to the built environment.

***Takeaway #2: Nature offers significant untapped potential for adaptation.  
Combining nature and engineering approaches is most effective.***

### **Part 3: Other important insights for the GGA and GST discussions**

Measuring risk—the unit to which adaptation progress could be assessed—is complex, considering the lack of a uniform reference metric for adaptation, changing baselines, confounding societal developments.

Moreover, there is evidence of maladaptation occurring—which is adaptation that inadvertently increases risk or greenhouse gases emissions.

For the GST this means that it is vital to look at the synergies and trade-offs of adaptation. WGII of Assessment Report 6 has done that.

We see that many adaptation actions have wider benefits, for the Sustainable Development Goals, for equity/ justice, for mitigation, and ecosystem services.

For example we show that strengthening **health** systems has parallel benefits for 15 out of the 17 Sustainable Development Goals, e.g. when planning disease surveillance, early warning systems, and improved access to potable water. But make sure that all parts of society have access to these systems, can benefit from it and act on it—just warning people is sometimes not enough under lack of resources or options where to go.

We also show that **social safety nets** and **sustainable food and fishery management** have large benefits for other SDG goals.

Overall, we find that actions centering on people issues, **social aspect, equity/ justice/ inequality** remains key, as it is also vulnerable people that are affected most by climate change and maladaptation.

***Takeaway #3: Investing in health systems and social security has large benefits for people and society.***

***Takeaway #4: Good adaptation is that that has wider benefits and synergies with other societal goals.***

***For the GST, consider assessing wider benefits of adaptation—when assessing of the risk reduction of adaptation remains challenging.***

And, yet, adaptation cannot prevent all losses and damages.

To keep the maximum number of adaptation options open it is essential to make rapid, deep cuts in greenhouse gas emissions.

Some natural solutions will no longer work above 1.5C warming. For example, a lack of freshwater could mean that people living on small islands and those dependent on glaciers and snowmelt can no longer adapt.

And by 2C it may be especially challenging to farm multiple staple crops in many current growing areas.

## Part 4: So, what are enablers? How can we accelerate adaptation?

Finance is a very important enabler, in particular when combined with investments in governance structures.

The amount of finance dedicated to adaptation is certainly insufficient.

As regards governance, political commitment and follow-through across all levels of government is key –

- as are national climate laws and policies that require adaptation from lower levels of government and include guidelines on how to do this.
- as are institutional frameworks with clear goals and priorities that define responsibilities.
- as are educational and information programs and the arts can play a part.

Also monitoring and evaluation is vitally important to track progress because, in a warming world, measures that are effective now might not work in 20 years.

And finally, inclusive governance that prioritizes equity and justice—as highlighted before—is also important.

***Takeaway #5: Strong, flexible, and inclusive institutions, along with considerable finance are important enablers of adaptation.***

Starting today, every action, every choice and every decision matters.

Because each of those can take us away from, or towards, a climate resilient and sustainable world.

Worldwide action to achieve climate resilient and sustainable development is more urgent than previously assessed.

If we want to secure a livable future, we have to act today and tomorrow.

The 5 key takeaway messages are again, as follows:

- ➔ ***Impacts, losses and damages increase, if we are not speeding up adaptation—and mitigation.***
- ➔ ***Nature offers significant untapped potential for adaptation.  
Combining nature and engineering approaches is most effective.***
- ➔ ***Investing in equitable health systems and social security has large and wider benefits for people and society.***
- ➔ ***In the GST, consider assessing wider benefits of adaptation, such as those related to the SDG.***
- ➔ ***Strong, flexible, and inclusive institutions, along with considerable finance are important enablers of adaptation.***

And, as a private person and professor from the University of Twente, doing a lot of research in Africa I add:  
I count on you. I am sure you can do it. You can do it.

Make bold suggestions on how to adapt and mitigate. Make these suggestions today. And follow-up and act on them tomorrow.