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FARM TO FORK:
**TOWARDS A SUSTAINABLE AND
RESILIENT FOOD SYSTEM IN
EUROPE**

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EDITORIAL

FARM TO FORK: TOWARDS A SUSTAINABLE AND RESILIENT FOOD SYSTEM IN EUROPE

The global demand for food will increase in the future. By 2050, two billion more people will need to be fed on Earth. But is it feasible without exceeding the planet's limits? The environmental pressure posed by our food system is already tremendous and should not be underestimated.

Agriculture is among the greatest contributors to greenhouse gas emissions while being at the same time heavily impacted by the effects of climate change. Farming is also the largest user of our precious water resources while being a major polluter that contributes to accelerating the loss of biodiversity.

Meanwhile, European consumers have become more and more demanding with the quality of the food they eat, as they should be. They want healthier food and expect greater transparency and traceability. In this regard, better labelling regarding both health and environmental impacts of food products will also play an important role in promoting more informed consumer choice.

Figures show that the global organic food and drink market has grown rapidly over the last years and will continue to grow in the next decade. European consumers have become more environmentally aware leading to increase significantly the sales of organic food products.

Moreover, Europe is torn between the need of maintaining food at an affordable price for

EU consumers while meeting the highest environmental and food safety standards without hindering the competitiveness of European farmers and the food industry... An extremely sensitive and delicate task that will require a balanced and carefully measured approach.

While a radical transformation of our food system is needed to make our society more sustainable and resilient, one should not overlook the strong and complex social, economic and ecological implications. Can the EU overcome such a big challenge? Will EU policymakers manage to solve Europe's food dilemma?

Last May, the European Commission decided to tackle this huge challenge with its Farm-to-Fork Strategy and address the weaknesses of our food system to sustainably feed 450 million European citizens and preserve our environment from potential harmful effects.

Breaking down silos by adopting a holistic approach, the new cross-cutting strategy outlines the main policy orientations to reduce the environmental footprint of our food while encouraging healthier diets. Thus, the Farm-to-Fork strategy is not just about agriculture, it is also about climate, environment, health, digital, competitiveness, and jobs.

Increasing food productivity in a sustainable way will not be enough to meet the growing food demand. The EU will also need to change from linear food consumption to a more circular economy. From a European

perspective, this means reshaping the policy framework regulating food chains, while from a more local and individual perspective, this means changing agricultural practices, adapting the food industry, and switching our consumption habits.

The EU will need to redesign its entire food system, literally from farm to fork, to make it future-proof. Driving the necessary policy change, supporting research and innovation, investing in new technologies, encouraging sustainable farming practices which do not necessarily involve massive use of synthetic fertilisers and pesticides, will all be critical to achieve a competitive, sustainable, and resilient food system in Europe.

The reform of EU agriculture and fisheries policies offers great opportunities to develop the needed resilience and sustainability. Some trade-offs will most likely be necessary and these should be carefully assessed to avoid threatening Europe's food security. For sure, tough political negotiations lie ahead of this strategy but Europe's consensual spirit will, as always, be the key to unlock positive outcomes for the greater interest.

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STELLA KYRIAKIDES

Commissioner for Health and Food Safety

The food chain: paving the way to formulating a more sustainable, healthy and quality food policy

Less than a month ago, I was privileged to host the first of what will become our annual Farm to Fork Conference, gathering people from all the sectors involved in the food chain, from farmers to consumers. One issue clearly stood out from our discussions: people want change. We need to make the way we produce and consume our food more in tune with our health, our society and our planet.

These are indeed challenging times to embark on change. The COVID-19 pandemic has already had a major impact on our lives and will make us rethink our habits. What started out as healthcare crisis has turned into a global recession with ramifications for many sectors – including our farming sector and our food industry. This is coupled with the effects of climate change that are becoming ever-increasingly apparent, with annual droughts, floods, forest fires and new pests threatening our food system and our economy. It is more than ever clear that we must become more sustainable and resilient, and we have no time to waste. Business as usual is no longer an option.

The figures speak for themselves. Agriculture is responsible for over 10% of the greenhouse gas emissions in the EU. We are being inefficient and unethical, wasting a fifth of the food we produce while 36 million EU citizens cannot afford a quality meal every day. We are throwing food away while others starve. Our health care costs keep mounting as over 50% of the EU adult population is overweight whilst, globally, nearly 690 million people go hungry every night. Food production systems not only overburden the environment, they also fail to deliver on our social objectives. We need to change.

Farm to Fork will be a transformational moment for the Union. At the heart of

achieving the Green Deal's climate goals, it will contribute to a greener food production. It sets out a clear course with ambitious objectives and concrete targets to transform the EU food system. Indeed, by 2030, we want to see the use of pesticides and antimicrobials as well as nutrient losses reduced by 50% and the share of organic agriculture to reach 25%.

We will do this hand-in-hand with stakeholders, ensuring that all necessary support to achieve these ambitious targets is given. We will transform food production and make it sustainable. Apart from these targets the Farm to Fork Strategy also puts forward a list of 27 EU-level actions to spearhead our progress towards sustainable food systems. These range from food labelling, food waste animal welfare and promoting the global transition.

We know that our citizens prefer healthy and sustainably sourced food, and we will make sure that they have such options at all times, while also providing sufficient information to make the right food choices. We will also provide clear and easily understandable information on the contents of their food: how it has been produced and how it affects the environment. A recent survey¹ showed that European citizens expect a lot from all of us. Most of them believe that producers (farmers, fisheries etc.) and food manufacturers are key actors in making our food systems sustainable, above public authorities. In addition to this, Europeans also think that information on food sustainability should be compulsory on food labels, and that producers and food companies should themselves raise their products' sustainability standards. This is a clear sign that this is change that comes from the bottom up – it has been demanded by our citizens.

Whilst transformational moments create costs – they should not create winners and losers. We need to support our farmers and fishers in this transition, and we intend to do so. No one will be left behind. Our ambition is to help primary producers strengthen their position in the supply chain and to capture a fair share of the benefit of sustainable production. To support the transition, policies such as the Common Agricultural Policy will continue to help, in particular, to offset the costs of changing practices. In addition, we will take actions to transfer costs from sustainable options to the less sustainable.

We know that investment will be necessary to encourage innovation and create sustainable food systems. We have made €10 billion available for research and innovation, to support and accelerate this transition, to develop biological pesticides, natural resources as well as the use of digital and nature-based solutions for food production. Ultimately, we aim to be able to bank on our sustainability turning this cost into a competitive advantage for Europe's farmers, fishers and food producers by sustainability leaders on the global stage.

As we work to overcome the COVID-19 crisis, I am convinced that with our Farm to Fork Strategy we have laid down the foundation for creating a better, stronger and fairer food system. For us to continue building on this foundation we need everyone's commitment. We will all sink or swim together - there are no opt outs in climate change or planetary degradation. The cost of doing nothing in the way we produce, distribute and consume food will be significantly greater. The transition to sustainable food systems is our collective responsibility. As I witnessed a few weeks ago, the appetite for change is there and I would like as many as possible to join us at the table.

¹ EB 505 Making our food fit for the future – Citizen's expectations

**JANUSZ WOJCIECHOWSKI***Commissioner for Agriculture*

Towards a sustainable and resilient food system in Europe – the key role of the **Common Agricultural Policy**

The Covid-19 crisis and the related lockdown measures reminded us all of the crucial importance of food security, a given for the past decades in the EU. The European Commission worked alongside Member States and the agri-food sector to find quick and efficient solutions, and ensured that food was available across the EU. The agri-food sector proved its resilience. Nonetheless, this crisis has highlighted the necessity to make our food systems more sustainable, which will lead to further resilience on the medium and long term.

Presented in May 2020 by the European Commission, the Farm to fork strategy aims at making our food system more sustainable. This transition will safeguard food security, ensure access to healthy diets, reduce the environmental and climate footprint of the EU food system, while also ensuring the livelihoods of all the operators of our food supply chain. It is important to remember the three dimensions of sustainability – environmental, social and economic. If we want to achieve this transition, we will have to take all three into account, leaving no one behind.

The strategy sets concrete targets to transform the EU's food system, including a reduction by 50% of the use and risk of pesticides, a reduction by at least 20% of the use of fertilizers, a reduction by 50% in sales of antimicrobials used for farmed animals and aquaculture, and reaching 25% of agricultural land under organic farming. To reach these targets, the Common Agricultural Policy (CAP) will play a crucial role.

The future CAP aims to shift the policy's emphasis towards results and performance, rather than compliance and rules. In addition, the proposals are built around key priorities: simplifying and modernising the CAP and better responding to European agriculture's emerging challenges at an economic, environmental and social level, which are only reinforced by the current crisis arising from the coronavirus outbreak.

The CAP's nine common objectives, set at EU level, tackle economic, environmental and social challenges. Ensuring fair income for farmers, preserving landscapes and biodiversity, rebalancing power in the food supply chain, climate change action - these are just a few examples. They are all fundamental in ensuring that the policy continues to deliver and helps the sector to achieve the transition towards sustainable food systems.

Furthermore, the future CAP includes CAP national strategic plans that will allow for more flexibility in the implementation of the CAP while being better adapted to the local conditions and needs of each Member State. Each Member State will have to produce a national strategic plan to explain how they will achieve the CAP objectives. The idea is for member states to analyse their situation and territory in terms of strengths, weaknesses, opportunities and threats (SWOT analysis) and link it to their needs. Based on this analysis, member states will explain how they will implement CAP instruments to achieve these objectives. For the first time, member states will have to develop a single strategic approach in the use of all CAP instruments and ensure their synergies.

To ensure that these plans are in line with the Farm to fork strategy, the European Commission has put in place a structured dialogue with Member States who are already in the preparatory phase of the CAP strategic plans. The Commission will provide recommendations to Member states based on an analysis of each Member State's situation, taking into account the strategy's targets.

Furthermore, the future CAP includes several tools that aim to increase the overall environmental performance of EU agriculture and contribute to the transition towards sustainable food systems.

Among those, conditionality replaces the current CAP's cross-compliance and greening with a more ambitious approach. Area and animal-based CAP payments will be linked to a range of obligations, including good

environmental farming practices and standards already enshrined in EU legislation.

In addition, the future CAP introduces a new system, the so-called eco-schemes, available under the direct payments framework. The eco-schemes aim to reward farmers for going even further in the implementation of sustainable agricultural practices, beyond the mandatory requirements set by conditionality. These practices could include the implementation of environmentally friendly production systems such as agroecology, precision farming and organic farming. Mandatory for Member States to propose, the eco-schemes will be voluntary for farmers to join. Member states will design and choose to offer one or more eco-schemes based on local conditions and needs.

The rural development framework includes environmental and climate management commitments. Similarly, they aim to restore, preserve and enhance ecosystems, promote resource efficiency, and move towards a low-carbon and climate-resilient economy by compensating farmers and other beneficiaries for voluntarily committing themselves to implement sustainable practices.

Technology and innovation will also have key a role to play in this transition. Both have already started to change the agricultural landscape: from publicly available satellite data to precision farming tools, a more efficient use of natural resources is possible while improving production. However, innovation does not only include digital and technological advances. By improving our understanding of how nature and ecosystems work, of how plants, animals and trees interact, we can design more innovative, sustainable farming systems. The European Commission will support the sector and its actors, by making the right tools available but also by investing heavily in research and innovation to continue and further develop sustainable agricultural systems. Finally, the key step will be to make this knowledge widely available and accessible to all.



JULIA KLÖCKNER

*German Federal Minister of
Food and Agriculture*

The future Common Agricultural Policy: How to combine food security with strong environmental protection and climate change mitigation

The Common European Agricultural Policy (CAP) is becoming more sustainable: This is the central message of the agreement the European Agriculture Ministers reached over the past month under the German EU Council Presidency. It also ensures that the agricultural sector continues to fulfil its core responsibility: food security for 450 million consumers in the 27 European member states. The agreement of the Agriculture Council is therefore a breakthrough for Europe's agricultural policy, because it combines environmental protection and climate change mitigation with food and nutrition security. It also provides planning certainty for our farmers. For the first time in the history of the European Union, the following principle applies: There has to be a quid pro quo. It is therefore a system change, a success for the environment and the climate, for our farmers, for rural areas and for European consumers.

Minimum budget for eco-schemes

It has been clear for a long time that environmental protection/climate change mitigation and an income-securing, high-yielding agricultural sector are not mutually exclusive. With the new CAP, however, agriculture will perform even better. At least 40 per cent of its funds need to be used for achieving climate goals. This is a significantly higher value compared with other EU policies. The introduction of a binding, Europe-wide minimum budget for the eco-schemes plays an important role in this regard. This was not included in the European Commission's original proposals and was pushed through by the German EU Council Presidency in the face of considerable resistance.

The environmental and climatic conditions under which farms operate in the European Union, however, differ considerably between countries in some cases. Therefore it is a major joint achievement of

all those involved that an agreement was achieved to henceforth link 100 percent of the direct payments to tighter environmental and climate requirements for all European member states. They include obligations for agricultural land, for instance on minimum levels of protection for moorland and wetlands and on the establishment of exclusively non-productive fallow sites to secure biodiversity. In addition to that, it will from now on be binding for all European Union Member States that at least 20 per cent of the direct payments are used for eco-schemes for additional environmental services. This includes the additional establishment of fallow land and blossoming areas to protect insects and water bodies, the selection of diverse crop varieties to foster species diversity and the promotion of extensive grazing. Key elements of the Green Deal and hence also of the Farm to Fork Strategy and the Biodiversity Strategy were also fleshed out, for instance

by agreeing on a minimum budget for eco-schemes and higher requirements for direct support. This significant step-up of environmental services will make a tangible contribution to more climate change mitigation and environmental protection. The post-2020 CAP therefore mainly targets sustainability-orientated production.

Direct payments will be made contingent on production practices

Direct aid schemes continue to play a crucial role in cushioning fluctuations in farm prices, securing farmers' income and thus providing planning certainty with respect to food and nutrition security. They also provide financial compensation for the high standards in environmental protection, animal welfare and consumer protection that apply to European farmers, which are significantly higher than in some non-EU countries. We need to be willing to pay for these high standards.



In this case, too, our approach is fundamentally new: direct payments to producers are no longer linked only to land ownership; instead, they depend on agricultural practices. Those who comply with basic environmental and management standards on more land are eligible for these payments. If you provide more services, you get more, if you provide fewer services you get less or nothing at all.

We want the farming sector to be profitable, now and in the future. Therefore, we also decided that at least 2 percent of the national direct payments budget must in future be used to support young farmers, who may receive a payment for young farmers and/or start-up assistance. It is important to offer young farmers attractive prospects by providing incentives and making it easier for young people to get started in agriculture. For investing in the future of agriculture today means securing tomorrow's food and nutrition.

Flexibility thanks to national strategy plans

The common goal is clear: to strengthen an income-securing, high-yielding and at the same time resource-conserving agricultural sector to secure our food and nutrition. The broad consensus on this common goal notwithstanding, the national specificities of the individual member states need to be appropriately taken into account. There is no "one size fits all" approach in this case. We will only be successful if we acknowledge the specific conditions in each member state. Therefore, it is planned to have national strategy plans in the future to give the respective countries the necessary flexibility

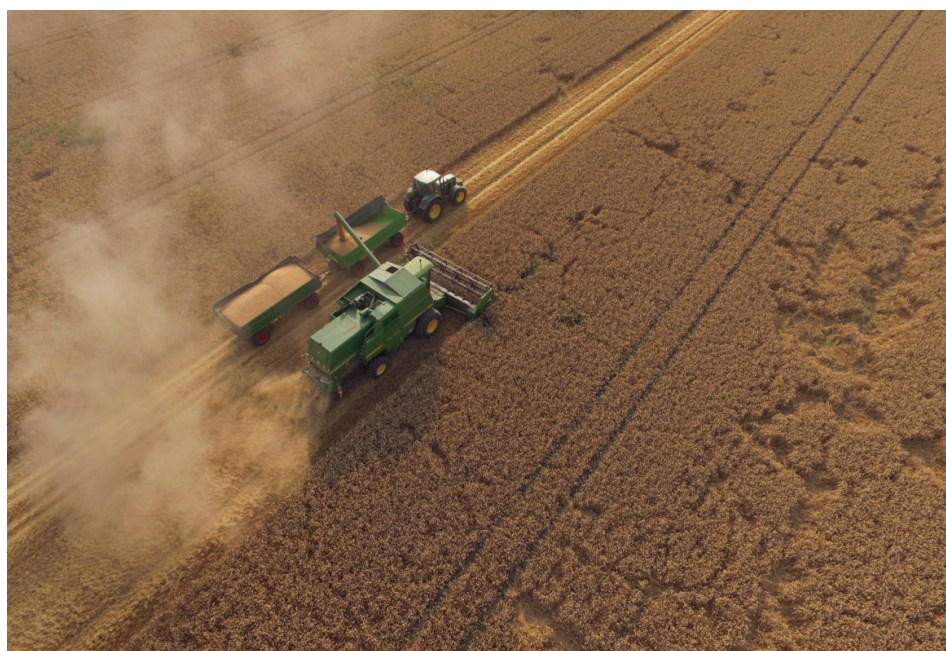
on how to implement the rules. This is the only way that countries will be able to adapt the mandatory, EU-wide requirements and implement them successfully.

Initiating a system change in the European agricultural sector

The European Union's future Common Agricultural Policy will secure the future: for our environment, our climate and our farmers. And hence also the future of our food and nutrition. Because protecting the environment and mitigating climate change are the prerequisites for us to be able to continue to produce adequate, safe food in the future.

This means initiating a system change in the European agricultural sector. By strengthening the farming sector in the European member states, we are also providing support to sustain strong regional production in Europe. In this way, we will not only conserve resources and secure the supply of food in the European internal market; we will also strengthen both our rural areas and our European supply chains, which have already proven their worth during the ongoing pandemic.

After all, the Council's agreement on the future Common Agricultural Policy also sends an important signal to European citizens in times of rising national interests, because it stands for strengthening European cohesion, for shared European values and hence for a united Europe. In the forthcoming trilogue procedure with the European Parliament and the European Commission, the German EU Council Presidency will vigorously defend the ambitious Council mandate, in particular on environmental protection and climate change mitigation.





DACIAN CIOLȘ

MEP (Renew Europe Group- Chair)

Shaping a new rural vision for Europe

Our rural life is the cornerstone of our Continent and represents beautifully the greatest symbol of our European pledge « United in our Diversity ». These unique reservoirs of social, economic and environmental innovation and transformation are only waiting to be used to their full potential. But these communities are faced with major struggles. Farmers, rural enterprises and start-ups already challenged by global market trends and competition are now dealing with the COVID-19 crisis.

The future cannot just be urban. Environmental and climate challenges, biodiversity loss, digital connectivity gaps and socio-economic recovery demand not only new practices and a new political and policy approach to rural areas but also massive investments.

EU priorities through rural lenses

Rural areas should be in a position to play a more prominent role in the recovery and reconstruction plan. Our next generation will also be a rural one. This should be reflected by closer links and ease of access between rural and urban areas. Many urban dwellers are fascinated by rural life, while our youth in the countryside are forced into cities because of lack access to basic services.

