TASK FORCE
WORKING GROUP
REPORT

AGRICULTURE AND FOOD

FROM FARM TO FORK

Towards a Resilient and Sustainable Post-Pandemic Recovery

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Agriculture and Food
From Farm to Fork

Report of the Working Group

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INTRODUCTION

The imperative to ensure healthy diets and improved nutrition, enhance industry sustainability and competitiveness and reduce environmental and climate impact is one of a number of challenges facing the EU's agricultural and food systems. In the midst of the Covid-19 pandemic, trade wars and post-Brexit implications, the EU's new industrial strategy has never been more timely, highlighting the capacity of the EU's agri-food system to drive sustainability through a new and more ambitious green architecture.

The timing of the debate is highly sensitive and the issues are complex. In the coming months, three developments, all of which affect each other, have the potential to shape the future of agriculture and food in the EU for the next 10 years: the reform of the Common Agricultural Policy (CAP); the implementation of the Farm to Fork (F2F) and Biodiversity Strategies; and the development of new technologies in agriculture.

First, the new CAP proposed by the Commission in 2018 called for greater environmental and climate ambition, mainly through a more results-oriented business model and the introduction of eco-schemes. After three years of negotiations, a political agreement on the future CAP was reached by the Council and Parliament at the end of June 2021.

Second, the success of the European Climate Law, the F2F and Biodiversity Strategies, which are at the heart of the European Green Deal, will ultimately depend on their implementation in the near future. As stated by Executive Vice-President Frans Timmermans, "*(…) the Biodiversity and Farm to Fork Strategies (…) are crucial for creating immediate business and investment opportunities so that we can restore the EU's economy as fast as possible.*" To this end, the F2F Strategy aims to deliver more resilient and sustainable value chains in Europe.

Finally, the development of new technologies in agriculture and food, including fast-developing digital technologies and advanced plant breeding techniques, can achieve a great transformation in agri-food industries while contributing to sustainable agricultural productivity growth to feed a growing population.

Finding diverse and innovative solutions is thus key to EU industrial policy priorities to improve the capacity of agricultural and food systems to respond to these challenges in Europe and globally, while at the same time ensuring the decarbonisation of the food and beverages industry.

Against this background, the Agriculture and Food Working Group of the Task Force focused on three main issues, discussed in three meetings. The aim of the first meeting was to discuss how to realise a more sustainable food production through a new and more ambitious green architecture. The second meeting focused on the need to build more resilient and sustainable agri-food industries. Finally, the third meeting discussed how fast-developing digital technologies and advanced plant breeding techniques have the potential to completely transform agriculture and food, whilst reducing the environmental and climate footprint of food production.

Three general recommendations emerged from the discussion in the three different meetings:

- For farm production, **food needs to be produced with much lower environmental footprint**, and help mitigate climate change, while improving **farmers' livelihoods and stimulating broader rural development**. The CAP should be reformed to support these objectives, but it is not the objective itself.
- For the **food industry and distribution**, greater emphasis should be placed on **producing safe, healthy and nutritious foods**, in a sustainable manner.
- These changes will require **much stepped-up investment in research and innovation**, but this should **embrace high-tech solutions** as well as **nature-based solutions and agroecological practices**.

POLICY RECOMMENDATIONS

Part I. Developing more sustainable food production

In the EU's new industrial strategy, agriculture and food sectors have been identified as one of the EU's strategic industrial sectors. In 2019, 15.9 million people were employed in the food supply sector in the EU, representing 8% of total employment (Eurostat, 2020). At the same time, agriculture and global food systems are pressuring our planetary boundaries as they are contributing importantly to greenhouse gas emissions, impacting natural resources, and using a large share of our energy resources.

As a result, **food urgently needs to be produced with much lower environmental footprint**, and help mitigate climate change, while **improving farmers' livelihoods and stimulating broader rural development**. This implies ensuring access to a sufficient supply of affordable food for citizens, while fostering the competitiveness of the EU supply sector and creating new business opportunities.

One of the most important EU policy mechanisms through which **EU agri-food systems could achieve the objectives of the European Green is the Common Agricultural Policy** (CAP). This is why the CAP should be reformed to support these objectives, but it is not the objective itself.

