## Vidar Helgesen Minister of Climate and Environment Norway

## Food systems for a sustainable future

Trondheim Conference on Biodiversity, May 31 2016

Ladies and Gentlemen. It gives me great pleasure to extend to you all a very warm welcome to this eight Trondheim conference on biodiversity. I am to convene this conference on behalf of the Norwegian government.

Trondheim is accustomed to visitors. This is the City with the Cathedral in which St. Olav was laid to rest after he was defeated by the peasant army at Stiklestad in the attempt to bring Christianity to the region. It is encouraging to see the turnout of Biodiversity pilgrims at this gathering! It affirms the seriousness with which the global community regards the importance of biodiversity and ecosystems for agriculture and food systems.

One of my greatest ambitions as the Minister for Climate and Environment is to reach out to different sectors and create dialogue to find common solutions. That is also the main purpose of this Conference.

If the world is to feed seven billion people, rising to over nine billion by 2050, then producing sufficient, safe and nutritious quality food for all in a way that also keeps humanity's footprint within planetary boundaries will be central.

While human population more than doubled in the space of just two generations, the natural resource base available for food production is limited. Increasingly more, scientists are seeing the environment as perhaps the missing underpinning pillar.

Allow me to highlight two landmark global agreements that, together with the Convention on Biological Diversity, provides important momentum for this conference:

Firstly, the Global community has adopted new goals for sustainable development. Biodiversity as well as food security and agriculture is high on this agenda. Moreover, the environmental, social and economic pillars underlying the development goals means that food security is linked to natural resources and sustainable production methods in the agricultural sector.

Secondly, the Paris Agreement recognizes the fundamental priority of safeguarding food security and ending hunger, and the particular vulnerabilities of food production systems to the adverse effects of climate change

We face an immense challenge in terms of food security. There are several factors that underpin food security, such as access to food and the availability of food. I would also highlight the importance of fisheries and aquaculture to world food production and food security. Food production and consumption is highly resource-intensive. All food systems rely upon natural resources such as water, biodiversity, healthy and fertile soil, or the sea. However, in many regions resources are being depleted. New information from the FAO is reporting that approximately 30 per cent of world fish stocks are reported as being fished at an unsustainable level.

At the same time, nearly a billion people are already food-insecure, unable to produce or buy sufficient quantities of nutritious food. Millions of children go hungry every night and die of malnutrition, It leaves me almost lost for words. And on the reverse side of the coin, let us not forget the fact – that over a billion people in the world are now considered overweight or obese. In one way or another, half the world finds itself on the wrong side of the food equation.

The IPCC also shows that food security is threatened in several regions due to various forms of extreme weather conditions including droughts and flooding. However, there is also scope for significant adaptation by modifying agricultural practices and using new varieties of plants. It is important, however, to note that one cannot do this overnight. Genetic material that may be needed for agriculture 20 years into the future might be seriously in danger due to biodiversity loss in the wild as well as in farmers' fields. This material must be identified, conserved and made available for agriculture and food security, a process that can take years and have to start now.

In addition, significant amounts of energy are used in producing agricultural inputs, and in post harvest processing, transport and distribution of food. Agriculture is a major user of ground and surface water, accounting for approximately 70 per cent of the water used in the world today. Soils are the basis for more than 90 percent of food production, and yet every year approximately 24 billion tons of fertile soil are lost due to erosion.

It is also a paradox that the waste and loss from the global food system can reach up to 30 per cent of all the food produced. We might be wasting as much as 2 billion tons of food a year globally!

As a part of the sustainable development goals, the global community has committed to halve per capita global food waste at the retail and consumer levels

and reduce food losses along production and supply chains. This is an important challenge, Norway is committed to contribute to the achievement of this goal.

These examples illustrate the complex interlinkages between food security and natural resources. I think we have already come a long way in looking at ecosystems, agricultural systems, food processing distribution and consumption in a holistic perspective. This is promising; however, we need to speed up!

Climate change present a serious threat to the global food system. The latest report from the IPCC shows that regions with a low level of food security, also are most vulnerable to future climate change: A recent report from the Max-Plank institute concludes that large parts of the Middle East and North Africa could become so hot that human habitability is compromised. Roughly, 500 million people live in this region today.