To turn challenges into advantages, the EU needs more integrated policies and strategies, to increase the energy and innovation capacity of our rural communities, to tackle decarbonisation, digitalisation and climate as well as social and economic development. From health to education, from quality jobs to broadband, these policies should provide access to equal services and strengthen the cohesion and cooperation between rural and urban areas and communities.

Both the digital agenda and Green deal can be an opportunities to strike a new societal balance between urban and rural areas, shaping a more inclusive society, closing the

service gap and launching a renew economic prospect for our countryside. Agriculture, food and health potential, culture and tourism, solutions to the climate and energy challenges are some of the unique levers on which Europe can build a strong new vision for its rural areas. New hard and soft investments need to be co-designed with rural communities to reflect their needs and to seize these opportunities:

- **Digital Agenda.** Digital innovation is essential to cope with many of the impacts of the crisis and will be equally important for recovery and the reorganisation of rural- urban relations. Innovation in sustainable mobility, decentralized energy production, work and service provision also offer huge opportunities for rural and urban areas.
- **Green Deal.** The circular economy and ecosystem services - needs to be recognised, valued and enhanced. There is no serious argument to water down ambitions of the European Green Deal in the light of COVID-19. On the contrary, the crisis is a chance to dig deeper into the real challenges of an eco-fair transition and the role European Institutions and citizens shall play.

A fresh impetus is also needed in the rural dimension of **cohesion, research, digital skills and innovation, connectivity** policies and programmes. The **Common Agricultural Policy** should play a greater role in unifying the expectations of farmers and citizens around a common food project. The **Farm to Fork** and the **Biodiversity** strategies are a unique opportunities and must be fully exploited.

The recent vote on the Common Agricultural Policy in the European Parliament is a new step in the process of transforming this policy, a step towards a stronger integration of society's expectations and for a more

attractive kind of agriculture for a new generation of farmers.

The Parliament has given a political dimension to a Commission proposal that was initially mainly administrative. We are on course to better support farmers who face major changes in their profession, particularly in terms of the green and digital transitions. Now the negotiations will start with the Council.

Those that are constantly asking for the reform to be rejected, rather than rolling up their sleeves and building a compromise, are simply irresponsible. Their ideological stance would freeze any change for 3 or 4 years, even though we have planned a revision of the CAP as early as 2025. Transforming the CAP is not a one off exercise but an ongoing process.

What is clear, is that the future CAP will be a lever to fully realise the ambition of the Green deal. We will give the Commission a strong mandate to ensure the credibility of future national strategic plans. These strategic plans will have to produce results, and will be monitored via performance indicators. The greening measures of 2013 will be integrated into the mandatory requirements to receive direct payments, and will therefore become the rule for all European farmers, under a reinforced cross-compliance that will better protect water quality, enhance carbon capture, and further preserve biodiversity. These are concrete steps forward.

An new dynamic, involving rural communities

Beyond the CAP, the future of Europe as a whole should be shaped through rural lenses. This can be achieved by launching an inclusive dynamic, building on rural movements and social innovation including inter-generational cooperation.

Rurality must remain firmly at the top of the European agenda.



NORBERT LINS

*MEP (EPP Group),
Chair of Committee of Agriculture and Rural
Areas, European Parliament*

Ensuring sustainable, safe, affordable and quality food in Europe

A lot of people believe that the food on our tables and shelves in the supermarket are a matter of fact and take them for granted. However, sometimes we forget that tables and shelves are not filled magically. It is farmers who need to work for them. Farmers who get up in the morning to go to the fields or the stables to produce our dinner. Work that starts as early as the sunrise and sometimes goes on until way beyond midnight to bring the harvest home.

For a long time, full tables have been a normality. No one questioned the food security in Europe. With Covid-19, the question suddenly became omnipresent. Is our food chain resilient enough to ensure sustainable, safe, affordable and good food in Europe? Luckily, we can say now that our European food system has proven itself excellently. As a second benefit, the crisis has finally created a momentum to acknowledge the daily work of all actors in the food chain, especially for the farmers.

The new Farm to Fork Strategy aims to make the European food chain more sustainable and share the burden equally among all actors - from the Farmers over the processors and retail to the consumers. In my opinion, the Farm to Fork strategy has some good ideas, but in itself is not the solution as it currently stands.

Even in crisis, the EU must be able to safely feed its people with nutritious and affordable food. Next to the question of quantity, we should also talk about the quality of the products we want to have. Not only will the yields decrease, there is also the question of health concerns without enough fungicides for example. Therefore, before any targets are legally binding or the Commission sends out letters to Member States urging them to implement the Farm to Fork Strategy, a proper

impact assessment on food security, quality and income stability must be conducted.

For me three aspects will be crucial to find sustainable, efficient and climate-adapted solutions for a long-term food security.

First: Involving all actors

The strategy can be a success if all actors have the feeling to be included and their input and work is valued. Let me give you an example: In my region Baden-Württemberg, a citizen initiative threatened to divide farmers (including organic farmers) and NGOs focussing on nature on how to best protect bees. While everyone expected it to end badly, it proved the opposite. Both sides found a compromise which was on the one hand acceptable for the NGOs, but also, and more importantly, had the support of the farming community. Rather than obligations and fix targets, the regional strategy now has ambitious target corridors and puts incentives before obligations. This example shows what the Farm to Fork Strategy needs: first, cooperation and acceptance and second, recognising that there is rarely a single correct solution to any problem. Whereas I like the idea of the strategy, unfortunately the current text focuses too much on the "Farm" part, rather than the whole chain.

Second: Enabling the farming sector to adapt to the future and market-driven solutions

Instead of flooding the sector with additional requirements, let us help farmers make the necessary investments and changes for the future. This can be done by promoting investment and innovation, reducing bureaucracy and having the courage to adopt new (breeding) technologies. Furthermore, all measures should be market-driven. This increases the acceptance of all actors, responds to the needs and demands of consumers, allows flexibility in extreme situations (climate changes, crises)

and is no less ambitious. These market-driven solutions should above all come into play in the discussion about pesticides, fertilizers and organic farming.

Third: Consumer awareness for quality and sustainability

Quality and sustainability have their price. I support that food prices should reflect transport and production costs fairly. This is why I want fair trade practices and strict measures against food counterfeiting and fair payment for those involved in the food chain. More regional production and consumption, circular economy, more animal welfare and ecological requirements don't come without a price. We need to make consumers aware about the quality and price of their food. With their purchasing behaviour, consumers decide which agricultural model they want to promote. Therefore, they need to be well informed in order to make informed choices about their diet. This education contributes to a healthy diet, less food waste and fewer diet-related diseases. We as policy makers need to think of labelling schemes that make sense. We will have to do a better job labelling our products so that consumers know whether they originate from the EU and where and when they have been produced. The question here of course is how "local" we want to go and how to avoid threatening the internal market by promoting national products over products originating from other EU countries. However, such labels must not restrict the possibilities of manufacturers and processors in terms of their entrepreneurial freedom and the internal market.

To conclude: ensuring sustainable, safe, affordable and quality food in Europe does not need magic. As European policy makers, we need to enable all actors of the chain to make our food sector more sustainable and resilient.



ULRIKE MULLER

MEP (Renew Europe Group),
Member of the AGRI
Committee-Rapporteur of CAP

Farm-to-Fork beyond bold claims - the strategy must deliver for the planet, consumers and farmers alike

Let me begin with a positive stocktaking. Never before have so many people - both in absolute and relative terms - had access to sufficient and high-quality nutrition. Never before has life expectancy been so high. Malnutrition and undernourishment remain an issue in parts of the world, but they are no doubt on the decline and we are making substantial progress in ending hunger in the world.

In today's Europe, we are privileged. Food supply is secure. Not even a serious interruption of the single market like the early days of the Corona-crisis has in any serious way threatened supplies. Such unprecedented food security allows us to shift our focus from increasing productivity towards increasing sustainability. It allows us for the first time to worry about negative external effects such as the emission of greenhouse gases and negative impacts on the environment and biodiversity.

Green Deal and Farm-to-Fork leave crucial questions unanswered

Make no mistake, our food production must become more sustainable to ensure food security over time. The effects of climate change put agriculture under pressure, just as a productive agriculture depends on a healthy environment. With the world's population expected to continue to grow over the next decades, productivity will have to keep up as well. These challenges are interconnected, and so should be our respective policies. We need to step away from the silo mentality and get to better-integrated policies. In other words: we need an integrated food policy that is well-coordinated with other high-level targets. This is what the Farm-to-Fork strategy and its following initiatives should deliver.

With the Green Deal and its Farm-to-Fork communication, the Commission acknowledges the need for more integrated policy-making and offers a welcome starting point. However, the communication leaves some central problems

and contradictions unresolved, dodging the painful questions we must answer.

Quantifiable targets focus on production

The Commission's strategy aims to address all steps of the food chain: from agricultural production, food processing and retail to the consumer. Its priorities are ensuring healthy, affordable and sustainable food, reducing the climate- and environmental footprint of food production and ensuring fair economic return in the supply chain. Measures can roughly be divided into production side (farm-level) on the one hand and consumption side (consumers, but also processing and marketing) on the other.

We encounter almost all quantifiable targets on the production side: the reduction of input such as plant protection products, fertilizers and antimicrobials, as well as increased areas destined to organic farming. While not linked to a clear target, we have to count reducing the greenhouse gas emissions as well. Achieving these targets comes with a price tag. The Commission recognises that this will "require human and financial investment" and that we need to ensure a "sustainable livelihood for primary producers, who still lag behind in terms of income". However, the Commission fails to provide answers as to how to finance such a transition beyond simply relying on the CAP.

Give small farmers better answers!

While the CAP is a large budget, its ability to fulfil ever more requirements is limited. The three quantitative input reduction targets cannot be achieved by simply turning to organic farming. We need to address trade-offs between Farm to Fork policy goals, notably increasing sustainability of food production and maintaining or increasing food availability and affordability. This will require conventional farming to innovate. This means substantial investments in new technologies such as precision agriculture and digital tools.

Big agricultural companies can shoulder these investments; thousands of small-scale and family farms cannot. They need more support than just the income stabilisation the CAP can provide. Clearly, balancing the costs of achieving climate and environmental protection goals with the economic viability for farmers calls for better answers. Besides subsidies, farmers need a fair return on their investments. As a society, we must come up with solutions beyond the CAP to make this happen.

A more sustainable food system will come with a price for consumers as well. With 33 million people in the EU unable to afford a quality meal every second day, food affordability remains an issue. This has to be borne in mind not only when discussing the Commission's target to make the healthy choice the most affordable one, but also when discussing further mandatory labelling requirements.

Make information available, accessible and understandable!

Speaking of consumers: their choice will ultimately decide about the fate of our food system. I therefore strongly welcome the target of empowering the consumer by making information available, accessible and easily understandable. However, how people use this information and which products they ultimately desire must remain their individual choice. The empowered consumer should remain the leading principle of our consumer protection policy. A sound nutrition education cannot be replaced by legal limits on certain nutrients.

The Farm-to-Fork Strategy should not be a vessel for additional requirements for farmers and food businesses. It must answer how we as a society want to get towards a sustainable food system as well. The strategy certainly is an important first step towards better-integrated policies and includes some valuable initial approaches. But it can only serve as a starting point to kick off the debates.

**CHRISTIANE LAMBERT***Copa President*

The role of farmers and their cooperation with other **food chain actors** in delivering on **Farm to Fork sustainability objectives**

The Farm to Fork Strategy published in May 2020 has outlined the vision for the future of the agri-food sector of the European Commission. The success of this Strategy depends to a large extent on the role and work of farmers in Europe and their cooperation and collaboration with other actors in the sector, all along the food chain.

Therefore, it is fundamental that the policy formulation and implementation of this strategy supports farmers and their cooperatives' economic sustainability, improves the functioning of the markets while contributing to a more economically, environmentally and socially sustainable agri-food sector. The diversity of the European farming must be recognised as well as the numerous production methods which bring additional benefits from a sustainability point of view. Our farmers are the carriers of so much responsibility when it comes to achieving the goals of this Strategy. Hence, it is necessary that their views, their problems and their own long term sustainability be reflected in legislative proposals steaming from it. Proposing targets is one thing, but if we want to achieve them we need a collaborative environment, one where policymakers come together with all relevant stakeholders and where the dialog and communication is focused on tangible and workable solutions, not rhetoric or ideologies.

The most recent COVID-19 crisis has put additional emphasis on the importance of collaboration and of a well-functioning food supply chain. The pandemic has brought a new reality to our daily lives, as well as to the activity of European farmers, agri-cooperatives and more globally of the actors involved in the food chain. Nevertheless, and despite the COVID-19 pandemic, we have, together, been able to maintain supply, thus ensuring food security for our fellow citizens.

When it comes to improved sustainability first of all farmers cooperation is of paramount importance. European agri-cooperatives with their interlinked value-adding activities involved in the production, aggregation, with their investments in processing, distribution, and even disposal or re-use of by-product or waste that originate from agriculture can support their farmers in being more efficient and sustainable in many sub-systems (e.g. farming system, waste management system, input supply system, etc.). Further on, an improved cooperation with the food and drink industry can only enhance this. Farmers shouldn't carry all the whole weight and the cost of the necessary transition towards a more sustainable food system. It is key that food and drink companies whose business models and sourcing of ingredients depends on farmers work be more involved in facilitating such transition and helping farmers make the necessary investments. If the food and drink industry and the retailers cooperate with the farmers to ensure that the additional economical return created by the added value of more sustainable products is equitably distributed along the chain, this could certainly encourage the creation of more sustainable products. For example an enhanced cooperation between the retailers, the processors and the farmers through the exchange of information on consumers demand could limit to the maximum the last-minute cancellation of orders to limit food waste. Such cooperation could allow to fix strict sustainability requirements for the importation of plant-protein needed (both for food and feed) that the EU is not able to produce itself. Together we would have more bargaining power and we could easier push for stricter sustainability criteria for those imports.

It is also important to underline the role of consumers, who have the power and the responsibility to help farmers in such

sustainability transition, they say they want to see. Unfortunately, what we often witness is that what the citizen says it wants, the consumers is not ready to pay. Enhanced communication and improved dialogue, bringing consumers and farmers closer together could certainly help with this.

Farming is a complex job, which depends on numerous variables, some of which farmers often cannot control themselves, like climate or market hazards. While some other sectors can implement changes easier, it is important to remember that farming has been constantly changing to respond to market and societal challenges. However, to answer challenges such as food security or climate change and their effects on land and rural communities, changes require a step by step approach, with adequate time for adaptation in order also to secure farmers' incomes. Cooperation between food chain actors in delivering on Farm to Fork sustainability objectives and achieving fairer food chain is of paramount importance. Farmers are already working to make these transitions successful. They deserve consideration, attention and recognition.



MARION JANSEN

Director, Trade and Agriculture, Organisation for Economic Co-operation and Development

Transition to sustainable food systems

In many OECD countries, agricultural support policies in force today are a reflection of historic concerns from which these policies arose, including global conflicts and famines in the 1900's. A century later, policy concerns and possibilities to address them have changed drastically. It is therefore about time to rethink the design of agricultural support policies.

Currently a large proportion of agricultural support in OECD countries focuses on production. While the set of rules put in place under the umbrella of the World Trade Organization has drawn attention to the market distorting effects of many of these policies, many countries continue to apply measures that distort incentives of agricultural producers and hamper the transition to more sustainable practices and outcomes. OECD research highlights areas where policy makers can redirect policies to accelerate transition to resilient, sustainable food systems and to foster economic opportunity.

Global food systems face a triple challenge

A transition to sustainable food systems requires a shift in perspective and a recognition of the interlinkages among agriculture, food and environmental policies. Food systems' face a formidable "triple challenge" of simultaneously:

- **providing food security and nutrition to a growing global population:** the world's population is expected to reach almost 10 billion in 2050, requiring a significant increase in the production of affordable, healthy and nutritious food;
- **contributing to the livelihoods of people around the world working along the food supply chain:** global food systems are essential to the livelihoods of people

working on the more than 570 million farms worldwide and are an especially important source of livelihoods in developing countries; and

- **ensuring the environmental sustainability of the sector, while adapting to, and helping to mitigate, climate change:** global food systems are not only dependent upon natural resources, but are responsible for the vast majority of global land and water use, and are an important source of greenhouse gas emissions.¹

Trade-offs and synergies exist among these objectives and no single solution will be suitable for all food systems. Rather, a food systems perspective requires that policy makers take a close look at the ways that policies interact to achieve sustainability goals in the context of the triple challenge. OECD research provides insights on how policies could usefully evolve to accelerate food systems transformation, in particular to ensure environmental sustainability.

Current policies hamper transition to sustainable food systems

OECD's *Agricultural Policy Monitoring and Evaluation*² report, which covers agricultural policies in 54 countries, shows that total support to agriculture averaged USD 708 billion per year during 2017-2019. More than half of this support was directly linked to farm productions, in many cases by keeping domestic prices higher than international

prices, through a combination of subsidies and trade barriers. These policies impose a burden on consumers, reduce the competitiveness of the domestic food industry, increase the income gap between large and small farmers and can undermine climate change mitigation and sustainable resource use. For example, payments linked to production can undermine efforts at climate change adaptation and mitigation by locking farmers into producing particular crops, regardless of changing climatic conditions.

A shift towards sustainable food systems requires policies that focus on enabling transition in the face of changing climate, technological and economic factors. Climate change and shifting pest and disease risks will alter production possibilities and require new approaches for managing risks. New digital technologies offer tools for producers to connect to high-value markets, to communicate with consumers highlighting product characteristics, and to navigate complex documentation to manage supply chain relationships. Evolving global markets and trade relationships mean that linkages among food system actors can shift rapidly, affecting value chain structures. As the pace of change accelerates, it is imperative that policies support the ability of actors within the food system to respond nimbly to manage risks and to take advantage of opportunities.

Policies can simultaneously foster sustainability and economic opportunity

Policies and public investment will shape food systems now and in the future, creating the enabling conditions for sustainable and resilient outcomes and linking producers with consumers and markets. Policy makers can focus on developing policies that will raise the environmental and resource productivity of agriculture, enhance land management

¹ OECD (2020), The challenge of coherent policies, Chapter 1: The Performance of the Global Food System [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=TAD/CA/APM/WP\(2019\)29/FINAL&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=TAD/CA/APM/WP(2019)29/FINAL&docLanguage=En)

² OECD (2020), *Agricultural Policy Monitoring and Evaluation 2020*, OECD Publishing, Paris, <https://doi.org/10.1787/928181a8-en>.

practices, minimise pollution discharges, curtail damage to biodiversity, and strengthen policies that avoid the use of production and input subsidies that tend to damage the environment. This will require a mixture of policy measures, including regulations, as well as investments in innovation, training, and infrastructure.

The experience of Covid-19 has highlighted the importance of transparency on market conditions and policies to reduce market uncertainty, expose bottlenecks and identify risks. The Agricultural Market Information System (AMIS) in which the OECD participates, has played an important role in helping market participants and policymakers develop effective responses and avoid counterproductive export bans.³ Investments in collecting information, monitoring market and policy developments, and communicating clearly about the findings provide clear payoffs when unexpected disruptions occur.