Against this background, 2021 is a pivotal year for the CAP. The CAP is the EU's most enduring yet highly controversial policy. Initially, the 1962 CAP aimed to support farmers and improve agricultural productivity, ensuring a stable supply of affordable food in the context of post-World War II shortages. Since then, the CAP has undergone major changes with several reforms. The most recent reform was decided in 2013 and introduced the 'green direct payment' (or 'greening'), which made the payment of 30% of the income support dependent on compliance with environmental and climate targets, indicating the beginning of the inclusion of sustainable development as a central component in the CAP. In June 2018, the Commission presented legislative proposals on the CAP after 2020.

One of the reasons why the debate on the CAP is becoming higher profile is that the challenges facing agriculture after 2020 have become more pressing since discussions on the last (2013) reform. In recent years, several major political and global events have added urgency to the debate. The 2015 UN Sustainable Development Goals (SDGs), the 2015 Paris Agreement on climate change, and the 2019 Green Deal set ambitious environmental and climate commitments that all have important implications for food and agriculture. Moreover, member states criticised implementation procedures of the CAP and there were doubts about the effectiveness of the green initiatives introduced by the 2013 reform. The post-2020 CAP therefore faces new challenges to stand in line with more demanding expectations from society.

For this reason, the new CAP proposed by the Commission in 2018 called for greater environmental and climate ambition. A key feature of the 2018 Commission's proposal is related to the governance of the CAP. Through the CAP National Strategic Plans, member states will have greater flexibility to design their own interventions and rules, such as setting climate and environmental targets at national level. This new EU-wide framework will be based on a toolbox of broad policy measures, as well as on a common set of result indicators utilising a new monitoring and evaluation framework developed by the Commission.

Furthermore, the Commission proposed a new green architecture for the post-2020 CAP, including eco-schemes as a novel instrument designed to further encourage and support farmers to address climate change, the protection of natural resources and biodiversity loss. Under the eco-scheme requirement, member states would be obliged to allocate a proportion of the direct payments to schemes voluntary for farmers that would directly benefit the environment and climate. This new green architecture is foreseen to be further strengthened by more ambitious mandatory requirements and by

increasing funding opportunities for farming better respecting the environment and nature, and therefore to achieve the environmental objectives of the CAP. Agriculture being placed at the heart of the EU Green Deal, there is a great expectation that the CAP will considerably contribute to enhance sector's sustainability.

The CAP political agreement reached at the end of June 2021 weakened several of the Commission's original CAP proposals. The provisional agreement still requires approval by the Parliament, which is expected to vote on it during the September plenary session. In parallel, the member states will have to draft their strategic plans in the light of the nine CAP specific objectives, targeting social, economic, and environmental sustainability.

R1. Keep the environmental and climate ambitions of the CAP high.

This Working Group highlights the risk of watering down the more environmentally ambitious green architecture of the Commission proposal, if the objectives of the European Green are to be achieved.

There should be a common vision and willingness to keep high ambitions for the CAP, in terms of the functioning of the green architecture, namely enhanced conditionality and the eco-schemes, as well as on well-designed agri-environmental-climate measures.

Considering the high ambitions set by the European Green Deal, the participation of the Commission is meant to play the role of broker between the co-legislators, but also as a driving force for greater sustainability and compatibility with its objectives. However, the negotiating mandates of the Council and the European Parliament in some areas have watered down the Commission proposal. But several elements remain that will strengthen its effects in addressing environment and climate goals compared to the old CAP. As a result, a decisive test will be the contents of the member states' strategic plans, still to be published.

R2. Recognise the need to integrate the Green Deal targets through the National Strategic Plans into the future CAP.

Despite their weak legislative basis, there is the need to **integrate the Green Deal targets through the National Strategic Plans into the future CAP**, if the goal of more sustainable food production is to be achieved.

The legislative proposal on the CAP presented by the Commission in June 2018 sets out nine specific objectives. These specific social, economic, and environmental objectives, among others, aim at increasing competitiveness and agricultural productivity in a sustainable way to meet the challenges of higher demand in a resource-constrained and climate uncertain world, as well as promoting employment, growth and local development in rural areas.

These nine common EU objectives will form the basis upon which EU countries will design their CAP National Strategic Plans, which set out how they will direct CAP funding towards specific targets and how these targets will contribute to the overall EU objectives. In practice, each member state will determine where action is required and how environmental and climate targets should be achieved, as well as the monitoring process and the possible sanctions.

The Green Deal was launched after the 2018 CAP proposal and there has been debate on how to reflect the greater ambition in the Green Deal proposals in the new CAP framework. In its analysis of the consequences of the F2F Strategy for the next CAP, the Commission considered that its CAP proposal is consistent with and could be adapted to the new Green Deal targets. In December 2020, the Commission issued some recommendations to the member states for their CAP Strategic Plans in order to ensure alignment with the Green Deal.