More than 3 million hectares of forests are being cleared each year, mostly for agricultural expansion in the tropics. This is a major concern for the global efforts on REDD+ under the Paris agreement.

We cannot simply continue with a 'business as usual' answer to this challenge: Deforestation due to food production must be addressed, we need a new approach to land-use which is climate friendly and also fulfilling the right to food, more productive, and increases the resilience of ecosystems and of societies. To meet increasing demands for food, we need to produce more, but with less resources!

So what is a "sustainable food production" system? For me, it has to be a form of agriculture that does not exceed the carrying capacity of its local ecosystem and which recognizes that soils, biodiversity and water are among the planet's most vital resources. Healthy top soil is a cornerstone of viable societies; it acts as a buffer against drought and as a carbon sink. And it is the primary source of the health of all animals, plants and people. Continued land degradation is not a viable option, then Nature's capital will lose its innate resilience and it won't be very long, before our human economic capital and economic systems also begin to lose their resilience.

The environment supports agriculture in two fundamental ways. Natural resources such as fertile land and adequate supplies of freshwater are one domain; the other is the planet's ecosystem services such as the nutrient recycling and soil stabilization provided by forests and biodiversity, including pollination services by insects such as bees.

Economists give us a way to think about this challenge by talking about "negative externalities". Negative externalities are costs of producing food that the market

doesn't account for. For instance, if a farmer doesn't pay for the water he or she uses, then the value of the water would be "external" to the price consumers pays for the food and hence there would be no incentive for the farmer to conserve this resource.

When did the bees last send you an invoice for pollination?

Ladies and gentlemen,

The International Panel of Experts on Sustainable Food Systems (IPES-Food) will launch their latest report during this conference. The report is addressing all the dimensions of sustainable food production in a holistic, systemic way, that is economic, environmental, social, and nutrition and health.

The report is exploring the potential for paradigm shift in agriculture, and I'm sure that it will stimulate the discussions here in Trondheim.

Studies show that investing in sustainable food systems is vital, and is also be beneficial from the environmental, social and economic standpoint. But economic investment is not enough. These systems must also be built upon a strong collaboration among farmers, fishers, governments, the private sector, consumers and civil society.

Partnership is vital, indeed, it has never been needed more and I am tremendously inspired by recent initiatives by private sector. You cannot help but feel hopeful when huge corporations like Unilever take the lead. Industry is clearly listening.

All key sectors and players throughout the food system must be involved to make better use of food systems for improved sustainability. This requires better governance, based on sound data, a common vision and, above all, political leadership.

Today, we have a blueprint for a comprehensive solution to our current land-use dilemma. The Sustainable Development Goals offer a unique opportunity to shape policies for the next 15 years towards a more sustainable use of productive land and natural habitat. What is historic with this new Agenda is that it links environment, and social and economic concerns in a much more holistic manner.

We also need more knowledge to make better policies. I am not sure how familiar you are with Norse mythology but Woden (Odin) was one of principal gods. He was a relentless seeker after knowledge and wisdom and willing to sacrifice almost anything for this pursuit. Woden had his two ravens, Hugin and Munin, which he sent around the world to gather information. The story says that Woden even went so far that he sacrificed his own eye for more wisdom.

This thirst for knowledge is especially important in the area of environment. Improved dialogue between the scientific and policy-making communities is necessary. It is important for researchers to communicate scientific findings in an accessible way to policy-makers in order for us to make the right choices.

The aim of the 2030 Agenda for Sustainable Development is to build 'the future we want'. So, can we make "the Future We Want" a reality?

I would like to congratulate Mexico and their bold commitment to advance the sometimes difficult discussions of mainstreaming biodiversity into other sectors of society. Biodiversity is important in itself, we have to stop the loss of biodiversity. We have to stop the loss because today's biodiversity is critical for tomorrow's food systems, and biodiversity is our insurance for a changing environment.

I wish you a fruitful and successful conference. I trust that this conference will not shy away from the big questions, and that it will inspire us all, and contribute in making the 13<sup>th</sup> Conference of the Parties in Mexico a big success.