An open, predictable, trading system plays a role in addressing the triple challenge facing the food system. The OECD-FAO Agricultural Outlook⁴ shows that international trade will become increasingly important over the coming decade in moving food from where it can be produced to where demand is growing... Trade helps pool risks associated with changing weather and with pest and disease, contributing to resilient sustainable agricultural systems, while also supporting rural livelihoods. Trade also plays an important role in connecting farmers to markets and thus ensuring farm incomes.

Food systems have shown a remarkable resilience to date in the face of disruptions from Covid-19. This crisis provides an opportunity to repurpose agricultural policies, to enhance predictable, transparent markets, to foster economic opportunity and to support a transition to sustainable systems.



3 The role of transparency in avoiding a COVID-19 induced food crisis

4 OECD/FAO (2020), *OECD-FAO Agricultural Outlook 2020-2029*, OECD Publishing, Paris/FAO, Rome, <https://doi.org/10.1787/1112c23b-en>.



MELLA FREWEN

FoodDrinkEurope Director General.

Covid-19 shows an industry up for the farm to fork challenge

Brussels is alive with talk about the future of our food and how to develop a fairer, healthier and more environmentally friendly way of feeding our growing population.

It is a big challenge, but as I hope our response to Covid-19 shows, we are an industry that does not shy away from a challenge, however difficult it may look.

That the flow of good food and drink has continued throughout the pandemic is thanks to the extraordinary efforts of many people working along the entire food chain – from farmers to manufacturers to retailers.

While Europe has been in crisis, an army of dedicated workers has been working tirelessly behind the scenes.

Above and beyond

On top of their day job – manufacturing high quality food and drink products – [businesses across the continent have gone above and beyond](#) in their efforts to help communities deal with the coronavirus crisis.

One noticeable intervention came from the drinks companies that switched production from spirits and beers and used the alcohol instead to produce hand sanitisers and gels.

Meanwhile, many food and drink companies stepped in to meet the demand for essential PPE equipment for health professionals.

Others distributed large quantities of nutritious meals to vulnerable communities and essential workers, while more still made sizeable financial donations to charities and health initiatives. You can read [more about these great initiatives here](#).

Cooperation with the authorities has also been vital to managing Covid-19 so that the pandemic creates as little disruption as possible. We have worked collaboratively with the European Commission which provided guidance on transport and on workers and encouraged the Member States to uphold the

Single Market and allow food products and workers to cross borders.

Collectively, across the food chain and working with the authorities, we have kept food shelves stocked.

Up for the challenge

Developing an EU policy environment that delivers more sustainable food systems is another important challenge, but we are ready for it. The European food and drink industry can be the benchmark for sustainability as it contributes towards a greener planet, thriving economy and healthier living.

The EU's Green Deal and Farm to Fork Strategy provide a unique opportunity to tackle all these issues altogether.

As the largest manufacturing sector in Europe – buying some 70 per cent of all EU farm produce and helping to provide 1.5 billion meals in Europe every day – the food and drink industry will be central to its success.

Nourish together

Covid-19 is still having a major impact on our food and drink businesses, most notably SMEs and those involved in the hospitality sectors, and the economic destruction will no doubt play out for years to come.

We still believe, however, that the Green Deal should be at the centre of Europe's growth strategy, and the food and drink sector will be a key player in rebooting the economy.

In October we celebrated World Food Day, where the strapline was 'Cultivate, nourish, preserve – together'. I can only agree. Covid-19 has taught us that working together we can achieve a lot, and we look forward to working constructively with all stakeholders to ensure European Commission's Farm to Fork Strategy delivers truly sustainable food systems.





SARAH WIENER

*MEP (Greens Group),
Member AGRI committee*

Yes! The relocalisation of food supply chains can lead to food security in the European Union and to a **healthier planet**

Global warming continues to accelerate, while biodiversity and species diversity are increasingly threatened. Many things on our planet are out of balance.

Despite the corona pandemic, we should not forget that the climate crisis remains the biggest challenge facing Europe and the whole world. Closely related to this is the question of securing our food supply. And this is clearly linked to the climate, because our food systems are dependent on biodiversity and healthy ecosystems. Our current food system, however, is geared towards earnings and profit maximization. Environmental toxins are becoming almost ubiquitous and making us sick, too. Therefore we urgently need to transform our food systems and agriculture.

Agriculture in particular is an important sector that depends on and should contribute to the health of our planet. Instead, it remains highly dependent on fossil fuels and consumes more energy than it produces: agricultural land use alone is responsible for around 40% of the carbon dioxide emitted worldwide. Healthy ecosystems are thus not promoted, but destroyed. As a result, soil fertility and biodiversity gradually decline. In addition to production, the processing, packaging and transport of food naturally also cause additional carbon dioxide emissions. In 2017 alone, around 1.3 billion tons of agricultural, forestry and fishing products were transported by road in the European Union.

In May this year, the European Commission presented the Farm to Fork Strategy for a fair, healthy and environmentally friendly food system. One objective of this strategy is the strengthening of regional and local food systems and the creation of shorter supply chains. The proposals of the Commission in the field of sustainable food production are very welcome. Surely it is in all our interests that

European food should once again be produced in a more socially, ethically and environmentally friendly way and be healthy for all of us.

In a few weeks' time, the Common European Agricultural Policy for the next seven years will be negotiated in a trialogue. The implementation of the Farm to Fork Strategy in the CAP would have been an important first step towards stable and sustainable food security. However, instead of seizing this great opportunity and enabling and strengthening climate-friendly agriculture and thus a sustainable food policy, an old system hostile to the climate is being maintained.

There are plenty of ideas for the implementation of environmentally friendly agricultural practices. Soil fertility, regionality and the preservation of biodiversity play a major role. And this is also what the citizens of the European Union want. In a recent survey, the following points were identified as the most important measures of the coming CAP: Healthy food, combating climate change and ensuring a fair standard of living for farmers.

One type of agriculture that takes into account the climate, soil, plants, animals and people - as producers and consumers - is Community Supported Agriculture. Here, customers pay in advance for a share of the harvest and thus share the risk of a possible crop failure with the producer. The idea behind this concept is that farmers provide people in their surroundings with healthy food. Conversely, farmers can be successful in the long term, because they are provided with the necessary financial resources. An essential aspect of the CSA is that both ecological and economic management are transparent. The aim is creating a closed cycle, where consumers are no longer just shoppers, but part of the agricultural sector. This will strengthen the region - ecologically, economically and socially.

The pandemic we are experiencing shows that particularly awareness of regional food is increasing. For example, surveys from Austria show that since the outbreak of the corona virus began, citizens' awareness of regional foods has risen sharply and people are now more likely to cook for themselves again.

The awareness of healthy food is increasing among the population and it is precisely this awareness that regional agriculture would like to strengthen. People should be able to relate to food again, where it comes from and how it is produced. At the same time we all have a responsibility towards natural resources and living beings. Small regional farms must be strengthened, thereby creating jobs, shortening supply chains and improving the environment.

Other local food systems include Food Assemblies, which are based on online ordering systems and therefore less demanding for their members. Thus, you order online and a few days later you pick up the regional food in a central depot.

Many small citizens' initiatives already support the model of sustainable agriculture. But for the European Union to really move towards sustainable agriculture, it is essential that public authorities, such as hospitals and schools, also buy from smaller local suppliers, thereby supporting small-scale farming, traditional breeds, artisanal processing and family businesses.

Agriculture is the pillar of our existence. We cannot shift the responsibility to individuals and say: „You have to do this and that now and save the world on your own!“ Instead, politics must create framework conditions that promote what is right and what is good and not just reduce bad practices a little bit. We must start today to build the food system we want to have in the future.



ANNE SANDER

*MEP (EPP Group),
Member of the AGRI Committee*

Support and maintain agricultural activity, essential to the food autonomy of our continent

Europe has always moved forward with crises, which have made us stronger and stronger. We have just gone through an unprecedented ordeal; it has made us aware of our strengths and weaknesses. The agri-food sector has been put to the test and showed its resilience in the face of a world at a standstill by continuing to supply European citizens with quality products. Food self-sufficiency has been put back at the center of the debate and the Covid pandemic has demonstrated how much it should be at the center of our concerns, for safety reasons but also for reasons of competitiveness, health and environment.

Everything today pushes us to continue our efforts to maintain a strong and resilient European food system.

It was the original role of the CAP to feed a continent that was drained of blood after the war. It met its very first objective by allowing us to be self-sufficient in terms of food, but it even went far beyond this simple expectation in terms of economic performance and above all by guaranteeing European consumers a varied and very high quality diet at an affordable price. The importance of our CAP is also reflected by its place in the European budget, a place that is now threatened in view of the cuts envisaged in the next MFF, despite the many fundamental missions requested from European agriculture, in particular the new environmental expectations linked to the Green deal and its Farm to Fork strategy.

The European Parliament is fully committed to the reform of the CAP to ensure that it responds to present and future challenges. However, we must keep in mind that our CAP is nothing without our farmers, it must accompany them without representing a punitive policy or too heavy with constraints. In the same way the strategies related to Green deal, Farm to Fork and biodiversity

should not only represent an additional burden for our agri-food system. Funding and the necessary tools must be available to accompany the sectors towards greater sustainability. Our producers and industries are key players in the European Union's transition to a climate-neutral economy, but they will need to be given the means to do so and not lose sight of our goal of food self-sufficiency. In short, we must at all costs avoid putting our entire production system, sometimes already in difficulty, in the face of the economic crisis, climate change or international sanctions. Otherwise, we risk jeopardizing our food autonomy and forcing ourselves to import products that do not always respect our standards and values and at the price of a sometimes high carbon footprint.

This is why we must also be consistent, particularly in the development of our trade policy. Our agriculture and agri-food production, which is of high quality and more sustainable than in the rest of the world, is therefore competitive and we must ensure that it remains so, also bearing in mind that

our system must be able to produce for all and be able to offer products at affordable costs. European agriculture must remain within the reach of all purses even if it gains in quality and sustainability over the years. We must remain productive and stay on course. This is also why the Commission has at the same time taken up the subject of food waste, which we must act on at all costs.

The other problem in Europe is the demographic crisis, particularly in rural areas, but also the crisis of vocations in agricultural professions. We must at all costs revalorize the sector, allow our producers to make a living from their work and ensure that we fight against agribashing, which is unfortunately running rampant in Europe. Our producers are key players in the fight for the climate, they make a lot of effort and we must at all costs accompany them to preserve our know-how, our gastronomic heritage and our European food autonomy.





ERIC ANDRIEU

*MEP (S&D Group),
Member of the AGRI Committee*

The huge challenges of 'Fourche à la Fourchette'

The European Commission finally presented last May the "Fourche à la Fourchette" project. This is an opportunity to share my vision with you on what this programme should be, but also on what should be done to get the bar back on track. For me, promoting agriculture, the work of farmers, short supply chains, agroecology, reducing the use of chemicals, supporting all actors towards a green transition and ensuring healthy food of sufficient quality and accessible to all are the objectives to be achieved. This is a famous challenge, but it is in fact a minimum for a transition that is more environmental, sustainable and more respectful of the demands of European citizens. A real reform of the PAC. Our analysis starts with a finding of *échec*. The Common Agricultural Policy should be substantially reformed and this reform should coincide with the design of the European Green Deal. However, it was essential to build bridges between the two projects. Unfortunately, this is not the case, far from that. The vote in the European Parliament confirmed my concerns. This CAP is a disaster and will probably be the last one, in any case under this name. Indeed, the CAP has lost its "C": It no longer has anything "common" since it advocates renationalisation and pushes Member States towards agricultural dumping. The question arises as to the European Commission's suicidal strategy of de-empowering and giving the Member States the levers of power. As a health and environmental crisis, it is more than ever the time to assert a European response and consolidate the European Union. With this text, it is more disappointing than ever. Moreover, this new common agricultural policy commends the vast majority of the environmental objectives that should have been its own: A real blow that jeopardises the future of agriculture, the future of farmers, but also jeopardises the introduction of the green deal.

I am very enthusiastic about the project from fork to fork, or biodiversity, but I sincerely doubt that the European Commission's will live up to their promise of an effective climate battle.

Environment vs Food safety: No! I would like to add another key point: for me, the environmental transition and food security are closely linked and, above all, they do not oppose, as some say, often those who would like nothing to change and for whom the benefit outweighs the health, the environment and the economy of the regions. It is imperative that the Farm to Fork project also sends this message of an eco-responsible Europe. Courts Disposal of diversified agriculture in each territory is an example of the complementarity between environmental transition and food security: It is a guarantee of a more secure supply, better for biodiversity while reducing transport in the short term. Short proximity chains are more environmentally-friendly and more resilient to crises: They need to be promoted and strengthened! Pesticide: It is essential to put in place concrete measures, including legislation, to significantly reduce the use and risk of chemical pesticides, as well as the use of fertilisers and antibiotics. Similarly, for a real environmental transition, it is necessary to put an end to this toxic reflexion to replace one active chemical with another, rather than to work towards non-chemical alternatives and to call agroecology and digitalisation. Agri-environments 27 % of national greenhouse gas emissions are now attributed to intensive agriculture. Agroecology offers environmentally-friendly technical, social and political alternatives. Here too, Europe has a role to play.

The impact of Covid 19 on the avenir The agricultural sector, during this health crisis, has never stopped supplying Europeans with food, despite the danger. however, Covid 19

also accentuated or highlighted numerous shortcomings. The lack of storage capacity, food surplus or stock disruption, the danger of price hypervolatility, the precariousness of many small farmers living on far too low incomes, working conditions and work contracts for drivers and seasonal workers. downstream, the question also arises of access to healthy food for the most vulnerable populations, while we are announcing a doubling of hunger in the world at the end of the crisis. Reconciling food security with sustainable agriculture, consumption production and the environment must be a priority. The status quo is not a viable alternative, only profound reforms will allow us to build tomorrow



PATRICK TEN BRINK

EU Policy Director,
European Environmental Bureau¹

Restoring biodiversity to its natural place

Although the climate crisis has been recognised as a threat for decades, it is only belatedly that the biodiversity emergency and its associated mass extinctions is receiving the attention it deserves. Now we must restore nature before it is too late.

The scientific evidence² is clear: we are eroding nature and with it the basis for our food, health, economies and societies. The functions of the ecosystems we take for granted are being compromised, yet action has been lacking in the past, seemingly ignoring that our lives depend upon them, with the lion's share of attention going to the climate crisis.

However, the need for transformative action has finally and belatedly been recognised in the European Green Deal (EGD). In the environmental movement, we know that we need system change to halt biodiversity loss, and we know what this system change needs to entail. Restoration measures are one crucial multi-benefit element in the "portfolio of actions" needed to flatten and reverse the curve of biodiversity loss.

Instead of intensive agriculture, forestry and other changes in land use contributing around a quarter of total global greenhouse gas emissions,³ restoration and conservation "can provide more than one third of the most cost-effective climate mitigation

needed to keep global warming under 2°C by 2030", according to the Intergovernmental Panel on Climate Change (IPCC).⁴

Instead of multiplying the risks of infectious diseases by destroying nature and wildlife,⁵ we can enhance our resilience to future pandemics by healing ecosystems.⁶

Instead of tolerating that one out of every eight deaths in Europe is caused by preventable environmental factors,⁷ we can contribute to improving mental and physical health by repairing ecosystems.⁸

And lastly, instead of throwing money at inherently unsustainable sectors and going back to business as usual, we can create sustainable jobs and invest in restoration, the benefits of which generally far exceed the costs.⁹

For this to happen, we need a focused restoration law that sits within the broader context of a reformed Common Agricultural

Policy (CAP) and adequate funding through the EU budget and the Recovery and Resilience Facility (RRF).

The law of the land

The European Green Deal, together with the associated Biodiversity and Farm to Fork Strategies, offers hope, momentum and direction. The commitment in the Biodiversity Strategy to propose legally binding restoration targets in 2021 is a major opportunity to promote both biodiversity and climate objectives and to push the needed regenerative agenda of giving back to the planet more than we take and investing in resilience. However, this will need clear and ambitious targets, urgent action and adequate funding. Concretely, the restoration law must:

- Set targets to restore 15% of the EU's land and sea area and at least 25,000km of free-flowing rivers by 2030, while also including a target for CO₂ removal through natural sinks
- Focus on ecosystems that can provide synergies with climate mitigation and adaptation by storing or sequestering carbon, while the primary objective should be to tackle biodiversity loss
- Result in large-scale restoration to high-quality nature with a significant positive effect on biodiversity through permanent land use change
- Go beyond existing requirements under the Nature Directives and other existing obligations

Funding the transition

The restoration law cannot do everything. Its strength will lie in its targeted and specific nature that will make it easy and timely to implement. This means that we must also look towards the CAP and other EU financial instruments.

1 With thanks for input from Laura Hildt, Sergiy Moroz, and Khaled Diab, EEB.

2 <https://www.cbd.int/gbo5>; <https://ipbes.net/global-assessment>; <https://www.eea.europa.eu/publications/state-of-nature-in-the-eu-2020>.

3 IPCC, 'Climate Change and Land' (2020), https://www.ipcc.ch/site/assets/uploads/sites/4/2020/02/SPM_Updated-Jan20.pdf.

4 IPBES, 'The IPBES assessment report on land degradation and restoration' (2018) <https://ipbes.net/assessment-reports/ldr>.

5 <http://www.oecd.org/coronavirus/policy-responses/biodiversity-and-the-economic-response-to-covid-19-ensuring-a-green-and-resilient-recovery-d98b5a09/>

6 <https://ipbes.net/pandemics>, <https://www.unenvironment.org/resources/report/preventing-future-zoonotic-disease-outbreaks-protecting-environment-animals-and>

7 <https://www.eea.europa.eu/publications/healthy-environment-healthy-lives>

8 <https://ieep.eu/publications/new-study-on-the-health-and-social-benefits-of-biodiversity-and-nature-protection>

9 OECD, 'Biodiversity: Finance and the Economic and Business Case for Action' (2019), OECD Publishing <https://doi.org/10.1787/a3147942-en>; IPBES, 'The IPBES assessment report on land degradation and restoration' (2018) <https://ipbes.net/assessment-reports/ldr>.

