Fra: Lois Marie Granskog <granskog@pvv.org>
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Til: Postmottak KLD
Emne: 23/5569 innspill til natur- og klimameldinger

Innspillet er skrevet på engelsk, slik at jeg også kan dele det med noen personer i utlandet. Referanser er i lenker i teksten og også på slutten etter innspillet kun med titler og lenker til artikler for en rask oversikt.

Dette innspillet er om:

Regionale innspillsmøter om stortingsmeldinger for klima og naturmangfold (Regional feedback meetings on white papers on climate and biodiversity)
https://www.regjeringen.no/no/aktuelt/regionale-innspillsmoter-om-stortingsmeldinger-for-klima-og-naturmangfold/id3014889/?utm_source=regjeringen.no&utm_medium=email&utm_campaign=nyhetsvarsel20231117

Important questions have been asked about how to meet the challenges ahead with regard to nature and climate change, thank you for the opportunity to comment on these important issues.

Response to this request for feedback is written in English, as this will be shared with some people abroad. References are in links in the text and also listed at the end with titles and links for an easy overview.

The following questions have been raised, these are in Norwegian, an English translation of the question follows each question.

1. Når vi i 2050 har nådd natur- og klimamål, hva er de tre viktigste grepene som ble gjort i dag for å komme dit? (When we have reached nature and climate goals in 2050, what are the three most important initiatives that were taken today to get there?)

By 2050, assuming a civilisation where people thrive, we will have understood "the limits to growth" and worked to create a steady state economy, meeting the 3 non-negotiable conditions for sustainable developmentdescribed so many years ago by Herman Daly, they have been summarized as follows: "(1) exploit renewable resources no faster than they can be regenerated; (2) emit wastes no faster than they can be assimilated; and (3) deplete non-renewable resources no faster than renewable substitutes can be developed to replace them". Our current society is failing on all three of these conditions for sustainable development. We are now beginning to feel "the limits to growth" in many ways, not only due to climate change but also because resources are limited and the EROI for fossil fuels is declining (EROI = energy return on investment = energy delivered/ energy required to deliver that energy). This will mean higher energy prices which will affect the global economy. We will need to figure out how to meet our needs using less energy, and in the case of fossil fuels, far less energy. Coal, oil and natural gas now supply around 80% of the world's energy, and oil is a critical supply chain component of ca. 90% of all manufactured goods. Look around you, and try to imagine life without oil. Bitumin/asphalt used for paving is mostly produced from refining oil, it can be recycled but, for how long? How long will the world be able to repair the roads already made? How much electricity has to be produced to replace energy from fossil fuels? Can this be done or do we really just need to use a lot lot less? Would a green energy transition use up the entire remaining carbon budget ? There are already significant conflicts within this country over energy. We have squandered exceptionally precious resources. We need to spend more time thinking these things through. Our current consumption can't continue. It is possible to live well with far less energy and resource consumption. We will collectively need to relearn skills and learn to think differently to do this. It's time for some serious reflection about the energy that we take for granted. This

also has implications for how we will be able to produce food. There is need to have a closer look at and start asking questions about the narratives in common discourse.

2. Hvilke viktige rammer og hensyn må de to meldingene ha med seg fra ditt ståsted? (What important frameworks and considerations must the two communiqué take into account from your point of view?).

These should be considered in light of the 3 rules for sustainable development. Our actions will need to come from a different perspective and understanding of our situation. We need to focus on quality of life, and how we can live well with far less consumption. It is critically important to repair degraded soils and restore the conditions for ecosystem functioning, not only in agricultural landscapes but also in urban areas. There will be things like extreme weather that must be taken into account. In some cases this can be alleviated by nature based solutions. Impermeable surface area increases flood risk. Non- point source pollution will need to be reduced.