However, there is no political legitimacy as yet for these targets as they are not embodied in legislation nor endorsed by the co-legislature. As a result, the Commission is limited to using moral suasion, and it has proposed that it will use these targets in its assessment and approval of the Strategic Plans.

This Working Group **urges member states to reflect the greater ambition** of the Green Deal in developing their National Strategic Plans, despite their weak legislative basis.

Part II. Producing healthy, nutritious and sustainable foods

R3. Recognise the need to provide safe, healthy and nutritious foods, in a sustainable manner.

The EU should develop a food industry and retail sector that has a focus on providing safe, healthy and nutritious foods to promote adoption of sustainable diets by consumers, reducing emphasis on ultra-processed foods.

As a result of the CAP, over the past six decades, agricultural production has grown fast in the EU. However, the EU now faces pressures and ill health due to poor nutrition, overweight and obesity. To address these challenges, the EU needs to reshape its agri-food system, shifting the emphasis from ensuring food supply to providing safe, healthy and nutritious foods, in a sustainable manner.

The need to improve the availability of healthy, nutritious and sustainable foods leads to more specific recommendations, as detailed below.

a) There should be **no trade-offs on the issue of food safety**. Ensuring food safety is a basic precondition of any agricultural/food policy.

b) The way of producing, buying and consuming food should be transformed, through e.g., reducing **food waste** or transition to a **more circular economy**. A shift to a sustainable food system can bring environmental, social and health benefits, and ensure a sustainable recovery from the Covid-19 crisis.

c) The responsibility to address the challenges faced by the EU's food system is **borne by all players along the value chain** (and not exclusively by the farmers or taxpayers). To this end, a **strong partnership across the different actors** along the food chain is needed, such as the Local Action Groups (LAG) that promote community-led local development strategies.

d) The food environment should **encourage healthy decisions and sustainable diets by consumers**. There is the need to facilitate consumers in making informed food choices, including through harmonised front-of-pack labelling rules, measures on promotion, responsible food marketing, and targets to be set for reducing food waste, including on the date marking ('use by' and 'best before' dates).

e) An **EU coherent approach** is essential to achieve the transition towards more sustainable and resilient agri-food industries. National regulations adopted at member state level should be avoided (e.g., as in the glyphosate case or concerning the mandatory labelling of foodstuffs), whereas an **EU wide harmonised food labelling system should be introduced.**

R4. Continue to be a global reference on agri-food standards for sustainability.

This Working Group advises the Commission to further develop the EU's agri-food sustainability strategy.

a) Establish the **EU Farm to Fork Strategy as a 'gold standard'** for sustainability. Improve the environmental footprint and help mitigate climate change, while improving farmers' livelihoods and stimulating broader rural development. **For the first time in an EU context**, the F2F Strategy recognised that the food chain needs to be addressed as a whole, with economic, environmental and societal concerns treated in parallel.

b) Encourage the use of almost 3,400 **Geographical Indications** (GIs) and Traditional Specialities Guaranteed (TSG), representing a sales value of more than €77 billion, as tools to **achieve the transition towards an EU sustainable food system** by:

   i. strongly encouraging GIs to better respond to quality and sustainability challenges

   ii. strengthening the role of GIs as a tool for rural development

   iii. improving consumers' information, awareness and transparency through GI logos.

R5. Build resilience and develop a higher degree of robustness in agri-food production.

The EU's food system has been faced by several challenges over time, pointing to the need to increase resilience, arming it better against disruptions and making sure it can provide and support critical infrastructure in times of crisis.

Firstly, the environmental impacts of food and farming systems and the greenhouse gas emissions deriving from farming are at the centre of an important debate in Europe. The EU is one of the major economies to have reduced its emissions (by 24% since 1990). However, this path has been neither linear nor homogenous across member states and agri-food industries remain one of the key drivers of climate change and environmental degradation. Secondly, poor working conditions, livelihood pressures and rapid consolidation highlight difficult socio-economic challenges. Thirdly, today's food and farming systems are seen to cause health risks, ranging from air pollution to unhealthy diets which could lead to overweight and other diet-related problems.

The strengths and weaknesses of the EU food system became more evident during the Covid-19 crisis: food supplies were assured but the pandemic also revealed where action is needed to avoid disruptions. National restrictions have contributed to major problems and logistical disruption such as blocked transport routes, long queues at border checks for commodity transport, and shortages of seasonal farm workers unable to move freely from one member state to another. The EU was urged to introduce measures to support the agri-food industries and secure an uninterrupted supply.