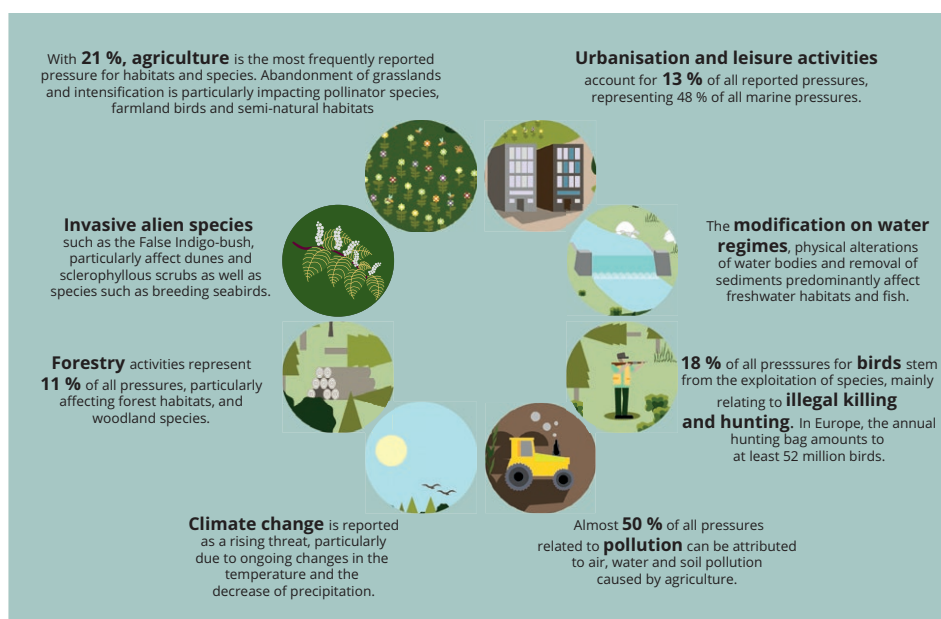
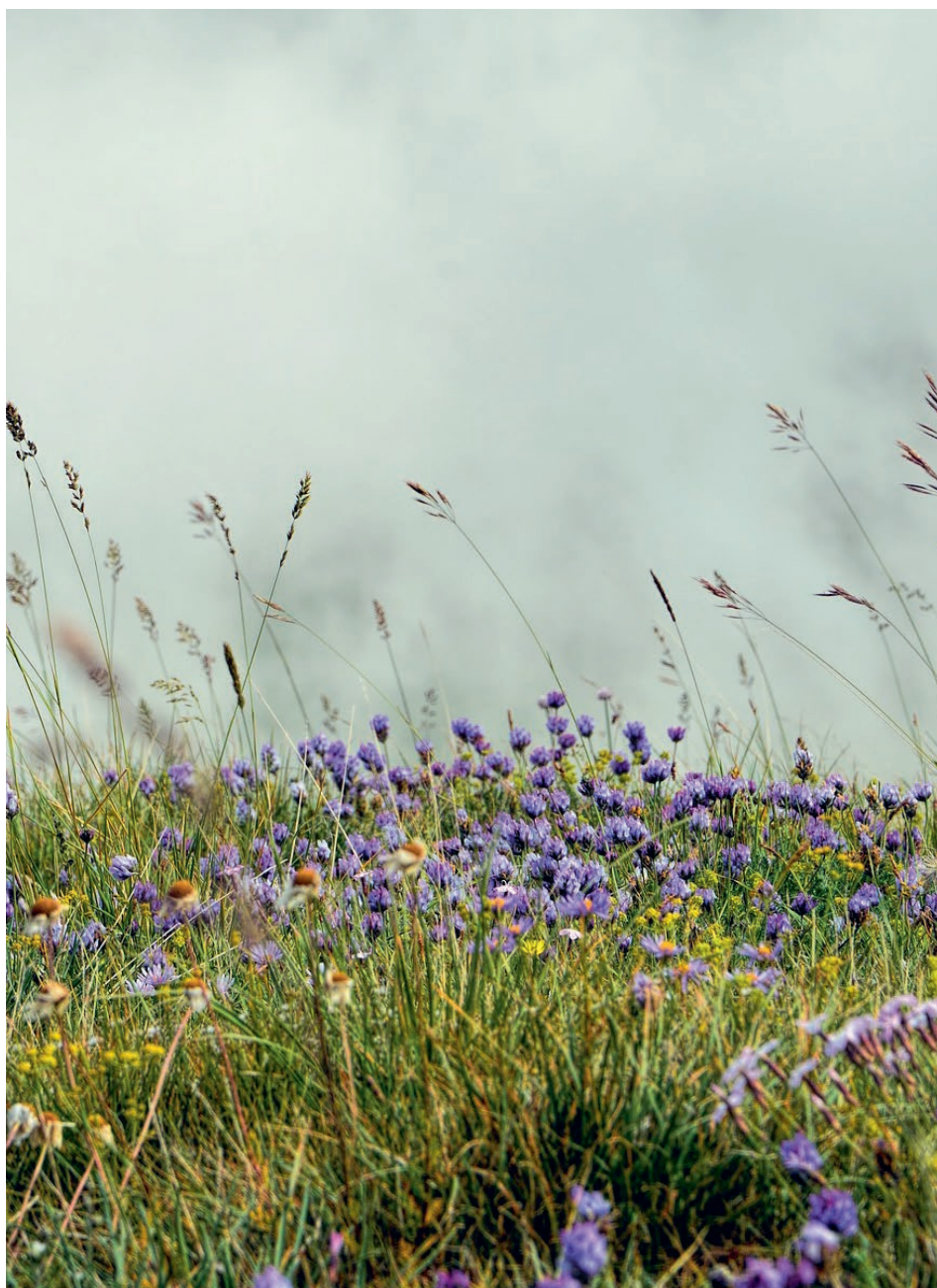
With intensive agriculture and wider land use change being the main driver of biodiversity loss, a thorough reform of the CAP that is in line with the EGD and the Biodiversity Strategy is needed to reverse biodiversity loss, to improve the resilience of our food systems and to support the farming community. CAP support can contribute to halting biodiversity loss while benefiting farmers, wider society and the climate. To do so, at least half of its budget needs to be dedicated to environmental and climate targets

In addition to the CAP, the EU's Multi Annual Financial Framework (MFF) and the Recovery and Resilience Facility (RRF) are important sources of funding. The commitment for 37% of the RRF to focus on the European Green Deal is a good start. However, to truly enable restoration, at least 10% of the MFF should further be allocated to biodiversity. The EUR20bn/year for nature promised in the Biodiversity Strategy are only the bare minimum, but this is insufficient to cover the large-scale restoration that is urgently needed.

Diversity of actions

We have seen positive commitments in the European Green Deal, in the Biodiversity Strategy, the Farm to Fork Strategy and the Commission President's State of the Union speech. But strategies and speeches are only part of the picture. The bigger part is the laws, action and money that follows. Each are political choices.

With a strong restoration agenda integrated in the restoration law, in funding, and in the CAP, the European Green Deal will be feasible and there will be hope for biodiversity and climate. Without it, this generation of policymakers will fail in their stated mission to protect biodiversity and the climate. The health, wellbeing and future of current and future generations depends on them taking the right actions now.





JEREMY DECERLE

*MEP (Renew Europe Group),
Member of the AGRI Committee*

Farmers and the “Farm to Fork” Strategy

In which areas do farmers lack concrete solutions to start adapting and investing in the F2F Strategy?

I can easily imagine why people would want to put me in the category of the sceptics as regards the Farm to Fork Strategy project. My double hat as a farmer and member of the Agriculture Committee would make me the perfect “culprit”.

As I have been given the opportunity to address the topic, I would like to set the record straight: I can only welcome the fact that Europe is concerned – in the final analysis – with the link between what happens in the farmyards and what we find on our plates every day. Revaluating agriculture, and the women and men who keep it alive, as well as reviving its demography can only be achieved through a process that reminds everyone where our food comes from.

With regard to the very ambitious proposals that the European Commission’s communication put on the table last May, I would like to stress the need for farmers be fully involved at all stages of this global reflection on food sustainability. No concrete and convincing results can be achieved if we try to build a castle with no foundations. In this sense, I would like to see a change in the dynamics by making farmers partners, and no longer public enemy number one. “Agribashing” serves only one cause: destroying our own agriculture for the benefit of a few global players who will happily feed the 500 million Europeans with products well below the quality and traceability standards of our own products. To be able to move forward, we must first recognise and value the steps already taken, then ask ourselves what the remaining obstacles are.

Among the announced offshoots of the Farm to Fork Strategy, some seem promising and close to existing practices. I am thinking, for example, of the fight against food waste, the development of nutritional labelling or labelling of the origin of products, or the fight

against antibiotic resistance. These actions, already been undertaken by a number of professionals, deserve, on the one hand, to be promoted and, on the other, deepened and extended to all European countries.

Among the stated and highly publicised objectives, there is of course a 50% reduction in the use of pesticides by 2030 and the conversion of 25% of the total European agricultural area to organic farming. I have absolutely nothing against it, but I would like to warn about the feasibility of such ambitions, which is the political question to be resolved. Contrary to what some would like to believe, farmers do not treat their land out of pleasure but out of necessity: to protect their crops from pests for which there are unfortunately not enough alternative treatments available today. It was the case with sugar beets in France, where we had to go backpedal to save the production heavily affected by yellowing. So, the way out of pesticides, if gradual, must go hand in hand with reinforced means and a greater focus on alternative processes as well as take into account the reduction of the risks linked to the use of pesticides and not only the quantities used.

As for organic farming, we should try to think beyond the numbers and favour a slightly less binary and less dogmatic reflection on the subject. A number of virtuous farms, that do not use any input, do not have the “organic” label, for a variety of reasons. Conversely, major disparities in quality levels between so-called “organic” farms still exist today in Europe. The Farm to Fork Strategy must therefore be, in my opinion, an opportunity to refine the issue and purpose of “organic”. By first supporting, beyond – if not before – the conversion of the farms, the structuring of the sectors and the added value. Bearing in mind that the target of 25% organic should not be achieved at the expense of three quarters of our production, which must also be supported. I am wary of two-tier strategies.

I shall conclude by saying that the Farm to Fork Strategy will have a bright future ahead of it and benefit farmers and consumers alike, if we take the time and have the courage to deepen it and work with all the stakeholders in the farm-to-table chain.





FRANC BOGOVIČ

*MEP (EPP Group),
Member of the REGI Committee*

Thinking Europe again, **thinking rural,** **thinking human**

The EU Action for Smart Villages sets out with no smaller goal than to change the way we live in Europe. By reinvesting into our countryside and rural areas, we are aiming to solve many of the problems Europeans and other continents are faced with in the 21st century, simultaneously. Both social cohesion and interconnected, smart technology play a large role here. The substance of a vision is tested by its applicability to changed realities. Both the European 'Green Deal' and the current COVID19 pandemic highlight that we have been on the right track from the beginning and have been thinking Europe in the right way. Our vision can play a large factor in making Europe more carbon neutral and it lays the groundwork for the ability to easily and painlessly practice social distancing and teleworking. Famously crisis or danger also embodies opportunity. In order for us to harness this opportunity, however, we will need to be brave and think big. We may not be driven by fear, but rather be enchanted by what could be. We cannot allow ourselves to be merely reactive, but need to proactively shape the continent with purpose and plan.

Imagine a World in which people rediscover the scenic beauty of our countryside, in which our citizens embrace social engagement, understand the advantages of cooperative structures and feel proud to be an active member of their respective community. A World that embraces and harnesses technology, instead of seeing it as a threat, because it gives us the liberty to concentrate on the essential and live outside of the city in an environment ideal to raise a family. This does not mean that we will leave caution outside the door; it is a natural and healthy part of advancement. Solidarity, freedom of choice, innovation, family values and ecological consciousness will go hand in hand,

thereby unifying the core visions of our four pro-European political families.

If COVID19 is teaching us one lesson, then it is that our bustling, highly individualistic city life is destructive to our health; both physically and mentally. We can only fight the disease by respecting the space of others, dispensing the wasteful and concentrating on the essential. If we can offer the economic, educational and medical opportunities of our cities to rural areas, than our villagers can offer a more healthy and respectful life to everyone. Land flight has been a product of necessity. People do not leave their homes and wider families lightly. If we turn this trend around we cannot only better the situation of rural areas, but can offer a real opportunity to everyone; an opportunity that includes answers to our current ecological and medical challenges.

It seems to me that, technologically speaking, we are currently in puberty. We are looking at a multitude of innovations that make our lives easier and make us more productive as a society. But they are often half-baked and all too often they still create frustration in their use. They are not compatible with each other and usually do not take account of each other, so that we are confronted with a chaotic coexistence of technology. I well remember how difficult it was to program a video recorder or connect it to the television. Programming became much easier with the DVD player and since smart televisions and HDMI cables, connecting it has also become much easier. Just as we got used to this convenient reality, the DVD became obsolete again. Everything is now online and in digital format. What happens to my old favourite films and how do I watch videos recorded with my iPhone on the Android TV etc. etc? My car is electric, but the electricity is produced with coal. You can continue this

chain of frustration endlessly. This is an attempt to bring order into chaos. Every aspect of life is important: energy, transport, services, health, education, environment and economy. An imbalance always harms all components. Good environmental policy is inconceivable without a functioning, successful economy and vice versa. Daily traffic chaos damages our health, environment and GNP. We have no choice but to think everything at once.

If existing technologies are interconnected and have the ability to communicate with each other, learn from mistakes and self-correct then there is a good chance that this 'smart' use of technologies will create synergies and therefore become more than the sum of its parts. The smart connection of technologies in a holistic manner, including all aspects of our daily life, will lead into a new product and solution. This product will have value that is currently hard to quantify. But it could be a flexibly used blueprint to solve region by region of our magnificent continent.

These sound like grand ideas, too high to reach. But it is our mission, as politicians, to translate these big ideas into real life. Creating a handful of model smart villages is only a step away and then we will already have achieved test scenarios that we can visit, see, smell, feel and learn from. They will serve as motivators for further investment into this vision. We are currently speaking to a number of companies and public actors simultaneously, or are very eager to roll up their sleeves and move into concrete action. This is exciting and invigorating for all involved.

What type of **logistics** is needed to have **fresh products** and **development on a metropolitan, regional and European scale?**



BRUNO CASSETTE

Director General, Lille Metropole (MEL)



DIDIER DELMOTTE

General Manager EURALIMENTAIRE



ISABELLE WISNIEWSKI

Innovation manager EURALIMENTAIRE

The Euralimentaire site of excellence was created from the former Lille National Interest Market, now the Lille Wholesale Market. It has a vocation to coordinate the city's actions in terms of food and urban logistics, as well as providing a welcome and support for foodtech start-ups. Euralimentaire's strategic reference standard is the European Green Deal. It is important to note that 44% of the land within Lille Metropole is agricultural. Lille Metropole is involved in this dynamic through its commitment to a local food strategy, with its Regional Food Project (*Projet Alimentaire Territorial – PAT*), itself the result of the Law for the Future of Agriculture, Food and Forests.

As one of the principal focuses of the PAT is to address "better eating" and "better production" and to move towards a more sustainable food system, Lille Metropole drew up its own Metropolitan Food and Agriculture Strategy in 2016. The approach is now being continued with the introduction of the Regional Food Project (PAT- Whose ambition is food well-being for all). This system offers a new, co-building approach to providing a better food system for city residents, bringing together all the stakeholders in the food system (producers, wholesalers, processors, retailers, restaurateurs, local authorities, consumers). The three main priorities of the PAT are: social accessibility; nutrition, health

and economy; the regional food identity (the different facets of local specialties).

This public action has strengthened local, short supply chains. The site of excellence is therefore pursuing three areas of development: Organisation of the sector; Welcome and development of start-ups; Urban logistics.

On the question of logistics alone, there are many challenges in terms of inter-regional and intra-regional flows.

The site of excellence is located in the future Low Emissions Zone (ZFE), intended to protect residents in the most polluted, densely populated areas. Already adopted by 231 cities or European metropolises, it aims to reduce road traffic emissions, one of the main sources of urban pollution. One of its principles is to encourage the circulation of cleaner vehicles. The most polluting and "unclassified" vehicles will not be allowed to travel in the ZFE at certain times of the day. This represents a real challenge for goods transport in general and fresh produce in particular. In view of these findings, discussions were held in 2019 to set up a professional Marketplace known as E-fresh. The aim is to support businesses that face traffic congestion and parking difficulties in urban areas. This platform will considerably develop the operations of the wholesale market, bringing

it closer to a lean manufacturing model and accentuating the hyper-freshness of the produce, from farm to fork.

Covid-19 has in fact both disrupted and strengthened this logistics axis. The pandemic has led consumers to buy in local shops rather than large retail outlets, increased the need for clean deliveries and generated a growing call for local, seasonal produce.

What does the concept of "incubator" bring to a project like Euralimentaire?

An innovation incubator-accelerator in the food sector of the future

Launched in 2017, the purpose of the Euralimentaire incubator is to boost the creation of innovative businesses and jobs in the fresh food market. Its teams support project leaders and start-ups who want to develop a product or service in the foodtech sector (distribution, manufacturing and/or coaching/media).

The incubator is an integral part of a dynamic regional ecosystem and a dense industrial network of 1,400 companies with 36,000 employees, making the Hauts-de-France region the number one regional agri-business cluster.

Over the last three years, the incubator has supported 40 project leaders in different foodtech sub-sectors (new products, processes, services and applications in the food sector of the future). Over 130 jobs have been created and four fundraising rounds have been carried out, raising over €5 million.

The types of projects supported by the Euralimentaire incubator are divided into three priority sectors: foodscience, food-service and coaching.

The incubator support services

Designed for innovative project leaders in agribusiness and foodtech, the incubator offers support services covering every stage of the project. A team of experts provides all

the necessary services that will structure the project and optimise its chances of success.

a. FoodStart Programme A three-month support programme known as "FoodStart" will be launched in 2020. This programme is designed for project leaders whose profile is a step behind those benefiting from the incubation programme.

b. Incubation Programme Tailor-made support to start your business over 24 months, up to the first fundraising round or proof of business concept. The expert team is present throughout the project, from researching a relevant business model.

c. Acceleration Programme For young companies, Euralimentaire has put in place an acceleration programme to help them develop and access the market, optimising their chances of success.

d. Suitable premises

The Euralimentaire site of excellence, dedicated to fresh, local produce and its logistics,

provides hosting infrastructure in the heart of the Lomme (Lille) National Interest Market (MIN), the largest French wholesale market after Rungis (fruit, vegetables, flowers). Over a surface area of 1,000 m², the structure provides:

- 12 x 40 m² preparation units with water supply and a Wi-Fi connection;
- Shared technical premises (cold room, vegetable processing area, goods loading and unloading docks, etc.);
- Co-working spaces or private offices;
- A shared kitchen.

e. A broad programme of events

Euralimentaire organises six events per year, with the objective of promoting meetings between stakeholders and partners in the sector. The structure has teamed up with Clubster NSL to offer its project leaders information workshops and networking focused on foodtech and nutrition issues. In 2019, these workshops had a total of over 500 participants.

Incubator testimonials

"We appreciate having the facility to 'pick and choose' from the different units, services and knowledge we need to make progress in our development, thanks to the Euralimentaire team and its links with Clubster NSL and Eurasanté. The HR unit for example has really helped us with recruiting several members of the team, preparing the roadmap and integrating these employees within the company." Jérémie Guilbert, Founder, Mes Voisins producteurs

"The Euralimentaire team has helped us examine patent filing and steered us towards key resources and skills to secure our innovations. This support has also enabled us to obtain essential funding to file our first patents." Thomas Dormigny

"After 8 months of incubation at Euralimentaire, we have been able to appreciate the many qualities in the support delivered by the team: the welcome and the variety of discussions with other project leaders at seminars and training courses, networking with good contacts such as technical centres, suppliers, industrial companies, and support with administrative and legal processes." Alvaro Madrazo, Founder, ZANT

"The support from Euralimentaire was crucial for my first fundraising round. The team, who are always available and experts in this subject, gave me the keys to understanding the specific world of innovation funding. This led to an introduction to a network of investors with tailor-made meetings and support in some very technical aspects." Stéphanie Rome





IRÈNE TOLLERET

*MEP (Renew Europe Group)
Member of the AGRI Committee*

How to guarantee food security and sovereignty in Europe by reducing the use of pesticides

The European new "Green Deal" and, in particular, the Farm to Fork and the Biodiversity strategies, are intended to meet consumers' expectations regarding the use of pesticides, among other objectives. The European Union will undertake the revision of its legislation on pesticides, while setting up a new Common Agricultural Policy reform that will improve farmers' transition towards greener practices.