Research indicates that following the dietary guidelines to eat more fruits and vegetables would cause an increase in green house gas emissions and energy usage due to the high energy requirements per calorie of this food (assuming it is grown commercially and sold in a store). Fruits and vegetables also represent around half of all food waste in the EU. However if people grow and/or harvest the fruits and vegetables they eat themselves, the outside energy inputs, ghg emissions, and food waste can be dramatically reduced. People who grow their own food also tend to eat more than the daily requirement of fruits and vegetables. Allotment soils have been found to hold more carbon and are healthier than conventional agricultural fields. It is important to foster measures that enable more people to grow their own food. In a time of crisis people will need seeds to do this, and local seed banks of open pollinated seeds well suited to organic growing conditions would be a wise idea. A lot of what was once the best agricultural land is now in lawns. That said in some cases urban agriculture can increase emissions. This can occur when urban agriculture comes with a lot of energy intensive infrastructure and other inputs, building small buildings from new materials and so forth. In the United States the Extension Master Gardener Programs educate volunteers that serve as communicators transferring knowledge and skills between universities and the public. The programs vary from state to state. A similar program in the Nordic countries might facilitate the transfer of knowledge from universities to people who need help learning how to grow food, for themselves and other life such as insects. We could use an army of volunteers to deal with the challenges ahead. No country in the world can manage without unpaid labor. That unpaid labor isn't measured in GDP has been noted as an issue. An example of a course book for a MG program can be seen here. With regard to growing food in urban areas some other educational videos may be also helpful.

We need more agroecological solutions that keep farmers farming and involve more people, especially young people, in food production. CSA (community supported agriculture (andelslandbruk)) is one way both goals can be achieved. We cannot afford to lose any more farmers. Weather can ravage harvests and disrupt trade as we are now seeing in various places. Livestock are critically important for getting agroecological methods to work, especially this far north. The challenges ahead will mean we need to farm with fewer costly inputs. "Novel entities" released into the environment need to be reduced. There are endless articles on this. Sperm counts are declining. People arelosing the ability to reproduce. Glyphosate isshowing up in pregnant women living near agricultural fields. Even deer are apparently affected by neonicotinoid Insecticides. To what extent does "plant based" = pesticide based, most especially on imported goods? What is this doing to life? Agroecological food production can address many of these issues, and reduce emissions.

3. Arealbruksendringer er en stor utfordring både for natur og klima. Hva bør meldingene legge frem for å sikre at arealbruken fremover bidrar til at vi når natur- og klimamålene? (Land-use change is a major challenge for both nature and climate. What should the white papers present to ensure that land use in the future contributes to achieving the nature and climate targets?)

Norway is not self sufficient in food production and has little agricultural land, every square meter of soil that can grow food for humans and wildlife may be needed in times of crisis. Land use in many cases will need to solve multiple challenges simultaneously, food production, healing soil degradation, fostering and restoring biodiversity - all at the same time. This implies more diversity in crops grown and less consumption of UPF (ultra-processed food) which is dependent on extensive monocultures of a few crops. EOV (ecological outcome verified) and bird friendly beef are examples of solving multiple problems simultaneously. We need to be thinking about organisms in trouble and how this situation can be remedied, dung beetles and birds in Norway are two such cases. Some environments/organisms will need special protection to survive as they cannot be easily regenerated in the space of human lifespan, for example trees that are hundreds of years old. The long term overall protection of agricultural land and ecosystem functioning is a priority.

Pesticides and other chemicals do not stay put, they move around and affect non target organismsincluding ourselves. In just 3 decades insect populations in German nature reserves have declined by over 75%. This shows clearly that making reserves alone is not enough. Ecosystems need animals to function many of which are now extinct, and in some cases livestock are needed to fill these niches.

4. Internasjonalt samarbeid er nødvendig og viktig for å løse klima- og naturkrisa. Hvordan kan internasjonalt samarbeid styrkes på klima- og naturområdet i årene fremover? (International cooperation is necessary and important to solve the climate and nature crisis. How can international cooperation on climate and nature be strengthened in the years ahead?)

In 2020-2021 thousands of farmers in India marched to the capital in protest. This was followed by a general strike in India in which an estimated 250 million people went on strike. You have to earn the trust of the people you claim to represent. Serious questions have been raised about this.

