

Background document

Break-out group discussions – part 1 (12 June):

Topic 1: Global climate change impacts and Europe

Topic 2: Adaptation measures in the land management sector

Topic 1: Global climate change impacts and Europe

The EU policies and knowledge base

Climate change impacts outside Europe are likely to have a substantial effect on Europe – including changes in trade patterns through impacts on supply chains, availability and prices of commodities and products (and consequently Europeans' consumption and lifestyles), and changes to population through migration attributable to climate change. There is a cascade of impacts from climate change to agro-ecosystems and on the agricultural production, which in turn influences price, quantity and quality of the products, and consequently trade patterns, agricultural income and food prices.

Climate change may also affect human migration and displacement patterns. Extreme weather and climate events can trigger displacement of people and migration within the national borders or internationally.

There are two main EU policies linking adaptation with the agriculture sector and Climate change impacts outside Europe with the effect on the EU. [The EU Strategy on Adaptation to climate change](#) (the Adaptation Strategy) aims at enhancing resilience and preparedness to current and future climate impacts by better integrating adaptation actions into key sectors of the EU, including agriculture. [The Common Agricultural Policy \(CAP\)](#) serves as the main EU policy framework for the agriculture sector. Together, the Adaptation Strategy and the current and especially the future CAP offer various opportunities for the EU Member States to adapt the agriculture sector to climate change.

Environmental policies in the field of water management (including floods) and biodiversity further complement the CAP and the EU Adaptation Strategy in encouraging adaptation action within the agriculture sector to be in line with their main objectives of achieving good ecological status. In addition trade agreements/policies have a major impact on agricultural production and thus can affect both mitigation and adaptation efforts. Agricultural trade liberalisation might be viewed as an adaptation strategy to climate change but how and to what extent remains to be clarified.

The current EU migration policies are not explicitly including climate change aspects, however [the evaluation](#) of the EU adaptation strategy addressed the links between the climate change and migration and security. A [recent study](#) confirm a relationship between climate change and fluctuations in asylum applications in the EU. Even under a moderate emissions scenario asylum applications are projected to increase by 28 % due to climate impacts by the end of the century (an average of 98 000 additional asylum applications per year). To further increase the knowledge base on the topic, the [H2020 call on Human dynamics of climate change](#) was published in late 2018. From this call, several projects have recently started or are expected to start in 2019. From the ongoing projects, the [COACCH project](#) has been developing a new concept of socio-economic tipping points, which can in turn alter the functioning of socio-economic systems, which can lead to major economic costs. These changes may arise directly in Europe, but may also involve global events that spill-over into Europe.

Background information on EEA activities

EEA has briefly addressed the topics of Europe's vulnerability to climate change impacts outside Europe in a short section in the recent [Climate change impacts report](#), published in 2017. The topic of climate change and cascading effects in the agriculture sector including trade of agriculture

commodities has been briefly addressed in forthcoming EEA report on climate change adaptation in the agriculture sector in Europe.

In 2019 EEA is developing a scoping paper on scientific literature and research & knowledge projects investigating the impacts of extreme climate-related events and climate change in regions outside Europe on the patterns of human migration to Europe (migration scale, origin, migrants' characteristics), considering both the past trends and future projections. This scoping exercise will feed into a discussion in EEA and with our main stakeholders, whether there is scope and added value for a possible future EEA assessment report in this area, and what type of information would be needed.

Topic 2: Adaptation measures in the land management sector

The EU policies and knowledge base

Adaptation to climate change is mentioned in various places in the regulation on the governance of the [Energy Union and Climate Action \(Regulation \(EU\) 2018/1999\)](#) and the [LULUCF regulation \(Regulation \(EU\) 2018/841\)](#). The Energy Union Regulation (EU) 2018/1999 calls in Article 19 for the integrated reporting on national adaptations actions especially regarding “adaptation to those climate change impacts that related to energy supply such as availability of cooling water for power plants and biomass availability for energy”. This should be done for the first time in 2021 and then every years thereafter. At the same time, the regulation recognises in recital 8 that sustainable and innovative practices within the agriculture, land use and forestry sector can “enhance the role of the sector in relation to climate mitigation and adaption, as well as strengthen the productivity and resilience of that sector”. It also recognises in recitals 6 and 12 that land management practices have an impact on biodiversity and ecosystem services and that there is a need for “coherence between the [Common Agricultural Policy](#) and the LULUCF regulation”.

Background information on EEA activities

As long as humans have managed agricultural, forest and other types of lands, they had to adapt their land management practices to deal with natural climate variations and natural disasters. The land use management sector will also need to include adaptation to climate change and to support the transition of the [EU economy to a climate-neutral one by 2050](#) that ask for an increased used of bioenergy and biomass based production systems.

The co-benefits between climate change adaptation measures and land management choices is subject of EEA assessments. This year a report on adaptation measures already taken in the agricultural sector will be published. Future assessments will focus on describing how adaptive land management choices affect the CO₂ emissions and removals by the LULUCF sector.

Questions for the discussion

Topic 1: Global climate change impacts and Europe

1. How useful and relevant is the planned EEA work on the topic of global climate change impacts on Europe for various activities at country level?
2. Do you have any existing assessments available in your country that address the topic on how global climate change is having an effect at national or regional levels?

Topic 2: Adaptation measures in the land management sector

1. How useful and relevant is the potential EEA work on links between climate change adaptation and LULUCF?

*13th EIONET workshop on Climate Change Impacts, Vulnerability and Adaptation,
12-13 June 2019, EEA, Copenhagen*

2. To what extent has adaptation in the LULUCF sector been included at national level in National Adaption Plans and Long-term Strategies?
3. How can good practices be shared and what can EEA do to increase the knowledge base on adaptation and land management choices in particular in the area of co-benefits and trade-offs between mitigation and adaptation policies and practices?