What are the alternatives to the use of pesticides in the European Union? Is it possible to feed the world without chemicals taking in consideration the global population growth? Can European farmers compete with productions coming from third countries which apply lower environmental and health standards? How do we tackle the influence of Climate Change in the proliferation of new plant diseases? Those questions need a deep reflexion involving all actors concerned.

In the last decades, the European Union has dramatically reduced the number of substances authorised by banning the most dangerous ones, and Member States have put in place national plans to reduce health and environmental risks in the framework of the Directive on the Sustainable Use of Pesticides. Organic farming has developed in the last years and farmers have started introducing digital and other innovative techniques to manage epidemics.

Unfortunately, despite all those efforts, the current situation is far from being satisfactory. According to the European Commission, Member States are not complying with the objectives of the directive regarding the reduction of pesticides, and the use of Integrated Pest Management tools to replace chemical substances is clearly insufficient.

At the same time, farmers complain more and more about the growing scarcity of plant protection products at their disposal to fight against pests. This problem is particularly noticeable in relation to minor uses.

This paradoxical situation, in which nobody is happy with the decisions taken by the European Union, should be analysed before taken new legislative initiatives. What is the reason or the reasons for such a failure in the implementation of the Directive?

On my opinion, the European Union has not given itself the means to reach its goals in this sensitive area: investments in research are lacking and digitalisation is still unthinkable in many rural areas. Since the introduction of the directive 91/414 the most dangerous substances have been progressively banned. Very often, less efficient pesticides have been put in the market, and this loss of efficiency has led to an increase of the number of treatments. A collateral impact of this phenomenon -which has never been assessed by the EU- is the consequent increase of GHG emissions due to more frequent pesticides applications in the fields. On my opinion, those emissions should not be disregarded in the scientific evaluation which is part of the authorisation process.

It is important to highlight that many Member States do not hesitate to apply the EU legal provision which allows them to temporarily authorise banned substances when there is no alternative solutions. In my opinion, this existing derogation makes even more obvious the failure of the EU's policy on pesticides. The research on new solutions is still far from being developed to compensate the reduction of active substances on the market and big companies are not willing to engage in long and costly scientific assessments. Bio pesticides are proliferating, but some of them raise doubts about their safety and efficiency compared to the chemical ones.

However, there is a real demand from society to reduce the use of pesticides and we should help farmers meet consumers expectations. Setting up precision farming techniques is indispensable as well as the

promotion of agronomic technics, such as rotation, in order to reduce plant protection treatments. The next CAP reform is the perfect opportunity for the organic production and other alternative systems to spread out thanks to the new eco-schemes.

In the future, we should better recognise the efforts done by farmers and support them in order to safeguard the EU competitiveness. Making economic goals compatible with the environment and the food safety is essential if we want to keep providing high quality products to consumers. Our European food sovereignty should not be neglected.

Furthermore, EU trade concessions to third countries should be coherent with the EU food safety policy. It is not admissible that the European Union allows the access of agricultural and food imports containing residues of pesticides which are banned in our territories. It is also a non-sense to authorise the EU production of banned substances with the aim of export them outside the EU. Although such an incoherence is permitted by the Rotterdam Convention, the European Union should show the good example to the world. Such a hypocritical behaviour lacks of morality.

In conclusion, I would like to insist on the fact that farmers deserve being properly accompanied in their efforts to contribute to the Green Deal objectives. We should not forget that they still play a key role in the preservation of the rural areas and in meeting consumers' expectations in terms of quality food. We need them.



VOLKER KOCH-ACHELPOHLER

Head Public Affairs, Science and Sustainability for EMEA, Bayer AG, CropScience Division

A coherent European Green Deal for the next generations

The European Green deal is a fine political ambition but it is first and foremost a policy imperative if we are striving to live within our planetary boundaries.

There has never been a greater urgency to address environmental degradation. With its 450 million (prosper) consumers single market governed by a stable rule of law, the European Union has the power to make a strong impact and lead by example. And while the implications of climate change are still abstract to some, we cannot deny the importance of the European Green Deal for the generations to come. It is a pivotal moment in the history of mankind; and we won't have a second chance to make it right.

We must acknowledge the extraordinarily difficult task it is for policy-makers to reconcile all these ambitions into one coherent set of policies and legislations. Climate change, biodiversity loss, pollution, circular economies, food security, trade are all deeply interconnected challenges and agriculture is centrally embedded in this nexus. Improving the resilience and sustainability of agriculture cannot be overstated. It is utterly clear that we must improve conservation and production at the same time. It is not one or the other. It has to be both. To be successful, we will have to overcome this fundamental paradox of agriculture.

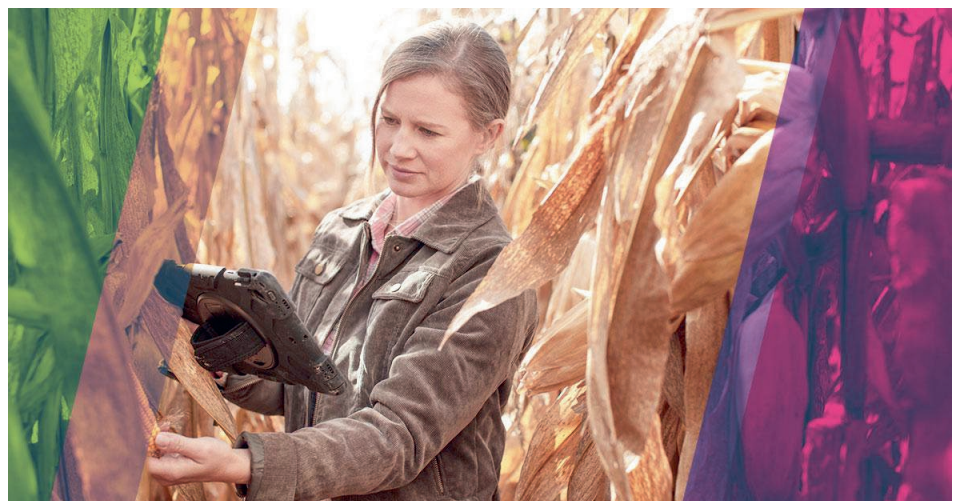
I sincerely believe that our best hopes rest with our innovation potential. Without modern crop protection solutions, integrated weed management, new breeding techniques, digital agriculture and carbon farming, there will be no reduction in environmental impact. On the contrary we will see an acceleration in environmental degradation, as the world population is growing and more people access the middle class.

At Bayer, we see room for transformational change in agriculture. If we can deploy the use of cover crops, no-till agriculture, integrated weed management and digital agriculture on a large scale, we can reach carbon neutrality in agriculture before any other sector and dramatically reduce our environmental impact on soil and water resources.

All these solutions will depend on the policies that will enact in the next two years. Shifting to the next level of sustainability practices requires a smart mix of incentives, large scale public investment and predictable risk-based regulation based on evidence and science. We must be more precise about what we want to protect and what we want to achieve. Here, I believe the planetary boundaries concept is essential to guide the EU policy action. If climate change is the mother of all battles, we must put in place policies that will reduce our land use and resource consumption. What we decide in Europe will inevitably have repercussions across the globe -so let's not offshore our environmental impact. If we deplete our farmers' toolbox and cannot sustainably intensify our agriculture

in Europe, we will continue to rely heavily on agricultural imports. If we no longer allow the imports from Genetically Modified Organisms or much needed crop protection solutions in tropical areas, we can expect a very strong increase in land use in those biodiversity rich countries. While painful, we must stay realistic when it comes to understand those relationships of causes and effects. If we do not want the European Green Deal to be a curse for the environment, we must deal with the reality of current trade-offs between imports, domestic production and the consumption patterns of our citizens.

In conclusion, there is too much at stake to put our head in the sand and hide behind the tribal debates that dominate much of the political conversation around agriculture. We can only wish that the upcoming political debates move away abstract targets and focus on how to deploy sustainable practices such as conservation agriculture, carbon sequestration in soils, environmental impact reductions measures and precision agriculture. The clock is running. It is time to act.





OLIVER LOEBEL

EurEau Secretary General

From River 2 Farm 2 Fork, and back



Safe and secure water supplies are fundamental to the delivery of our food, and fair, healthy and environmentally-friendly food systems are at the heart of the Green Deal to transform the Union into a modern, resource-efficient and competitive economy. The Commission itself admits that our food systems consume large amounts of natural resources, resulting in biodiversity loss and negative health impacts. Something needs to change.

Water is therefore central to the success of achieving the EU's goals of a fair and equitable future. Water and agriculture are intrinsically linked. The intensive use of anthropogenic substances such as nitrates, pesticides and veterinary medicines, including their metabolites, is increasingly having a negative impact on the quality of drinking water resources. At the same time, waste water proposes plentiful ways to replenish and nourish our soil while conserving these drinking water supplies.

With this in mind, EurEau welcomes the Farm to Fork (F2F) Strategy and the full value chain approach. The success of the strategy will largely depend on its full alignment with other components of the Green Deal, including its zero pollution ambition, climate change goals and Circular Economy Strategy. The EU needs a systemic change, and the F2F could provide the framework for a sustainable food system. One prerequisite to achieving this is incorporating the goals and requirements of the EU's water legislation and in particular the Water Framework Directive, its daughter directives (the Environment Quality Standards and Groundwater Directives) and the Nitrates Directive into agricultural legislation such as the CAP.

Farmers need support with what will undoubtedly be a complex transition phase. The Common Agricultural Policy (CAP) is designed to offer the support that farmers need. However, the CAP must also put tools in place that encourage farmers to reduce

their environmental footprint and comply with applicable EU legislation. The introduction of the Farm Sustainability Tool for Nutrients provided it is well designed and its recommendations are effectively implemented can be a major step towards full compliance with the Nitrates Directive. The CAP conditionality requirements must be extended, such as farmers should only receive support for practices that will deliver EU water legislation goals. The eco-schemes must remain compulsory.

The F2F is an opportunity for the EU to oversee the implementation of other legislation that is only partly delivering, such as the Sustainable Use of Pesticides Directive. The revision of this directive is therefore welcome. In addition, pesticides or their metabolites which are hazardous to human health should not be authorised for use. The approval requirements must include the formation of possible hazardous transformation products in the drinking water treatment process. We are pleased to hear that the Commission's proposed reduction goal for chemical pesticide use is 50%.

With the F2F Strategy, we also have the occasion to look at the impact of excessive nutrient losses on the quality of drinking water resources. Excessive nitrate levels in groundwater used for drinking water production cause hundreds of millions of euros of extra treatment costs to drinking water suppliers. This cost has to be borne by water consumers today. A general reduction goal of nutrient losses of 50% is a first step, but it must be remembered that groundwater pollution is a local or regional phenomenon. The full implementation of the Nitrates Directive should ensure that levels are respected in all regions across Europe.

The upcoming revision of the Sewage Sludge Directive will regulate sludge use in such a way as to prevent harmful effects on soil, vegetation, animals and people when applied to farmland.

EurEau fully supports the Commission's intention to reduce the excessive use of antimicrobials in animal healthcare, as those may be found back in drinking water resources. The Commission aims to reduce the sale of veterinary antimicrobials by 50%. If properly implemented, this Control-at-Source measure will make a significant contribution to reducing antimicrobial resistance.

We strongly believe the F2F Strategy should not only look at water quality but extend to water quantity. In light of the impacts of climate change and increasingly recurring drought, excessive water abstraction for irrigation purposes must be avoided, since it is unsustainable and may cause local problems to the security of the drinking water supply. With the recently adopted Water Reuse Regulation, farmers have more opportunity to use safe and treated water in irrigation which, in turn, may conserve water resources for drinking water production.

The Farm to Fork Strategy is at the heart of the Green Deal. It is a golden opportunity for the EU to address the challenges of sustainable food systems and build links between healthy people, healthy societies and a healthy planet. Innovation, research and technology, combined with increasing public awareness and demand for sustainable food, will ensure that the Green Deal and the F2F will benefit everyone. The water sector is ready to cooperate with farmers at all levels to progress in the transition process.

About EurEau

EurEau is the voice of Europe's water sector. We represent drinking water and waste water operators from 29 countries in Europe, from both the private and the public sectors.

Our members are 34 national associations of water services. At EurEau, we bring national water professionals together to agree European water sector positions regarding the management of water quality, resource efficiency and access to water for Europe's citizens and businesses. The EurEau secretariat is based in Brussels. With a direct employment of around 476,000 people, the European water sector makes a significant contribution to the European economy.



PIERRE KARLESKIND

*MEP (Renew Europe Group),
Chair of the PECH committee*

Sustainable fisheries and aquaculture sectors to make the food system resilient

Sustainable fisheries and aquaculture sectors will contribute to a resilient food system, eradication of malnutrition and hunger in Europe and in the world. Fisheries and aquaculture products will play a key role in feeding an increasing world population with healthy products. The proportion of fish production intended for human consumption is expected to continue growing, reaching 89% by 2030, as the Food and Agriculture Organization (FAO) underlines in its report on the State of World Fisheries and Aquaculture for 2020.

Regarding the European Union, one of the objectives of the Common Fisheries Policy (CFP) is to ensure that fishing and aquaculture activities are environmentally sustainable and managed in a way to achieve socio-economic benefits and to contribute to availability of food supplies. CFP applies to the entire EU fleet within the European waters as well as outside of them. It means that the European fleet has to comply with high environmental, social and sanitary standards all over the world. Very high standards also apply to European aquaculture production. Nonetheless, more than 60% of the fisheries and aquaculture we, Europeans, consume come from imports. These imported products can come from countries that do not comply with the same standards than the Europeans producers. Having products in the European market that contribute to the availability of food supplies is not enough. We need to ensure that these products comply with the highest standards in the world such as the European ones and do not come from Illegal, Unreported and Unregulated fishing activities. That is exactly what the Farm to Fork Strategy attempts to address by making the value chain more sustainable. Improving the traceability for imported products while continuing working on the sustainability of our methods of production is key to ensure food security

in Europe. In addition to that, we also need to valorise our European products. Consumers need to know when a fish is caught sustainably or when an aquaculture production is done in a sustainable way. The efforts of the European producers to make their practices more sustainable need to be economically and socially rewarded. This is what we need to work on and unfortunately, the Farm to Fork Strategy is still lacking ambition in that matter.

Sustainable fisheries and aquaculture management, in line with our international commitments on UN Sustainable Development Goals, is key to ensure food security in Europe. For fisheries, the reformed CFP introduced the concept of Maximum Sustainable Yield (MSY). The objective of the MSY is to preserve resources while allowing a profitable activity for the fishing sector. Even though it is not applied in all European sea basins already, it has shown positive effects in some regions such as in North-East Atlantic. We need to carry on fishing to offer food supplies to European citizens, but it has to be done respectfully to biodiversity, marine environment and in a way to allow stocks to reproduce. It is the same for aquaculture activities. We have to make sure that aquaculture productions preserve the quality of the products and animal welfare. One need to understand that aquaculture could play an important role in the following years in providing food to a growing population. That is why it is fundamental to have sustainable aquaculture production methods and practices.

Sustainability of fisheries and aquaculture goes hand in hand with the resilience of the food system. We cannot separate or oppose one to the other. For these sectors to guarantee food security in Europe, we need to make them more attractive to the future

generations. The European Maritime and Fisheries Fund should help this purpose but cannot be the only way. Therefore, we need these sectors to be economically and socially resilient. In this perspective, we should not forget that sustainable development has three focuses: environment, economic and social and that they should be treated equally. To guarantee food security, we need fishers and aquaculture producers for the century to come.

In Europe, we decided to focus on these two pillars: sustainability and resilience. The Green Deal, the Farm to Fork and the Biodiversity strategies will serve this goal of achieving more sustainable fisheries and aquaculture sectors to ensure a resilient food system for our continent. But it will not be enough if we act alone. We have to act globally through the Regional Fisheries Management Organisations and through all the international platforms, in order to ensure that achieving food security is not only a European concern but a global one. Fisheries do not know borders; our ocean is common. Aquaculture products coming from all over the world enter every day the European market. Therefore, our fight for sustainable fisheries and aquaculture sectors must be global!



CARINE KRAUS

Sustainable Development & Public Affairs Director - Veolia

Malnutrition, Food Waste, Obesity: Solving A Paradox

According to a [report](#) of the Food Agriculture Organization (FAO), over 820 million people worldwide still suffer from hunger and 149 million children are stunted. In his book *Betting on Famine: Why the World Still Goes Hungry* (2011), Swiss sociologist Jean Ziegler — who served as UN Special Rapporteur on the Right to Food from 2008 to 2012 — examines the paradox of our failure to eradicate global hunger while there is enough food for everyone on Earth.

In fact, enough food is produced to feed twice our current global population. However, about 33% of the global food production is not consumed, while the FAO estimates that [14% is lost](#) before even reaching consumers, worth €360 billion. In Europe alone, 88 million tonnes of food are lost annually. Wasting food means that additional land, water, energy, and material resources have been consumed, contributing to unnecessary greenhouse gas emissions.

Worldwide obesity has nearly tripled since 1975. The World Health Organization (WHO) [reports](#) that over 1.9 billion adults were overweight in 2016; of these 650 million were obese. The paradox: hunger still exists while huge quantities of food are wasted and obesity is on the rise. As a matter of fact, something is broken within our food system and it needs to be fixed.

The Challenge of Feeding Everyone Sustainably

The challenge of feeding everyone within the planetary boundaries has never been so acute. With the world's population expected to reach nearly 10 billion in 2050, experts estimate that global food production will need to increase by 50% to meet demand. At the same time, rapid urbanisation and climate

Redesigning Our Food System To Make It Future-Proof

change are exacerbating the pressure on arable land, whose quality and availability are inexorably deteriorating. Ensuring the best food coverage, while diminishing the pressure on the necessary resources on land, energy, water, and intrans, is becoming a considerable challenge.

In May, the European Union has taken ambitious steps to address these issues with the publication of its Farm-to-Fork Strategy. A cornerstone of the [Green Deal](#) — the EU's roadmap for achieving climate neutrality by 2050 — this comprehensive strategy aims to make Europe's food system more sustainable while bringing economic, social, and health benefits. It seeks to tackle both the supply and demand side by greening food production and encouraging healthier food consumption.

Reducing The Environmental Impact of Food Supply

According to the [FAO](#), agriculture accounts for 70% of all water withdrawals globally. These proportions impact the environment and generate conflicts of use. As the world will be facing a 40% water deficit by 2030, there is an urgent need to significantly reduce water abstraction by applying circular economy principles to water management. The recent adoption of the [EU Water Reuse Regulation](#) for agricultural irrigation sends a positive signal. Farmers can safely use properly treated wastewater while protecting the health of consumers, workers, and ecosystems.