5. Naturavtalen er et rammeverk for alle. Hvordan kan vi sikre at alle samfunnsaktører og hele myndighetsapparatet i denne regionen tar sin del av ansvaret for å gjennomføre naturavtalen og stanse tapet av natur innen 2030? (the DECISION ADOPTED BY THE CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY is a framework for everyone. How can we ensure that all social actors and the entire government apparatus in this region take their share of the responsibility for implementing the nature agreement and halting the loss of nature by 2030?)

The agreement in English can be found here . Sustainable development is mentioned 13 times in this agreement. Daly's rules for sustainable development need to be kept in mind. This is going to be a work in progress since at this point it's not clear we have an overview of all the organisms that are in trouble in our area, for this artsdatabanken is helpful.

6. Hva trenger kommuner, næringsliv og andre av kunnskap og virkemidler for å ivareta naturen bedre i denne regionen? (What do municipalities, businesses and others need in terms of knowledge and instruments to safeguard nature better in this region?)

We need to consider that the future will be very different from the past, to think about what Herman Daly calls "uneconomic growth", that what we are destroying is more valuable than what replaces it. The love of nature runs deep in Norwegian culture. The recent report on Norwegian television abouthow much we are losing was a wakeup call. Will natural areas destroyed for "development" interests end up like the deserted shopping malls in China? We have 12 protected areas in Trondheim. In some cases invasive non-native species are being removed, and hiking is being channeled into trails. Some important habitats are protected, this is encouraging. This alone however will be unlikely to reverse things like the dramatic

decline in birds. We need a mentality that considers nature and functioning ecosystems in all of the decisions we make.

7. Hvilke andre grep enn vern kan vi ta for å sikre langsiktig beskyttelse og bevaring av viktige naturområder (jamfør mål 3 i naturavtalen)? (What other measures than protection can we take to ensure long-term protection and conservation of important natural areas (cf. goal 3 of the Nature Agreement)?)

The previously mentioned 3 principles of sustainable development need to be considered in all our decision making. Those familiar with Daly's work and limits to growth are very familiar with them. We face a number of challenges not least of which is who influences the framing of the discussion and policy. The EAT Lancet article did not consider chemical pollution at time when people are losing the ability to reproduce and insect numbers, bird numbers and other organisms are plummeting. Ecosystems can't be protected from chemical pollutants that move around globally.

8. Med utgangspunkt i 2050-utvalgets hovedanbefalinger (se lenke), hva bør klimameldingen prioritere å følge opp, sett fra ditt ståsted? (Based on the 2050 Commission's main recommendations (see link), what should the climate report prioritise following up, from your point of view?)

The report has not considered "the totality of the evidence" with respect to diet and the environment. The main article used to make environmental claims was published thesame year as one with better methane calculations. The older calculations do not accurately represent the actual warming effect of methane emitted by ruminants. Misleading calculations should not be considered acceptable and this matters for local communities. GWP* should be used. More may be gained by reducing emissions from manure management than by reducing enteric methane. The reference much used for making environmental dietary recommendations, used to justify telling people to eat "plant based" foods has not analysed the environmental impacts of UPF (ultra-processed foods), which are many of the "plant based" foods people are eating. This changes the picture significantly, both from a health and an environmental perspective . Large segments of the population in some countries are gettinghalf or more of their calories from ultra-processed food. Much more could be said on this subject. Ultra-processed foods (UPF), with damaging health and environmental impacts should be discouraged, not red meat which is a valuable and sustainable source of critically important nutrients. Other problems with using Poore and Nemecek (2018) are that it is based on crude protein rather than essential amino acids which matters for how much "protein" people need to eat. Micronutrient density is not considered. Essential nutrient availability is not considered. "Novel entities" such as pesticides which are implicated in massive reductions in populations of insects and everything that eats them were not part of the Poore and Nemecek (2018) analysis either, this has major impacts on the environment. Does "plant based" mean pesticide based? Runoff, leaching, and presumably erosion are not included in carbon emissions (see supplementary information for the Poore and Nemecek 2018 article), and these are major sources of carbon in the atmosphere. Only commercial operations were examined in Poore and Nemecek (2018) not subsistence farming and as much as 75% of the methane emissions from ruminants are estimated to be coming from "developing" countries. Only 7 to 13 percent of beefis estimated to be feedlot beef. Large numbers of people eating "plant based" diets do not imply fewer ruminants. India has one of largest population percentages of vegetarians in the world but has also over 300 million bovids, (about 200 million cattle plus about a hundred million water buffalo). India is a major exporter of beef. Methane emissions per carcass weight also varies greatly by region, so not only are there many cattle in developing countries, but each of these cattle may also emit more methane. Europe is one of the regions with the lowest methane emissions per carcass weight in the world. Europe is also apparently the only region in the world where methane emissions have beendeclining over the past 20 years, and Europe is responsible for over 70 % of all exported dairy products. Dairy products are globally an important source of essential nutrients, providing an estimated 49% of global nutrient availability for calcium, 24% for vitamin B2, 18% for lysine, 15% for fat, and also contributes to more than 10% of global nutrient availability for an additional 5 essential amino acids, protein, vitamins A,