This Working Group welcomes the commitment in the F2F Strategy to bring forward a contingency plan to ensure food supply and food security in times of crisis by Q4 2021 and recommends the Commission to provide studies and impact assessments to assess the resilience and sustainability of the supply chains.

Part III. Investing in Research and Innovation in agri-food systems

The need to provide safe, healthy and nutritious foods with much lower environmental footprint will **require much stepped-up investment in research and innovation**, but this should embrace **high-tech solutions** as well as **nature-based solutions and agroecological practices**.

R6. Recognise farmers' crucial role in the digital economy.

The adoption of new digital technologies has the potential to contribute to sustainable agri-food systems.

New digital technologies, such as wireless connectivity, the Internet of Things, artificial intelligence and blockchain, have the potential to transform elements of the agri-food system, some in a fundamental way. The diffusion of digital technologies in agri-food chains promises to increase and stabilise yields, reduce waste and negative environmental effects, and trigger changes in consumption patterns, thereby substantially contributing to the UN's SDGs. Digital technologies are already showing great potential to increase efficiency and productivity, in sectors from manufacturing to energy. The great challenge of our time will be to tap into this potential not only for business purposes, but also to achieve overall sustainability.

As an example of the benefits of digital technologies, the application of seasonal forecasts in agriculture has significant potential to increase resilience and adaptability. Seasonal forecasting uses climate and weather models to provide information about climate changes (such as expected rainfall or temperature) that are likely to happen in the upcoming weeks and months. As a result, informed farmers can better adapt to climate change, predict how crop yield can be affected, and decrease their risk. Data from the EU Copernicus Programme has the potential to guide farmers, decision-makers and policies at EU and farm level.

However, the use of digital technologies faces a variety of potential risks, in terms of economic, social, and environmental sustainability. A smart policy

framework and a best policy mix is needed to adequately couple with technologies and avoid some possible risks, such as i) aggravate inequalities when it comes to connectivity, skills and capital; ii) produce negative consequences for the environment and human health due to energy consumption and e-waste; iii) open major regulatory aspects (e.g., new ethical questions when it comes to digital privacy issues and ownership of data). Knowing about these challenges enables all stakeholders to take informed decisions, where this tool is the most useful and where it is not.

To contrast some of the challenges, there is the need to create (or enable) a new generation of farmers in agriculture which do not fear the new and are well educated towards the use of artificial intelligence and new technologies in agriculture. Since one of the biggest challenges in the agri-food sector remains the ageing and declining farming population, investments in education, skills, R&D, and infrastructure in rural and remote areas are needed to make sure farmers in rural areas have a wide range of opportunities.

a) Dedicated **training programmes** for farmers should be made available, in a way that creates the right environment for community-based, tech-enabled, agroecology-oriented business models.

b) Further investments **in infrastructure**: better availability and accessibility of public services (transportation), quality jobs and higher education (universities), leisure time activities.

c) In particular, for farmers to benefit from the digital economy there needs to be **access to fast and reliable broadband** across all rural areas, which is not the case at the moment. Hence there is the need to ensure investment, for example, through the Recovery and Resilience Plans funded by Next Generation EU.

R7. Enhance productivity and sustainability through the use of advanced techniques in agriculture.

Science, technology and innovation have shaped agriculture over the past 100 years and can also help to bring about a radical transformation towards the sustainability of agri-food industries. This Working Group suggests that, apart from digital technologies, **advanced plant breeding techniques can also help tackle sustainability issues** and contribute to the transformation in agri-food systems.

Plant breeding has historically led to major increases in productivity growth (EU plant breeding has contributed to more than 20% productivity gain in the past 20 years) and has greatly improved the sustainability of agriculture. Conventional methods of plant breeding usually take a long time before producing plant varieties with favourable characteristics, while advanced plant breeding techniques can significantly accelerate the process. The new techniques, for instance, make use of genome editing for crop improvement; they evolved rapidly in recent years and produce much faster and more precise results than conventional plant-breeding techniques. These advanced techniques such as CRISPR, that alter the genome of an organism, are known as 'new breeding techniques'.

The use of advanced techniques in agriculture generates important debates on major regulatory aspects. There is considerable debate as to whether some or all of them should fall within the scope of 2001 EU legislation on genetically modified organisms (GMOs). On 25 July 2018, the European Court of Justice (ECJ) ruled that organisms created using new breeding techniques had to be classified as GMOs, which thereby subjects them to an extensive risk evaluation. At the same time, other less precise and conventional mutation breeding techniques were exempted from the EU GMO legislation.