Equally, large companies from the food and beverage industry such as [Nestlé](#), [Danone](#), or [Bonduelle](#) are increasingly deploying technologies to recycle their wastewater for further reuse in manufacturing processes (e.g. cleaning vegetables, cooling towers, brewing beers, etc.). The upcoming revision of the [EU Industrial Emissions Directive](#) (IED) could further promote the reuse and recycling of volumes of water on-site.

Regarding energy, the food production and supply chain [uses 30% of all the energy](#) consumed on the planet, which exacerbates

the need for a more efficient use of energy throughout the agri-food chain. One promising solution lies in the conversion of waste and industrial effluents from agro-industry into clean energy through [anaerobic digestion](#) (methanisation), significantly reducing the consumption of fossil fuels. The revision of the [EU Emissions Trading Scheme](#) (ETS) will be an opportunity to incentivise the food and beverage industry to further develop energy efficient manufacturing sites.

Changing Food Consumption Patterns

Consumer choices will also play an important role in reinventing food systems. There is overwhelming evidence and a growing recognition that overconsumption of meat from intensive industrial livestock farming negatively affects environmental sustainability. In 2018, researchers of the University of Oxford conducted [a study](#) analysing livestock's environmental footprint, and found that the best thing we can do for the planet is [stop eating meat and dairy](#).

A number of studies highlighted that 1 kg of meat requires between 5,000 and 20,000 litres of water, while 1 kg of wheat requires between 500 and 4,000 litres of water. Meat alternatives, such as plant-based and cell-based meat, could also alleviate the pressure on natural resources and contribute to reaching climate objectives set in the [Paris Agreement](#). This could save up to 6 gigatonnes of CO₂ emissions per year.

All non-dairy milk products, whether they are made from nuts, beans, or seeds, produce less emissions than traditional cow's milk. Switching to such products would make a significant difference. But the real challenge lies in raising consumer awareness and transforming consumption habits.

Encouraging An Economic Paradigm Shift

In her book *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist* (2017), Oxford economist [Kate Raworth](#) calls for a paradigm shift and offers a new economic model based on a [doughnut](#) (literally two circles). Its inner circle represents

the basic human needs, the outer circle the planetary boundaries, and in between is the safe space for humanity. Only by living within this safe space can we meet everyone's needs while avoiding environmental collapse. Raworth advocates for a regenerative and distributive economy and suggests to stop focusing on economic growth.

In April 2020, the city of Amsterdam launched its [Circular Strategy 2020-2025](#) following the Doughnut model proposed by Raworth. The strategy outlines actions to become completely circular by 2050. Among the city's objectives, cut food waste by 50% by 2030, strengthen infrastructure to allow for separate collection of organic waste streams by 2022 and develop urban agriculture.

Fostering Local, Circular And Innovative Solutions

Urban farming is an ideal circular economy practice that addresses several needs. It provides urban consumers with quality, fully traceable, and locally sourced food. It creates local jobs especially in deprived neighbourhoods. This helps municipalities landscape the urban environment while contributing to greenhouse gas emission reduction and climate change mitigation.

Today, many inspiring and innovative business initiatives are bringing hope to transform our food system. Companies such as [AeroFarms](#) in the United States are growing fresh greens just outside New York using vertical farming. [Meatable](#) in the Netherlands and others are producing cell-based beef as a substitute to regular meat. In France, start-ups such as [Ynsect](#) and [Mutatec](#) create high-value insect proteins for animal feed and organic fertiliser for plant nutrition through insect bioconversion. In Belgium, [Le Champignon de Bruxelles](#) is growing mushrooms in a large basement with local brewer's spent grains.

Finally, precision agriculture, an approach to farming that uses data to optimise inputs such as water, fertilisers, and pesticides to maximise crop productivity, can prevent overapplication of chemicals, which are a key source of greenhouse gas emissions in the agricultural sector.

Applying these principles and upscaling these practical solutions is now urgently required. Rethinking, redesigning and reinventing ways to feed people is needed more than ever before.

Policy-Makers Are Part Of The Solution

Throughout its 160-year history, Veolia has gone through several revolutions, wars

and crises of all kinds. The upcoming revolution, that of the ecological transition, is not a source of fear, but precisely the opposite: the opportunity to deploy our energy and know-how for the benefit of all.

For this reason, Veolia welcomes the European Green Deal and related initiatives including the European Climate Law, the Farm to Fork Strategy, the new Circular Economy Action Plan, and the 2030 Biodiversity Strategy. Without the right policy instruments, the expected structural change will not happen at the pace our planet desperately needs.

First, we call on political leaders to find a swift agreement on the next Multiannual Financial Framework 2021-2027 and the EU Recovery Plan as budgetary means will set the tone for the next seven year. Sufficient support should be given to the new research programme Horizon Europe and in particular to support the development of sustainable innovation.

To enable the full potential of the circular economy in Europe, we call on decision-makers to improve the design of food packaging in order to ease its recycling and implement mandatory recycled content in packaging in order to boost the market for secondary raw materials. Adequate investment in waste collection and treatment should also be made to increase recycling rates.

In addition, the EU must address food labelling by disclosing the carbon footprint and food prices better reflect their environmental impact as it will help consumers make more informed choices and empower them to consume more sustainably. Moreover, the EU Novel Food Regulation and the European Food Safety Authority should enable safe edible insects to be sold on the European market as their production consumes significantly less land, less water and less energy

than breeding farmed animals while providing more proteins.

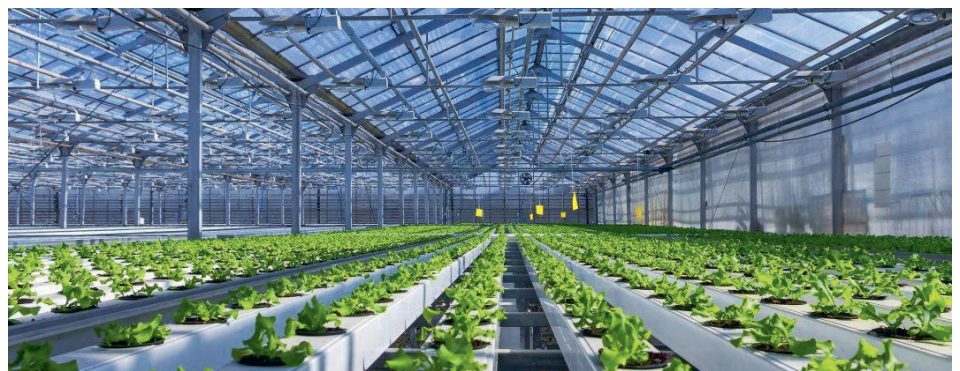
Aquaculture is an increasing critical source of food. Land-based aquaculture facilities minimise the impacts of fisheries on the environment, while reducing the carbon footprint of conventional seafood supply chains (up to 50% reduced footprint). Utilising advanced recirculating aquaculture systems allows farmers to improve their sustainability performance. Regulators should promote such solutions.

The recovery of sewage sludge can help reduce dependence on fertilisers or produce renewable energy. This is why we believe all recycling and reuse options should be encouraged including recovery into fertiliser, compost and biomass as long as it meets strict health and environmental standards. The revision of the Urban Waste Water Treatment Directive from 1991 and the evaluation of the Sewage Sludge Directive from 1986 should help close the loop of sewage sludge management.

As already mentioned, the upcoming revision of the Industrial Emissions Directive should seek to optimise water and energy use in industrial processes. A thorough implementation of the recently adopted EU Taxonomy will contribute to drive the needed private investment in green and low carbon technologies.

Finally, the introduction of a carbon border mechanism will be detrimental to preserve the competitiveness of the European economy and prevent carbon leakage in third countries.

The next five years will be critical to the transformation of our food systems to make them more resilient and sustainable for present and future generations, so let's not miss this opportunity to accelerate the ecological transition.



Inside a greenhouse growing lettuce using aquaponics, a method that combines aquaculture and hydroponics in one single integrated system for growing plants without using soil and pesticides.



CINDY VENHO

Research Analyst,
Ellen MacArthur Foundation

Investing in food system resilience

A circular economy recovery to the Covid-19 pandemic

While the Covid-19 pandemic has devastated many industries, its impact on the food sector has been varied. On the one hand, there has been a global increase in spending on groceries, as the popularity of cooking from scratch has grown, and many have turned to local retailers and producers. However, on the other hand, farmers and other food providers have been challenged with oversupply issues as lockdowns and border closures have caused shortages of seasonal agricultural workers in some regions, and impeded the transfer of goods between other regions. Farmers typically supplying restaurants and cafes have suffered cancelled orders, and many have struggled to adjust their offering to fit alternative markets.

In the face of its successes and challenges, the food industry has been tasked to become more flexible and resilient to meet changing needs. As economic stimulus is unveiled for a post-Covid-19 economic recovery, how that stimulus is channeled into the food system will impact food security and business survival long-term. Investing in a circular economy for food provides two key opportunities to this end by:

- › Providing tools to enable farmers to shift to regenerative agricultural production models
- › Increasing food and by-product collection, redistribution, and valorisation infrastructure

Enabling farmers to shift to regenerative agriculture

Investing in a faster and broader shift towards regenerative agriculture could offer opportunities to create a healthier and more resilient food system that benefits natural systems and people alike. The World Economic Forum indicates that by 2030, 191

million jobs and USD 3.56 trillion in economic opportunities could be created by reforming food, land, and ocean use by, among other things, making greater use of regenerative agricultural practices.

In a regenerative system, input costs can be reduced as the organic matter in soil is enriched and mutually beneficial relationships between different crop and animal species are created, reducing reliance on synthetic pesticides and fertilisers. Spending USD 78–116 billion on accelerating the adoption of regenerative production – promoting practices such as planting diverse cover crops, no tillage, and multiple crop rotations – could yield USD 2.3–3.5 trillion in lifetime operational cost savings. Diversifying the types of food grown can also lead to diversification of farmer income, subsequently improving both crop-resilience and the resilience of producers' livelihoods in the face of external shocks, such as those created by climate change.

A regenerative food production system can also provide significant environmental benefits, improving rather than degrading the environment on which food production relies. Farmland LP found that USD 85 million of farmland – which under conventional farming would have generated USD 8.5 million worth of ecosystem damage – was able to generate USD 12.9 million of value in ecosystem services after being regeneratively farmed. Combined with the adoption of practices such as no-tillage, the reduced use of synthetic fertilisers and pesticides manufactured using fossil fuels, also means that switching to regenerative production could conservatively estimate–reduce total agricultural greenhouse gases by a minimum of 17% annually. As food production and agriculture are currently responsible for over one fifth of all GHG emissions, improvements in this area can have significant global impacts.

Increasing the availability of specific equipment and non-synthetic inputs—such as biofertilisers, vertical tillage tools that preserve soil structure, and 'finger weeders' that can remove unwanted flora without toxins—will support farmers in making the transition. Emerging digital and technological capabilities are also giving way to new tools that provide valuable insight into soil quality, and crop and animal welfare.

Investments in food collection, redistribution, and valorisation infrastructure

Each year around the world 1.6 billion tonnes of food is wasted, amounting to USD 1 trillion in economic costs. This lost organic matter consists of edible surplus food and inedible by-products, both of which could be transformed from costly burdens into attractive economic opportunities through enhanced collection, redistribution, and valorisation efforts. In fact, food waste reduction has been found to present an annual economic opportunity worth USD 155–405 billion by 2030.

Edible surplus food could be redistributed through food banks, to help improve food security and fight hunger, or processed to create new food products and revenue streams as is done by Renewal Mill, a flour-producing venture using the by-products of tofu and soy milk production as inputs. Inedible food by-products, in turn, could be valorised to create inputs for agriculture as well as new materials and bioenergy, depending on the mixture of by-products present in the stream and technologies available for processing. For example, Ananas Anam produces a leather-like material called Piñatex from pineapple leaves that would otherwise be discarded.

This infrastructure could also play a critical role in unlocking a variety of environmental

benefits for the food system. Currently, every year one-third of all food produced globally is wasted. However, if circular solutions were employed to redistribute edible food surplus, while increasing the valorisation of unavoidable by-products and green waste through composting, 1.7 billion tonnes of CO₂ emissions could be avoided annually.

Reaping these benefits will require investments in both physical and digital infrastructure. In low-income countries where most food loss occurs directly after harvesting, investments in increasing the availability of food processing infrastructure that extends the shelf life of food, such as freeze-drying, could be most effective. Meanwhile, in high-income countries, where most food waste is generated at the post-consumer stage and consists of edible food, digital solutions to redistribute this surplus should be developed. For example, the FareShare FoodCloud platform connects large retailers to supply surplus food to local charities.

The policy environment is increasingly supportive of investments in food circulation and valorisation. Japan introduced the Food Waste Recycling Law in 2001 that improved the recycling rates of food-related businesses. Meanwhile, the EU's Farm to Fork Strategy of 2020 set out to create legally binding targets on food waste reduction for each member state. With more innovations for food waste revalorisation popping up, and a growing concern over the issues surrounding food waste, it is likely policies around this matter will also become more commonplace.

Food

Shaping a resilient, healthy, and food-secure food system

- 1** Tools enabling farmers to shift to regenerative agricultural production
- 2** Food surplus and by-product collection, redistribution, and valorisation infrastructure



Spending **USD 78-116 billion** (on accelerating the adoption of regenerative annual cropping) could save **USD 2.3-3.5 trillion** in lifetime operational costs.¹

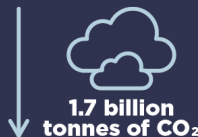


72% of Europeans have reported a greater willingness to put effort into healthier eating in the future.²



USD 700 billion

USD 700 billion in environmental costs caused by the food waste created in the current system could be avoided.³



Reducing edible food surplus and increasing the composting of inedible by-products and green waste could save **1.7 billion tonnes** of CO₂ annually.⁴

- 1 Project Drawdown,
- 2 Based on a survey of 23,000 people conducted by FMCG Gurus in April 2020. Food Navigator, *Is coronavirus changing how we eat?* (11th May 2020)
- 3 Food and Agriculture Organization of the United Nations, *Food wastage footprint - full-cost accounting - final report (2014)*
- 4 Ellen MacArthur Foundation and Material Economics, *Completing the picture - how the circular economy tackles climate change* (26th September 2019)



JEAN HORNAIN

CEO of CITEO

Farm to Fork Strategy: an opportunity to rethink the role of **packaging** in the **transition** towards **sustainable** food systems

Citeo, the French company in charge of Extended Producer Responsibility (EPR) for household packaging and graphic papers, fully supports the Farm to Fork Strategy presented by the European Commission in May 2020 as part of the European Green Deal. Aiming to make food systems fair, healthy and environmentally friendly, this initiative is a unique opportunity to rethink the role of packaging in the transition towards sustainable food systems.

When considering accelerating the EU's transition to sustainable food systems, packaging has a decisive role to play. As underlined by the European Economic and Social Committee, "there is an urgent need to improve the sustainability of our food systems, which includes also the development of more sustainable food packaging"¹. Sustainable food packaging is about minimising the environmental impacts of food packaging as part of improving the sustainability of the packed food, reducing food waste, while preserving food quality and consumer safety.

Food packaging represents two-thirds of total EU packaging in terms of market share value². Essential properties in terms of storage, handling, transportation and preservation of food make packaging a necessity. At the same time, food packaging causes rising concerns on environment due to its high production volume and often short use time, as well as problems related to littering and waste management. Alongside manufacturing, processing, retailing and transportation, packaging is considered as a "major contribution to air, soil and water pollution and

GHG emissions, and has a profound impact on biodiversity"³.

In order to become sustainable, food packaging has to shift towards a circular model where resource use and waste are reduced, and reuse and recycling encouraged.

The need to consider the food product and its packaging together

Packaging has become a major concern in the food sector, both from the point of view of producers and consumers. While food safety is and should remain the overarching priority, consumers increasingly pay attention to the quality and environmental impacts of the food products they buy, and also that of the packaging which contains these products. In response to this increasing public awareness and demand for sustainable food packaging, companies and retailers are more and more subscribing to an approach aimed at reducing packaging's environmental impacts⁴, strongly incentivised by the EU current and future policy and legislation on circular economy, packaging and plastics, which are all relevant for food packaging.

In addition to these trends, the food industry has to take into account the effects of the current global pandemic, consisting of both opportunities and risks. Indeed, while the Covid-19 crisis has resulted in an increasing use of plastic food packaging for health safety reasons, relegating to a certain extent the sustainability issue to a secondary role,

the impact of the virus on long supply food chains of imported food has also encouraged consumers to shift towards more local food production, that can lead to food packaging reduction. If this trend towards sustainable food consumption is maintained over time, producers will have to develop more sustainable packaging solutions because consumers expect a sustainable product to be in sustainable packaging. This need to consider the packaging not in isolation but in combination with the product it contains, is reflected for instance in consumers' growing demand to ensure that organic products are not packaged or when they are, in a sustainable way.

The same reflection could be made when considering consumer information. The Farm to Fork Strategy provides for several measures to empower consumers to make informed, healthy and sustainable food choices, among which the creation of a sustainable labelling framework that will cover nutritional but also climate, environmental and social aspects of food products, a measure reaffirmed within the framework of the New Consumer Agenda published by the Commission last week. Although packaging represents a small percentage of the overall environmental impact of the packed food, Citeo is convinced that a labelling system informing consumers about the sustainability of food products should necessarily include the packaging's environmental impacts, both direct and indirect. In addition to direct environmental effects largely arising via production and disposal, there are also adverse environmental impacts caused by inadequate packaging, such as packaging-related food waste, that are insufficiently considered in the current food products' life cycle analysis (LCA). We believe that considering packaging in combination with the product it contains would prevent producers from opting for alternative packaging seen as more sustainable but in reality less environmentally friendly when considering its indirect

¹ European Economic and Social Committee, *Recycling food packaging & food waste in plastics revolution*, June 2020, p. 1.

² Cowi, et al, *Eunomia*, 2020, in European Economic and Social Committee, *Recycling food packaging & food waste in plastics revolution*, June 2020, p. 2.

³ *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system*, 20 May 2020, COM(2020) 381 final, p. 3.

⁴ As part of the Ellen MacArthur Foundation's New Plastics Economy Initiative, several food and drink producers, including Mars, Evian, Pepsico, Coca-Cola, Unilever and Nestlé have committed to work towards 100% reusable, recyclable or compostable packaging by 2025 or earlier.

environmental impacts, and would help consumers to make the best choices regarding both the packed food and the packaging. The difficulty lies in the capacity to resolve these potential conflicts of interest and trade-offs between direct and indirect environmental effects of packaging. Citeo recommends using LCAs to help companies decide on the most sustainable and suitable solution for their packaging.

The need to develop solutions to shift towards a circular model of food packaging

When developing sustainable food packaging, the priority should be given

Pandobac: a service of reusable containers available to wholesalers for the delivery of fresh products replacing single-use packaging

Born in 2018 from the realization that food delivery packaging generates large amounts of waste in restaurants, Pandobac offers a service replacing disposable packaging with reusable containers to any type of wholesaler or supplier. The reusable containers are designed in PP or HDPE single material to ensure they are recyclable. 200 000 disposable packages have already been avoided. This French start-up also provides monitoring and cleaning services, thus closing the loop of the circular economy. Reducing packaging waste while promoting short circuits and the local economy, Pandobac was awarded with the Circular Challenge's collaborative innovation and territory prize by Citeo in 2019.

