Storyline 1: Business-as-usual

Globalised food systems - low level of implementation of agro-ecological farming practises

The SSP2 scenario, Middle of the Road, provides the overall context for this storyline. In the SSP2 scenario, it is assumed that the historical social, economic and technological trends are sustained, income growth develops unevenly and there is slow progress towards reaching sustainability goals (O'Neill et al., 2017). Technological developments are moreover modest and only slowly shared with developing countries. Low-income countries continue to experience food and water insecurity. There is a slow decrease in fossil fuel dependency and a growing energy demand (SSP2).

Based on this, storyline one describes a future in which globalisation of the EU food system continues[1]. In this system, farmers are incentivised to produce low value commodities leading to further specialisation of farming systems and regions. As for production and consumption trends, these are assumed to continue as described by the EU Agricultural Outlook[2] which assumes:

"• a continuation of current agricultural and trade policies;
• normal agronomic and climatic conditions;
• no market disruption".

In summary, the outlook is as follows: *The utilised EU agricultural area will continue to decrease by 0.2% per year reaching 172 million ha by 2030. Although total sugar consumption decreases by 5% by 2030 because of increased health concerns, total sugar production increases by 12% by 2030, making the EU a net sugar exporter. Cereal production also increases to 341 million tons by 2030 while oilseed production will decrease due to decreased demand for biofuels. The production of feed is expected to rise due to increases in poultry, dairy and intensive beef production. Dairy exports to China are expected to increase considerably with the EU supplying 30% of the increase in dairy products mainly as cheese and skimmed milk powder. Dairy consumption increases also within the EU up to close to 900,000 tons of milk per year, mostly consumed as cheese, other processed dairy products and included in convenience foods. Milk drinking meanwhile decreases. Meat consumption per capita first slightly increases but then decreases to current levels in 2030. Beef production decreases slightly while pigmeat will increase marginally (consumption in the EU stabilises and exports increase somewhat). Poultry meat production increase by 5% until 2030.*

It is assumed in this storyline that the same trends continue beyond 2030 until 2050.

It is assumed that consumer interest in healthier and more sustainably produced foods including organic foods and locally produced foods increases somewhat in the EU in this storyline. However, due to lack of major public investments in, or support for the implementation of agro-ecological farming methods, these remain close to

[1] The organisation of the EU food system is in this scenario well described by Therond et al. (2017) socio-economic context for farming called "Globalised commodity-based food systems" in which increasingly efficient industrial processes are used to "*produce large amounts of food that are inexpensive, convenient, safe and attractive*".

[2] https://ec.europa.eu/agriculture/sites/agriculture/files/markets-and-prices/medium-term-outlook/2017/2017-fullrep_en.pdf

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current levels (the share of organic farming area was 6.7% in 2016[3]) or increase slowly (reaching an average of somewhere between 5-15% of agricultural land in 2050). Certified organic products, produced using mainly weak agro-ecological practises, dominate the output from the agro-ecological farming systems in the EU; these come in the form of high-value products like wine and other alcoholic beverages, cheese and charcuteries, jams and juice etc. sold in niche markets to high-income urban citizens, as well as cheaper bulk commodities sold in ordinary supermarkets. Diversity in crops produced in the EU are constant from current levels or somewhat further decreased (following trends in Kummu et al. (2020)).

In this storyline, trade increases both between member states and between the EU and global markets - specialisation in production in different regions continues (SSP2). A few multinational food industries dominate the global food market. Diets and the range of products on offer become increasingly homogeneous both with the EU and globally. Obesity levels continue to rise as do its associated health problems.

On a global level there is weak cooperation between international and national institutions, the private sector and civil society (SSP2). Access to global markets are slowly opening up for developing countries. The structure of the EU agricultural policy remains similar to the current CAP and continues to drive specialised, large-scale and export-oriented agricultural production. The EU budget is somewhat decreased due to Brexit; however, most member states push for keeping the EU agricultural budget constant and rather decrease expenses in other areas. The agricultural policy landscape is similar to today; Pillar 1 has low requirements for greening. Although Pillar 2 includes support for e.g. organic production and other agro-ecological practises, variation in the implementation rate of such agro-environmental policies is large between countries, efforts uncoordinated and only half-heartedly supported by national governments and the EU. There is a constant discussion on the ability of agro-ecology to "feed the world" and a push from large multinational agro-chemical and seed companies to implement more industrialised types of agriculture. There is only weak or no policy targeting demand in Member states, such as taxes on unhealthy or high-impacting foods, restriction on advertisements and similar – these have been effectively counteracted by powerful lobbying groups. Food waste levels remain similar to current levels or decrease somewhat in countries in which waste reduction policies are implemented.

[3] https://agridata.ec.europa.eu/extensions/DashboardIndicators/OrganicProduction.html

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