B12, B5, phosphorous and potassium. This it does while only providing about 7% of global calories, an important point when excess weight is a global problem. If animals including humans do not get enough protein they keep on eating.

There are other problems that are especially important in our part of the world that further complicate these issues, and in ways that could result in catastrophic warming. Direct anthropogenic emissions are not the only significant sources of green house gases. Over 70 percent of the methane emissions in the arctic are coming from nature, and how that nature is managed can greatly influence how much carbon gets released. There are increasing numbers of articles that indicate that expansion of woody vegetation results in more carbon lost from the soil. The amounts of carbon in the soils of the north are immense. Zimov et al. have studied the soils in the far north for decades and have produced many articles on this. They have long advocated increasing herbivore density to mitigate melting of the permafrost. Methane from the northern hemisphere has been implicated in recent surges in methane in the atmosphere. Animals and most especially ruminants are critically important for restoring degraded land, circularity, and maintaining functioning agro-ecosystems with fewer outside inputs.

Emissions from health care are nowhere mentioned in the Klimautvalget 2050 report. In the US health care emissions are around 8% of all emissions. Discontinuing all animal based agriculture in the US is hypothetically estimated to reduce total emissions by less than 3 %, and at the same time this would result in more calories consumed and nutritional deficiencies. Over 40% of the US population is already obese. There has been serious criticism of the dietary guidelines process, both here in Norway and abroad. Swiss Re is one of the world's most significant providers of reinsurance. They make money when people stay healthy and live long lives. They have noted that the current dietary guidelines have failed to curb rising obesity and diabetes rates, and that new up to date science based guidance on food choices is needed. A recent article in the Lancet has indicated that if current diabetes rates continue, 1.3 billion people will have diabetes in 2050. The costs, emissions and suffering with this are immense. The dietary guidelines here and abroad are supposedly meant for a generally healthy population, however apparently 93% of the population in the US does not have optimal cardiometabolic health. In Norway over 70% of the population is now considered overweight. Conflicts of interest among those who formulate guidelines do not inspire trust.

9. Hvordan legge til rette for en rettferdig omstilling til lavutslippssamfunnet, og hvordan bør en klimapolitikk som når klimamålene innrettes slik at den har legitimitet og aksept i samfunnet? (How to facilitate a just transition to a low-emission society, and how should a climate policy that achieves the climate targets be designed so that it has legitimacy and acceptance in society?)

There needs to be more honesty and healthy discussion about fairness, the limits to growth, a steady state economy and the conditions which must be met for sustainable development. Wealth taxes have been suggested by some. If the emissions of the wealthy are not curtailed all other efforts are in vain. The fuel we waste on luxury burning today is fuel the next generation won't have to do things that keep civilization functioning. Things will change as energy gets more expensive. Local food production will be essential for food security. In this country that means ruminant agriculture. Ruminants are essential for the healthy functioning of grassland ecosystems. People have already cut down on eating red meat while diabetes and obesity have soared. The 3 rules for sustainable development need to be in our thoughts when decisions are made. Ruminant agriculture can fulfil all three.

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