While the majority of reuse in France is captured by the B2B segments (either coffee hotel restaurant circuits or industrial packaging), most reuse initiatives are currently developing on the B2C market, driven by local initiatives.

Jean Bouteille: a solution that combines bulk and reuse to transform consumption habits



Jean Bouteille combines the bulk sale of liquids with a deposit system for bottles to allow consumers to purchase liquid products without generating waste. This French start-up created in 2012 in the North of France offers food

to measures and actions reducing (over) packaging, in line with the EU waste hierarchy. However, the environmental burden caused by the possible food loss resulting from reducing the amount of packaging can have a much more significant environmental impact than packaging waste. This observation should not prevent the development of alternatives such as edible packaging, which may be relevant for certain applications. Even more than for other packaging categories, there is no one size fit all solution with food packaging.

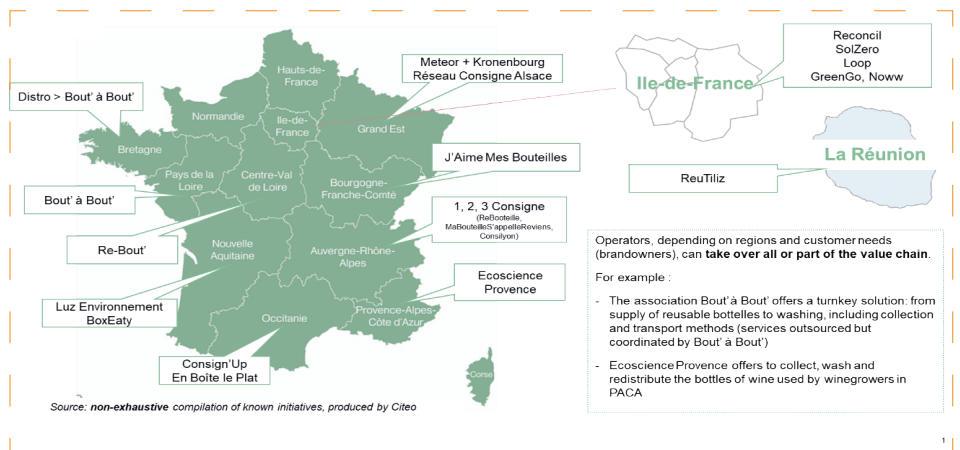
If the most common solution adopted by food companies opting for more sustainable packaging is the switch to alternative materials to replace single use plastics,

stores organic liquid food products, equipment specialized for the bulk sale of these products, as well as reusable bottles. This initiative, selected as finalist of the Circular Challenge in 2017, fully meets Citeo's overarching goal of

moving away from the throw away culture can also be achieved through the development of reuse. Citeo, through its open innovation programme "Circular Challenge", aims at supporting emerging solutions via the financing of projects which enhance the environmental performance of existing initiatives or those under development, while guaranteeing that the solutions can be scaled to industrial processes. Many innovative and concrete reuse solutions have thus been identified and supported by Citeo, both in France and abroad.

is detrimental to reuse from an environmental point of view.

At the regional level, associations and companies offer local solutions



reducing the amount of packaging placed on the market and extending the packaging's shelf life when reduction is not possible, while relying on consumer mobilization and engagement. To support bars and brewers in the context of the Covid-19, Jean Bouteille also helps them bottle their beers to allow take-away solutions.

As they can help achieve the needed systemic changes in our production and consumption patterns and have already proven to be effective in the beverage sector, reuse systems need to be further promoted to enhance the sustainability of food packaging, as a complement to recycling solutions that are also relevant and need to be further developed as well. Both the EU and French regulatory framework offer an opportunity to incentivize the development of reuse, which is particularly relevant at the local level. While Citeo is convinced of the environmental, economic and social benefits of reuse, we must not lose sight of the fact that reuse solutions make sense at the local level, considering that the transportation of reusable packaging on long distance

The Farm to Fark Strategy provides for a legislative initiative on reuse in food services, aiming to substitute single-use food packaging and cutlery by reusable products. This proposal, planned for 2021 under the sustainable products initiative announced in the new Circular Economy Action Plan, already has an equivalent at the French level. We maintain that the EU could also promote new solutions by using its funding programmes, and by supporting the Member States to distribute "green vouchers" in order to accelerate the transition to sustainable food systems, including the development of reuse.

Promoting the uptake of recycled, renewable and innovative materials that achieve genuine environmental benefits and avoid burden shifts is also a solution. In this regard, the Commission plans to revise the food contact materials legislation. For the food packaging industry, it is indeed crucial to remove the regulatory obstacles to the use recyclable and recycled materials, while ensuring that the highest levels of food safety are guaranteed.



PHILIPPE MENGAL

Executive Director of Bio-based Industries
Joint Undertaking (BBI JU)

BBI JU - launching the circular bio-based economy in Europe



In these globally challenging times, EU policies such as the European Green Deal and the Farm to Fork Strategy are key to reaching the EU's climate and societal goals, while addressing the consequences of the pandemic. European bio-based industries are part of the solution, as they enable new - circular and sustainable - production of consumer goods.

The Bio-based Industries Joint Undertaking ([BBI JU](#)) is a €3.7 billion partnership between the European Commission and the Bio-based Industries Consortium ([BIC](#)) that supports the development of innovative and competitive bio-based industries in Europe. It helps de-risking investments for the construction and deployment of biorefineries across Europe to contribute to a more sustainable low-emission economy.

Since its establishment in 2014, BBI JU has funded over 120 projects, in particular 11 flagship biorefineries at commercial scale and most importantly first-of-their-kind in Europe, with high replicability potential.

The BBI JU concept has a high leverage effect. For a contribution of €720 million of public funding, the industry will invest close to €2 billion in the biorefineries and demonstration plants. Moreover, BBI JU projects mobilise all relevant stakeholders – primary producers, large industries, SMEs, clusters, trade associations, academia, research centres and end-users – to develop technologies and business models advancing Europe's green economy, thus structuring the sector's value chains. Among other benefits, these projects allow diversifying and growing farmers' income, leading to stronger rural areas and local communities across Europe.

BBI JU is placing sustainability at the heart of production by enabling a fully circular use of

resources. The vast majority of BBI JU projects transform previously underutilised leftovers from agriculture, forestry and fisheries into valuable bio-based materials and products. By making farming side-products fully circular and developing new, sustainable crop protection and stimulation, BBI JU projects enable the shift to a more sustainable food production system. All feedstock used must be sustainably sourced in Europe and not compete with food production.

Thanks to their circular production cycle, over 80% of BBI JU projects anticipate lower greenhouse gas emissions compared to fossil-based counterparts, while 75% of them contribute to waste reduction and valorisation, reuse and recycling. In addition, most BBI JU projects are reducing energy consumption, improving the land use and water efficiency, as well as developing more sustainable use of natural and existing unused resources. The 11 biorefineries funded by BBI JU will generate over 3,500 direct and 10,000 indirect jobs in both urban and rural areas and are expected to reduce about 600,000 tons of CO₂ emissions per year.

Such impacts show that bio-based industries have already achieved a lot in Europe and are paving the way towards a climate-neutral continent. With the benefits they provide to the environment and society, they are key contributors to Europe's green recovery and to the objectives of the EU Green Deal.

BBI JU founding partners are now proposing a more ambitious initiative to start in 2021. The European Partnership for Circular Bio-based Europe ([CBE](#)) will continue the biorefinery deployment in Europe, while involving all stakeholders along the value chain, strengthening collaboration with regional actors and systematically measuring the environmental and socio-economic impacts of

funded projects. The partnership is expected to invest massively in coming years, in order to achieve its ambitious goals and to pave the way for climate neutrality by 2050.

Examples of BBI JU success stories:

Disposable nappies have a sizable environmental impact. 8.5 thousand tons of such waste are incinerated or landfilled in Europe every year. The [EMBRACED](#) project has developed collection and recycling systems in several EU countries, which turn used nappies into profitable new materials, such as organic fertilizers or packaging films.

The [GreenProtein](#) project is transforming leftovers from green vegetables and field crops into high-grade protein for the food industry. The finished product is a viable alternative to egg whites and whey protein - and has huge commercial potential. In this way, the project combines fighting food waste and producing alternative plant-based proteins. The project team expects to process up to 4,000 tons of leftovers per year.

The [FIRST2RUN](#) flagship project cultivated oil crops on arid and marginal lands in Sardinia, to be used in the production of biolubricants, cosmetics, bioplastics and additives. Leftovers from the production process were used for energy, feed for animals and added-value chemicals, thus making the value chain even more sustainable.

More information

Visit [BBI JU website](#)

Read the publication '[BBI JU: a high-impact initiative for green recovery of Europe](#)'

Watch the video '[BBI JU - Launching the circular economy](#)'

Follow BBI JU on [Twitter](#) and [LinkedIn](#)



PAOLO DE CASTRO

*MEP (S&D Group)
Member of the AGRI Committee*

What measures should be taken in terms of innovation, in order to achieve the F2F goals?

With the 'Farm to Fork strategy,' we have the chance to implement a comprehensive political approach to responding to food systems. Research and innovation play a pivotal role in this respect.

We are still at the beginning of the debate. We share the goals but not the way to achieve them. We know "what" we want, but we are still working on "how" to get it. Especially in agriculture, the "how" issue is crucial in many aspects. Innovation makes no exception.

The awareness of the "what" is due to hard facts. For years the debate on agriculture and food production had been about feeding 9-10 billion humans on the planet while reducing the environmental impact. The acceleration of climate change and digitization makes things more complicated. Today, the challenge is providing food to the world while polluting less, in an increasingly precarious climatic situation, and a potentially disrupting technological revolution ongoing. Sustainable development is not an option. It is the only development conceivable.

"How" to do that in practice is a complicated matter. Agriculture is highly contextual. It is about diverse territories, characterized by specific soil compositions and sun irradiation conditions, often with peculiar micro-climate patterns. The agronomical practices are different, as the social structures bearing the management practices. Innovation itself is something that needs to be tested and adapted at the farm level. Sustainability in agriculture depends on many and interconnected variables. There are many indicators, but none of them applies to all places and contexts. Against this background, a pragmatic approach is the least we can offer.

Unfortunately, often the EU political debate does not take those aspects into sufficient account. Most of it resembles religious wars, irrespective of the farms' practical situation: organic

versus biotech, extensive versus intensive, natural versus chemical, climate change adaptation versus mitigation, smallholders versus 'Big Farm', and so on.

Thus, the first innovation I wish for the 'Farm to Fork' debate is that it brings us beyond these 'monocultures' in our heads. Innovation thrives in the more profound interconnection of diverse knowledge and experiences, even 'soi-disant' opposed ones. We need feasible alternatives, not slogans. That is even more important if we keep in mind the sensitiveness of innovation in food production, which often raised social acceptance issues. A more result-oriented attitude in the debate could improve the mutual understanding between farmers and consumers on their respective needs and perspectives about sustainable innovations.

Focusing on innovation at the farm level requires a combination of financial support, regulatory interventions, and investment in human capital at the EU and national level.

I give an example. Public financial support for building infrastructures is necessary to accelerate farm digitization. But we also need a proper framework for data ownership. Farmers' training is especially critical, as well as it is the communication to society about the gains in the social and environmental sustainability of the new technologies adopted.

In my view, this means having the public sector back as the pivot of research. Since the Green Revolution – that achieved great results on the economic and social side, far less for the environment – the EU (and the US) public funds in research in agriculture has been shrinking. Corporate investment replaced most of the funding, and that is valid and useful. But it is mostly short-term and mostly based on production scales to maximize the return rate on investments as rapidly as possible. Instead, public investment

can focus on long-term solutions, considering the diversity of contexts in which the innovation is to be applied, and its social and environmental sustainability.

As far as innovation is concerned, the public sector should accelerate the shift from the "innovation transfer" linear model (from the academy to research centers, then technical assistance, and, finally, farmers) to an "innovations co-creation and interconnection" one. That requires remarkable efforts in human capital, especially.

We are not starting from scratch. The international wheat genome project's results are a clear example of public support's added value on the research side. On the innovation side, the 2013 CAP reform started up innovation "Operational groups" on productivity and sustainability in agriculture all over the European regions. Those groups, composed of farmers, researchers, and citizens, have been experimenting with sustainable solutions on everyday problems at the farm level. Improving and accelerating the exchange and the interconnection of those experiences is a promising pathway to apply those solutions on the farm.

On top of the support for long-term research and human capital, regulatory aspects are essential. In this perspective, I look forward to the European Commission's orientations on the modern molecular biology techniques in agriculture. It has to be specified that those new techniques have nothing to do with the previous biotechnology methods (GMOs), the so-called "Frankenstein food"; new sustainable biotechnologies simply replicate natural evolution processes, enabling the design of new varieties that fit local needs.

The political decision on the regulatory framework for those techniques is critical to promote a varietal innovation less dependent on chemicals and big-scale production.



JEAN-PIERRE MASSICOT

CEO of ATT

Ensuring Product Safety and Physical Traceability Is Crucial

The European Union's *Farm to Fork* Strategy undoubtedly marks a major turning point for the coming years and reflects the ambition to make the European food system safer, healthier, and more invested in sustainable development. For the first time, the European Union is giving itself the means to implement a "Food Value Chain" regulation with clear and measurable objectives throughout the entire value chain, from production and distribution to consumption.

This comprehensive strategy sets out the legislative initiatives for the years to come aiming at making the European food system more sustainable in terms of environmental impact while bringing economic, social and health benefits. Two of the most striking initiatives are undoubtedly the safety and sustainable development of the food value chain, as they impact consumer health safety.

Food Value Chain at Risk

The safety of the European food system is threatened on multiple fronts. Illegal, undeclared or unregulated activities have been rampant in the supply chain for a long time: false designations, outdated recycled and reprocessed products, fake organic products, the substitution of authorised substances by dangerous ones, the introduction of or substitution by fake products in the circuits are dramatic examples of the criminal practices to which consumers are exposed. According to some studies, 1 in 3 French people has bought counterfeit food.

In addition to these "frequent" illicit practices, the COVID crisis has highlighted the importance of a resilient supply chain capable of surviving such a major shock without any disruption. While the supply chain partly withstood the shock of the crisis, it did not come out unscathed: the number of seizures of non-compliant, expired or altered food products was considerably higher during the

crisis, proving without the shadow of a doubt that criminal networks are taking advantage of the disruption of the supply chains to introduce counterfeit, non-compliant or illegal products into the flows.

It is therefore absolutely essential to ensure the safety of the food value chain, on the one hand to protect the consumer, and on the other hand, in the event of a crisis such as the one we have experienced, to ensure the safety, stability and resilience of the chain itself. It is also crucial to clearly differentiate between the actors involved in the quality and safety of the food value chain and the other stakeholders.

Blockchain, the Illusion of a Solution

How can this be achieved? Blockchain technologies-related initiatives are currently flourishing. But beyond the "buzzword", what exactly does this mean? Very schematically, Blockchain is a technology for storing and transmitting encrypted and distributed information, without any central storage facility. It records all the transactions carried out from a given moment onwards and distributes them in "blocks", which makes it possible, through comparison, to detect any data falsification. As Blockchain technology has worked wonders in finance and fintech, it is now seeking to integrate other application areas. In the food value chain, for example, it would be possible to secure all transactions: every invoice, transport and delivery note could be identified, integrated into the value chain and their integrity checked. By doing so, it would be possible to secure the entire value chain, and, as a result, the entire food value chain.

Blockchain technology is an excellent tool for transaction security. But is it able to ensure the security of the food system? The answer is a clear and resounding NO. It can only secure transactions. Although it is capable of securing operations along the value

chain, it lacks a key attribute: security, i.e. the physical security of the products. It appears that, despite all transactions – purchases, transport, deliveries – being legitimate, fake goods are being introduced into the value chain. OK, products are bought at one location and delivered to another one, but how can we make sure that fakes are not introduced somewhere along the line, either upstream or downstream? By taking advantage of the lack of physical Track and Trace Solutions, this is precisely how unscrupulous operators and criminals successfully operate.

Imagine a monetary system where transactions would be totally secured through Blockchain (or any another solution) but notes and denominations would not! Counterfeit banknotes would seamlessly blend in with the genuine ones, ultimately destroying the entire system and public trust. This is exactly what is currently happening in the food value chain. And consumers are fully aware of it.

Ensuring the Physical Security of Products: Authenticating & Tracing

The only viable manner to truly secure a system, food or any other, is to incorporate a unitary identification and a *digital* security marking physically on the products – or on the primary container closest to the product – to authenticate the latter and trace them unitarily throughout their life cycle. A number of health, cosmetics, and luxury goods companies (some close to the food industry) which are under extreme pressure from illicit practices have long understood and implemented this system. This technology has enabled them to successfully detect and reduce fraud and embezzlement, control production and distribution channels and networks, attract and reassure their consumers, and secure their loyalty. Product physical security and unitary traceability is the only way to guarantee a secured food value chain.

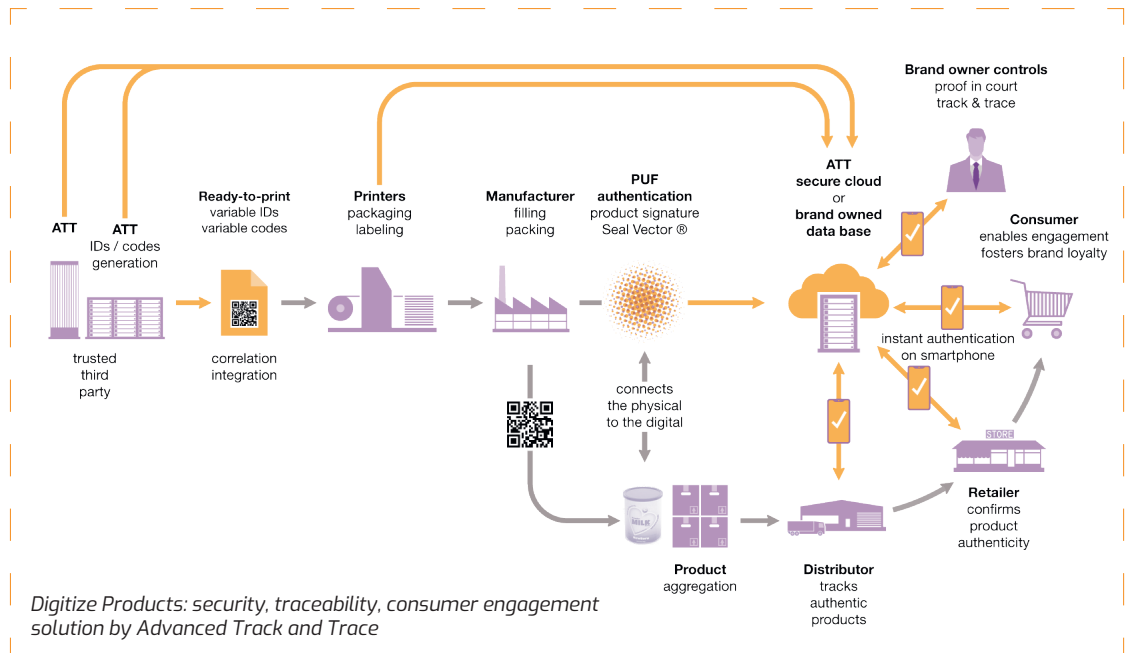
Advantages of the Digital Unitary Authentication Technology (PUF) in Ensuring Product Physical Security

First, with the digital traceability authentication technology, forgeries can be detected immediately and remotely thanks to the product unitary digital identifier, or "Digital ID": the product, marked for its lifetime, can be authenticated and traced at all stages in the supply chain all the way to the consumer. Second, any illicit practice will be detected, too. Why has the code disappeared? Why are these products no longer in their original batch or consignment? How come they end up on a market which is not the one they were initially intended for? Why has the product been tampered with? When irregularities are detected, corrective measures are taken, either at the manufacturer level or, in the event of a health risk, at the level of the authorities; product recalls are targeted and safe; product monitoring, and manufacturer – or brand – organisation is up to scratch.