The debate is reopening now because of two important political events. First, in 2019 the Council requested the Commission to submit a study on new breeding techniques. The study was published on 29 April 2021 (European Commission, 2021). The study envisages that new breeding techniques have the potential to promote agricultural sustainability and to contribute to a more sustainable food system. The second political event that made the debate on new breeding techniques more urgent was the publication of the F2F Strategy in 2020. The Commission suggested that plant varieties obtained using new breeding techniques have the potential to contribute to the objectives of the European Green Deal, and in particular to the F2F Strategy, as well as to the UN's SDGs.

However, even if these advanced techniques in agriculture may further support sustainable agricultural productivity, they also have **major regulatory aspects** (GMO-like controversy). Therefore, a **smart policy framework and a best policy mix is needed** to adequately couple with technologies and avoid some possible risks.

a) The new technologies are currently constrained by complex and disharmonised regulations throughout the world. This Working Group highlights the importance of **greater cooperation between regulatory agencies.** Approval costs decrease if a more harmonised approach is adopted, e.g. between the EU and the US. This would allow the fast development of a sustainable bioeconomy based on recent biotechnology tools.

b) Regulatory reform based on **scientific evidence** is needed to guarantee safe advanced plant breeding techniques and sustainable agri-food industries.

c) Reset from the polarised debate of the 1990s about GMOs and **create new narratives** to understand the uncertainty and fill the gap between perception and reality.

   – Focus on **outcome and impact and not on technology differences**, where productivity is not in opposition with sustainability.

   – Best mix between **technology and traditional knowledge**. Increase the role of young generation for sustainable farming and sustainable, healthy nutrition. Traditionally and locally grown products can co-exist with new products.

R8. Recognise the need to embrace nature-based solutions and agroecological practices.

Even if high-tech solutions are needed to meet the Green Deal objectives, further investments in research and innovation will also be needed to foster nature-based solutions and agroecological practices.

There is the need for the CAP to further promote and invest in nature-based solutions (sustainable management and use of nature) and agroecological practices (crop diversification, long crop rotations, hedges, cultivating leguminous plants, constant soil cover, mixed crop-livestock farming, etc.). These practices not only have the potential to achieve the Green Deal objectives by decarbonising agriculture, reconquering biodiversity and restoring soil fertility, they can also be instrumental in revitalising rural areas across the EU and enhancing the economic and social resilience of EU farms.

The European Committee of the Regions adopted an opinion on agroecology that explores the linkages and interdependencies between agroecology and the social component of agri-food systems, looking into the rights of agricultural workers as a baseline for CAP subsidies. For example, Committee's opinion takes a true 'food systems' approach, recognising the need to shape citizens' diets by curbing the increase in obesity, and also recommends to "*move from an extractive agricultural mindset to a circular one.*" (The European Committee of the Regions, 2021).

CONCLUDING REMARKS

The report of the Agriculture and Food Working Group recognises the need for a fundamental transformation in our agriculture and food sectors. The participants of the Working Group identified in the meetings several recommendations that would help European policymakers to deal with the pressing challenges. In order to give structure to the meetings of the Working Group, we grouped the main challenges under three topics for discussion: the reform of the EU's food and agricultural system; the integration of the Farm to Fork (F2F) and the Biodiversity Strategies in our food systems; and the implementation of digital technologies for agriculture and food production.

The participants pointed out that food needs to be produced with much lower environmental footprint, and help mitigate climate change, while improving farmers' livelihoods and stimulating broader rural development. In parallel, for the food industry and distribution, greater emphasis should be placed on producing safe, healthy and nutritious foods, in a sustainable manner. These changes will require much stepped-up investment in research and innovation, but this should embrace high-tech solutions as well as nature-based solutions and agroecological practices. Therefore, we urge EU policymakers to take steps to find diverse and innovative solutions to make the agriculture and food systems more sustainable and resilient.

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LIST OF RECOMMENDATIONS

WORKING GROUP SESSIONS AND SPEAKERS

- Chair: Giulia Meloni
- Rapporteurs: Jane Arroyo, and Chiara Del Giovane
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REFORMING THE CAP TO ENHANCE SUSTAINABILITY

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SCIENCE AND TECHNOLOGY: OPPORTUNITIES FOR AND RESISTANCE TO CHANGE

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