

Storyline 4: Local agro-ecological food systems

Local food systems - high level of implementation of agro-ecological farming practises

This scenario plays out in a global context as laid out in the SSP1 scenario: Sustainability – Taking the Green Road. Here growing evidence of the multi-faceted cost of inequity and environmental breakdown is pushing for the prioritisation of reaching sustainability goals, with a shift in focus from economic growth towards improvements in well-being, especially in developing countries (O'Neill et al., 2017). A rapid increase in climate and environmental concerns among large population groups in the EU and fierce campaigning for stricter policies to prevent climate and environmental breakdown drive change in this storyline. The first sign of this development was seen in 2019 with the Friday for Future movements and in the 2019 election to the European parliament when the green parties increased their mandates by 40%.

Globally, cooperation between national and international institutions are strengthened, and new global institutions arise to reinforce the rule of law and decrease corruption in order to effectively work towards greater sustainability on the global level (SSP1). In the EU, a common EU policy on sustainable food systems based on agro-ecological practices, much influenced by the iPES report¹, has been put in place. This integrated approach to EU food security, rather than the silo approach of separate agricultural, environmental and health policies, has been largely adopted by most member states in the year of 2028. The focus of the food strategy is on establishing more localised agro-ecological food systems to overcome multiple problems including nutrient and chemical pollution, soil erosion and soil carbon loss, high use of antibiotics and poor animal welfare and to enhance social sustainability by promotion of more small-scale and diverse farming and food production practises. Different types of alternative food systems are rapidly expanding including different types of community supported agriculture and short supply chain/direct sales online systems. To enable more localised food systems, support is also given to the establishment of small-scale processing. International markets are opened up to developing countries but trade stays limited due to the focus on regional production (SSP1). European farmers are protected from the international competition primarily by industry and retail introducing local produce as a base criteria due to consumer demand, but also by trade agreements that implement sustainability criteria, e.g. for countries lacking tax on CO₂ emissions duties on imported goods are introduced (ref). In combination with, and actually proceeding the changes in policy, many Member states experience an explosion in bottom-up initiatives fostering agro-ecological farming practises and local food systems. Local town councils and regions play an important role here. In developing countries, yield increases are accomplished thanks to rapid introduction of best practises and effective technologies, alleviating food security challenges in these regions (SSP1).

As for the CAP, this is now handled under the umbrella of the integrated food policy and has in 2050 radically changed. Already in the 2030 there are systems in place for e.g. Results Based Payment Schemes and such system are largely expanded between 2030 and 2050. Greater consumer awareness is achieved by coherent marketing campaigns, and with the dissemination of clear, accurate and complete information about the benefits of agro-ecological production systems for society. Programs for knowledge transfer among practitioners and producers in rural areas have also been implemented and are available for most farmers.

¹ http://www.ipes-food.org/_img/upload/files/CFP_FullReport.pdf





The investment in agro-ecology is also used as a strategy to adapt to unavoidable effects of climate change. Pillar 1 support is thus reformed from purely area-based to being based on several sustainability criteria. One important example is the recognition of the inefficiency of feeding human edible crops to livestock that lead to the implementation of incentives to feed ruminants more grass and forage and to the rapid rise in poultry production to level off. Intensive pork production also decreases.

The concept of locally adapted agro-ecological food systems in this storyline also includes striving for more healthy and sustainable consumption patterns. This includes a view that excess intake of "unnecessary" unhealthy foods (sugar-sweetened foods and beverages), excess consumption of livestock products, especially from animal species consuming human edible feed (i.e. pigs and poultry), and excess intake of food in general is a waste and should be prevented by powerful policy measures². As should of course ordinary food waste which is reduced between 25-50% mainly as a result of food becoming more expensive but also through a range of different policies. The EU common food strategy includes an initiative to make policy targeting demand and production coherent, directing the CAP support towards the production of foods desired in a healthy and sustainable diet. As suggested in the iPES-report, in order to receive CAP funding, Member states have to develop and implement certain health promoting policy such as fiscal and social policies to promote healthy eating.

An important success factor of the rapid transition to strong agro-ecology at a large scale has been food retailers' and industries' commitment and involvement in the new food strategy. Driven initially by consumer demand³ and as a result of the societal discourse, food industries have started to work actively with farmers to enable the implementation of agro-ecological schemes and then bit by bit incorporated this into their company strategies⁴. In 2050, on average across member states, between 20-50% of land is farmed with strong agro-ecological practises serving mostly local markets.

⁴ Dairy company Danone is an example of a large multinational company already promoting agro-ecology, in their case under the concept of "regenerative agriculture" https://www.danone.com/impact/planet/regenerative-agriculture.html



² For example, taxes on unhealthy foods and policies that steer away from using grains for animal feed.

³ Example of recent developments of consumers driving change: https://www.politico.com/news/2019/10/10/food-industry-consumer-brands-association-043892