Improved Information and Relations with the Consumer

In addition to safety benefits, the digital marking technologies provide a crucial benefit to manufacturers as regards consumer relations. Producers need to prepare today for the new packaging and labelling rules. The packaging space taken up by mandatory information – labelling of origin or place of provenance, nutritional information, as well as climate, environment, and even social data – will increase considerably in the future, leaving little space for producer information. So, new labelling practices will have to be put in place, as consumers will no longer be satisfied with the limited information provided by the manufacturer. With consumers becoming increasingly demanding, producers need to find new channels to demonstrate the quality of their products, maintain trust and build consumer loyalty.

Through digital marking technologies, a simple click on a smartphone connects the brands directly to the consumers to supply them, on the one hand, with the compulsory indications that can be certified by a trusted



third party, and on the other, with the information brands consider relevant to differentiate themselves from their competitors and promote their products. Moreover, these digital technologies are extremely flexible and scalable: the information available to the consumer can be adapted in time and space, in keeping with current events and circumstances. So, they enable virtuous companies to highlight their involvement in improving the food value chain and promote the benefits of their products.

Economically Viable Solutions

Finally, marking technologies are the perfect answer to the problems of economic feasibility. In the wake of the publication of the *Farm-to-Fork* Strategy, concern arose regarding the costs of implementing such measures. Some warned against the risk of exploding costs, leading to indebtedness and the disappearance of the actors most at risk, such as SMEs, organic producers, or small producers. Fortunately, digital marking technologies are extremely cost-efficient and can be implemented at minimal cost, largely offset by the commercial and other benefits. They integrate seamlessly into existing marking and printing processes, require no additional consumables – no special inks, no holograms, and no special tags – and have a zero-carbon footprint. So, the cost of these solutions is more than offset by the users' benefits, both in terms of safety and the relationship of trust with the consumer.

The *Farm-to-Fork* Strategy is undeniably one of the most ambitious initiatives at the global level aiming at ensuring the safety and sustainability of a food system. All the implications are not yet fully known and will become clearer as the Strategy is

being implemented. Europe will unquestionably become one of the most regulated but safest food regions in the world. This represents a tremendous opportunity for producers and manufacturers to implement real safety and traceability strategies and to integrate these assets to ensure and regain consumer confidence in Europe and beyond. For the other regions of the world, Asia or the Americas, where consumers share the same concerns and fears, the demand for authenticable European products with guaranteed traceability is growing rapidly, opening up new opportunities and markets for companies that know how to evolve and adapt. The technologies are available, they are safe, proven, and economically viable and – if it were the EU political will – would even fit effortlessly into the eIDAS trust environment. The companies that use them are the first to stand out and benefit from this new environment.

About Advanced Track & Trace

Advanced Track & Trace® develops innovative authentication, identification and tracking technologies for a better protection of products, companies, citizens, and trade. For over 15 years, Advanced Track & Trace® has had trust-based relationships with leading customers and partners: companies, governments, institutions, based on its ability to offer creative, valuable, reliable, and durable solutions. www.att-fr.com

For more information, please contact info@att-fr.com

1 PUF : Physical Unclonable Function



MONIQUE GOYENS

BEUC Director General

How to make food trade work for consumers and the planet

Last May, the European Commission unveiled the Farm to Fork Strategy, its masterplan to shift the EU food system onto a more sustainable path.¹ It is all well and good to aim at greener food production, but for the EU's blueprint to deliver we need coherence across *all* policies affecting food – including trade policy.

There is a major inconsistency to solve here. While the EU strives for sustainable food production at home, it continues importing products that do not meet its own requirements for environmental protection and animal welfare.

Currently, imported food must only meet the EU's safety and labelling rules – and yet, there are issues with controls meant to check that this is effectively the case. Only recently, an audit² by the European Commission services found that the Canadian food safety authorities are failing to ensure that beef exported to the EU complies with the EU's ban on the use of growth promoting hormones – which are allowed in Canada.

It is a must that the food we import from third countries complies with *all* the rules we have democratically set for ourselves in the EU. No wonder so many EU farmers are dragging their feet to move towards more sustainable production practices. It is simply because they fear they might be exposed to unfair unsustainable competition from third countries.

We recently found that consumers expect the EU to continue to lead on food

sustainability, regardless of whether other world players are doing the same.³ To ensure that those who export food into the EU do abide by the same rules as those that apply to EU farmers and food producers, EU trade policy must go beyond cooperation and dialogue.

The EU should follow the example of its own legislation on veterinary medicinal products. It was reviewed in 2019 and the new law, which will apply as of 2022, will oblige third country producers exporting animal products to the EU to follow our rules and restrictions governing the prudent use of antimicrobials. Despite the major health threat posed by antimicrobial resistance, some trading partners have criticised this move, arguing that the measures will affect international trade.⁴ It is likely that similar concerns would be voiced were the EU to introduce rules to make the healthy choice easier for consumers (by mandating simplified nutrition labelling on the front-of-pack, for instance via the use of Nutri-Score as BEUC is calling for).⁵

So long as trade agreements fail to sufficiently recognise factors other than food safety (say, ethical considerations linked to animal welfare) as a legitimate reason to regulate, consumers are left with little option but to look for a food's origin to assure themselves that it meets EU regulations and standards. Sadly, this information is still missing from many products – including meat that is used in processed foodstuffs for

instance.⁶ As such, most EU consumers have little means to know whether the chicken in their nuggets was raised according to the EU's animal welfare standards, or whether the beef they order at the restaurant might be linked to deforestation.⁷

The Farm to Fork Strategy commits the European Commission to presenting a proposal for a legislative framework for a sustainable food system by the end of 2023 to make sustainability central to all food-related policies. This initiative, together with the ongoing review of the EU's trade policy,⁸ is a golden opportunity to align all policies affecting food, including trade policy, with the Green Deal's objectives. The EU must seize it to finally make food trade work for consumers and the planet.

1 European Commission. '[Farm to Fork' Strategy for a fair, healthy and environmentally friendly food system](#). May 2020.

2 https://ec.europa.eu/food/audits-analysis/audit-reports/details.cfm?rep_id=4287

3 BEUC, [One bite at a time: consumers and the transition to sustainable food. Analysis of a survey of European consumers on attitudes towards sustainable food](#). June 2020.

4 https://www.wto.org/english/news_e/news18_e/sps_12jul18_e.htm

5 https://www.beuc.eu/publications/beuc-x-2019-033_front-of-pack_nutritional_labelling.pdf

6 Some EU countries (incl. Finland, France) have adopted temporary measures (pending EU-level policy discussion and possible harmonisation) requiring food businesses to label the origin of meat used as an ingredient in processed foods.

7 Very few EU countries (incl. Finland, France) require the origin of meat served in restaurants and the catering sector to be indicated to the consumer.

8 See [BEUC's response](#) to the public consultation on the review of the EU's trade policy and its more detailed [position](#).

**BRENT LOKEN**

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PLANETARY DIETS: the **Power** is on our plates, and on our **food policies!**

We all want to make the world a better place. But what power does one person actually have? Is it really possible to stop deforestation in the Amazon? Or help keep the polar ice caps from melting? Or save tigers and orangutans from going extinct? In short, yes! Wisely choosing the food that we put on our plates may be the most powerful action that each of us can take to make the world a better place. And accompanying individual actions with a supportive suite of food-related policies can massively scale up the impact.

Just how is food connected to deforestation, climate change and wildlife? Many studies, including the [2020 Living Planet Report](#), have shown that how we produce and consume food is one of the biggest drivers of our planet's deteriorating health. There is good news though – the main conclusions from this growing body of research are that: 1) we still have time to reverse course and restore nature; 2) there are win-win solutions available today that are good for people and planet; and 3) what we eat matters.

In fact, what we eat matters a lot. Our food systems have caused 70% of biodiversity loss on land and 50% in water; they're responsible for around 25% of all greenhouse gas emissions; and they've caused 80% of global deforestation. Our dietary choices aren't just damaging the planet, they are also damaging our own health. Unhealthy diets now pose a greater risk of morbidity and mortality than unsafe sex and alcohol, drug and tobacco use combined.

The solution is right on our plates.

In [Bending the Curve: The Restorative Power of Planet-Based Diets](#), launched in October 2020, we demonstrate that planet-based diets (high in human health benefits

and low in environmental impact) not only reduce environmental damage and harm to our health, they can also be restorative – a true "win-win". These diverse and flexible dietary patterns can help restore nature by cutting greenhouse gas emissions, halting deforestation, and saving wildlife.

Some people may argue that warnings of the catastrophic impacts of the destruction of nature are alarmist: the human population has never been healthier, and food has never been more plentiful; the human species has always advanced by utilising natural resources and it has in fact been positive and necessary for our species to thrive.

But this argument is inherently flawed. Although agricultural revolutions of the past have enabled us to feed more people, and the rapid productivity gains since the "green revolution" have spurred improvements in human health, these gains have come at the expense of the environment. Current global food production depends on practices that cross planetary boundaries, taking us into dangerous territory and an uncertain future.

So far, increased food productivity has been able to stay ahead of the effects of a deteriorating environment – but this time lag has masked the underlying symptoms of a planet in crisis, and tricked us into believing that exploitation of the Earth's resources is without reckoning. Far from being alarmist, there is now overwhelming scientific evidence that our past actions are catching up with us.

Humanity has never before needed to change the food system so radically at this scale or speed. With this new study, accompanied by a new [Impact & Action Calculator](#), we hope to help remove some of the barriers that in the past have prevented action being taken on the ground, from individuals to

policymakers. We are convinced that to accelerate dietary shifts a supportive [policy framework](#) can play a crucial role, especially by modifying our food environments, thus making the healthy sustainable choice the easiest option for everyone.

The past year has been devastating in many ways – from the Covid 19 pandemic to intense fires raging from the Arctic to Amazon. But it has also shown us that a new and better world is possible. The EU's Farm to Fork Strategy has rightfully underlined the centrality of an integrated food policy to achieve the desired change. However, it has only timidly addressed the need to change food consumption patterns in Europe, and more initiatives than those announced in the Farm to Fork Strategy will need to be undertaken in the coming years: from improving National Dietary Guidelines to setting minimum VAT levels on fruits and vegetables.

The evidence is out there. The time for talk is over. It's now time to roll up our sleeves and get to work.



LENA ROHM

Animal Protection Denmark
Board representative, Eurogroup for Animals
(Animal Welfare association)

Farm to Fork and the urgent need for a food transformation

There is an urgent need to transform our food consumption and diet towards a greener food system with focus on animal welfare, climate change and biodiversity loss.

Each year more than 11 million live pigs are sent from Denmark to destinations around Europe to finally end on the dinner table as ham or sausages. The transports often last more than 8 hours and the pigs are exposed to severe distress in the form of injuries, stress, overheating or cold – in some cases resulting in death. Vulnerable animals such as calves are sent on equally long transports even though these young animals are not yet able to drink by themselves. The majority of all Danish dairy cows are never allowed to graze as they are kept indoor all their lives. Conditions, that causes leg and hoofs problems among other issues. Fast growing broilers also suffer with leg problems, as the broilers grow so fast that they cannot carry their own bodyweight. Millions of egg laying hens are kept in small cages without possibility to live out their natural behaviour. Living conditions, you also see for tons of fish in aquaculture.

These cases are just some examples of how the current food system has massive negative impact on the welfare for many millions of animals. However, animals are sentient beings, and consequently we have an ethical, moral and legal obligation to treat them as such. As we are entering a new era of a sustainable and resilient food system it is not an option to continue to produce food relying on intensive animal production and massive consumption of animal products. Our food policy needs rethinking.

A new EU food policy must acknowledge animal welfare as an integral part of a sustainable and resilient food system, and it needs to take climate change and biodiversity loss into account as well. Like the EU Commission states in its Farm to Fork Strategy: "There is an urgent need toincrease organic farming, improve animal welfare, and reverse biodiversity loss."

In Denmark two-thirds of our land area is farmed and 60 % of the land is used for

growing crops for animal production. We need a transition towards a much larger organic production of plant-based food, and we need a transition towards a significantly smaller scale of meat production. Further, we must aim to produce animal products with a high level of animal welfare, i.e. methods of production characterized by free range, more space, no mutilations, more adjusted and robust breeds, short periods of transport and humane slaughter. By producing less but better meat, the EU can accommodate the need for a sustainable and resilient food system with a high level of animal welfare.

Good animal welfare is also expected by consumers. To quote the Farm to Fork Strategy. "It is also clear that citizens want this" [ed.: better animal welfare]. Similarly, consumers are increasingly focusing on - and expecting – products that are at the same time healthy, climate and biodiversity friendly.

Being a conscious consumer needs to be much easier, and the EU should encourage the consumption of less but better meat and green alternatives. Changing food consumption patterns requires initiatives on the supply and the demand side.

A new food policy should secure consumers easy access to attractive, affordable, fresh and locally produced products through stimulating organic production of plant-based food and organic extensive farming. This presupposes a close coupling between the Food Policy and the Common Agricultural Policy.

On the demand side it is important to provide clear and high-quality information to ease consumers' choice of healthy and sustainable food to foster more plant-based consumption. The EU Commission points out various measures, among others labelling schemes. Each of these have relevant elements, but we need a more holistic view of the Europeans' plate. In Eurogroup for Animals we point to a new way of labelling food that would make the consumers' choice

much easier. We call the label "Method-of-Production+" (MoP+). The label will combine information on method of production and animal welfare based on a core set of animal welfare indicators. An example of method-of-production information is the marking of shell eggs solid in the EU (Intensive indoor, standard indoor, extensive indoor, free range).

The MoP+ label will be a multilevel label. We envision the label to be mandatory so all products, and not just the products that perform well on animal welfare, are labelled. The label will provide high quality and objective information to the consumers. Furthermore, it will set improvement targets easily identifiable for producers to encourage them to aim for the highest level of the label. MoP+ is one way towards a food transformation in the EU and a future with greener, healthier food with the highest level of animal welfare.

Additionally, The Common Agricultural Policy should support a transition towards organic, plant-based consumption. One obvious way is funding promotion of plant-based products rather than meat and dairy products.

With the Farm to Fork Strategy the agenda towards a future sustainable food system has been set. A system that combines the urgent need to improve animal welfare, health and food quality and to help preserve biodiversity and environment.

Let us seize this golden opportunity to make real improvements for farm animals and fish in our food system!



European Commission

From Farm to Fork: Our food, our health, our planet, our future

The European Green Deal

May 2020
#EUGreenDeal

Moving towards a more healthy and sustainable EU food system, a corner stone of the European Green Deal



Make sure Europeans get healthy, affordable and sustainable food



Tackle climate change



Protect the environment and preserve biodiversity



Fair economic return in the food chain



Increase organic farming



"The coronavirus crisis has shown how vulnerable we all are, and how important it is to restore the balance between human activity and nature. At the heart of the Green Deal the Biodiversity and Farm to Fork strategies point to a new and better balance of nature, food systems and biodiversity; to protect our people's health and well-being, and at the same time to increase the EU's competitiveness and resilience. These strategies are a crucial part of the great transition we are embarking upon."

Frans Timmermans, Executive Vice-President of the European Commission



The use of pesticides in agriculture contributes to pollution of soil, water and air. The Commission will take actions to:

- ✓ **reduce by 50%** the use and risk of chemical pesticides by 2030.
- ✓ **reduce by 50%** the use of more hazardous pesticides by 2030.



The **excess of nutrients** in the environment is a major source of air, soil and water pollution, negatively impacting biodiversity and climate. The Commission will act to:

- ✓ **reduce nutrient losses by at least 50%**, while ensuring no deterioration on soil fertility.
- ✓ **reduce fertilizer use by at least 20%** by 2030.



Antimicrobial resistance linked to the use of antimicrobials in animal and human health leads to an estimated 33,000 human deaths in the EU each year. The Commission will **reduce by 50% the sales of antimicrobials for farmed animals and in aquaculture by 2030.**



Organic farming is an environmentally-friendly practice that needs to be further developed. The Commission will boost the development of EU organic farming area with the aim to achieve **25% of total farmland under organic farming by 2030.**



Making the transition happen: informed choices and efficiency gains

- **The creation of a healthy food environment which makes the healthy and sustainable choice the easy choice.**



It is estimated that in the EU in **2017** over **950,000** deaths were attributable to unhealthy diets (one out of five).



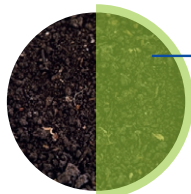
A healthy and plant based diet reduces the risk of life threatening diseases and the environmental impact of our food system.

- **Food labelling to empower consumers to choose healthy and sustainable diets**



The Commission will propose mandatory harmonised front-of-pack nutrition labelling and develop a **sustainable food labelling framework** that covers the nutritional, climate, environmental and social aspects of food products.

- **Stepping up the fight against food waste**



Halving per capita food waste at retail and consumer levels by 2030.

The Commission will propose legally binding **targets** to reduce food waste across the EU by 2023.

- **Research and innovation**

EUR 10 billion under Horizon Europe to be invested in R&I related to food, bioeconomy, natural resources, agriculture, fisheries, aquaculture and environment. Knowledge transfer will be essential. The CAP's Farm advisory services and Farm sustainability data network will be instrumental in assisting farmers in the transition.

- **Promoting the Global transition**

Making European food famous for its sustainability can add a competitive advantage and open new business opportunities for European farmers.

The EU will collaborate with third countries and international actors to support a global move towards sustainable food systems. **A sustainability food labelling framework will facilitate consumer choice.**





Responsible food companies invest a lot of time and resources in selecting safe, healthy, and sustainable ingredients. Food safety and traceability is today a major concern for consumers, who are looking for healthier and sustainable products. Traceability and consumer information has become a must for companies looking to differentiate themselves on the food and beverage markets.



Traceability from Farm to Fork

- **Unit traceability:** give each product a unique digital ID
- **Authentication, track & trace solutions** for your products and their components: detect diversion, fraud and anomalies across the entire supply chain 24/24 , 7/7
- **Mobile customer Relation,** engagement and activation
- **Customize your costumer relation:** dynamic, scalable technology allows to tailor content over time and geographies



About Advanced Track & