2nd SUPREMA Stakeholder Workshop 'Narratives'

In the 2nd SUPREMA Stakeholder Workshop 'Narratives', a participatory approach was applied to involve stakeholders and experts to get first-hand input and insights from the "real" world into the modelling undertaking in SUPREMA. All scenarios were developed under consideration of stakeholders' and experts' inputs, as well as under an assessment of the current policy debate and expected policy challenges, e.g. climate change.

In total three main scenario topics are developed in the workshop that implement challenges and needs identified in the first workshop:

(1) A medium- and long-term baseline business as usual scenario.

(2) The CAP narrative comprises a medium-term perspective on environmental issues covering the CAP budget period spanning from 2021-2027.

(3) The scenario with a focus on the long-run impact of climate change

The CAP scenario is also driven by the environmental and climate change pressures that increasingly affect agriculture. Three out of nine proposed key objectives of the CAP reform address environment and climate change issues. New measures are supposed to meet these objectives that will be implemented through the new "delivery model" which, in turn, will give a more responsible role to Member States. The three main achievements in this regard are the system of "conditionality", the "eco-schemes" (ES) and the "agriculture-environment-climate measures" (AECM) for support of rural areas and their developments. Based on these policy elements three CAP scenarios with different assumptions are foreseen:

i. Strong sustainability and climate focus (a strict enhanced conditionality, and intensive use of ES and AECMs, limited use of voluntary coupled support (VCS); and a reallocation of EU budget from direct payments to environmental program payments);
ii. Balanced sustainability and profitability approach (less strict conditionality, small role of ES and limited extension of AECMs, maximum use of VCS);
iii. As under (ii), but with adjusted consumer demand to reflect consumers' diet and preference shifts.

Since the new delivery model is applied to achieve the CAP, some more in depth-assessments at selected Member States could be made, if sufficient information is available.

The long term scenario on climate protection assesses the potential contribution of the EU's agricultural sector to climate change mitigation efforts. Impact assessment of various mitigation levels in the agricultural sector for non CO^2 emissions are investigated by comparing methane and nitrous oxide emissions to a counterfactual baseline.

In the workshop stakeholders claim several needs that need to be taken into account into the scenario for a sufficiently long time horizon, like the global perspective on climate change and

low carbon economy or the SDGs. Also, resource constraints like water and soil scarcity expected in future should be covered. The participants identified the following topics as most important for the climate change scenario:

- Mitigation targets should meet the 2°C and 1.5°C targets to assess the implications for the agricultural sector. To simulate the mitigation potentials of agricultural non-CO^2 emissions a carbon price on non-CO^2 emissions should be implemented as a tax on agricultural non-CO^2 emissions.
- Mitigation region is primarily the EU while the rest of the world is assumed to take up only limited mitigation efforts. In a second variant the rest of the world will take coordinated efforts to achieve the climate target and apply mitigation policies of varying degrees as well whereas already effective efforts will be considered in the differentiated regional efforts.
- The analysis should assess increased competition for land related mitigation policies and its potential effects for agricultural non-CO^2 mitigation. Therefore, a scenario taxing agricultural non-CO^2 emissions should be contrasted to a scenario with increased biomass demand for energy purposes.
- Land used for afforestation and energy plantation is expected to trigger severe transfer effects on the intensification of the remaining agricultural sector and consequently also on biodiversity. Carbon pricing on the other side would have substantial implications for farm incomes, as well as for food security.

These two scenarios were supplemented with a third one, examining changing demand behaviours and their impact on GHG savings. This additional scenario illustrates the consequences of a diet shift of meat and dairy products to recommended levels and a 50% reduction in food waste.

References

Havlik, P., Jongeneel, R., Salamon, P., Barreiro-Hurle, J., Rau, M.-L., Witzke, P., Brouwer, F., Frank, S., Banse, M. and Zirngibl, M., (2019) Deliverable 1.3: Narratives for implementation in impact assessments. Project Support for Policy Relevant Modelling of Agriculture (SUPREMA). Online: https://www.suprema-project.eu.

van Leeuwen, M., Rau, M.-L., Salamon, P., Barreiro-Hurle, J., Havlik, P., Jongeneel, R., Witzke, P., Banse, M. and Brouwer, B. (2019) Deliverable 1.4: Stakeholders' Workshop Narratives . Project Support for Policy Relevant Modelling of Agriculture (SUPREMA). Online: https://www.suprema-project.eu.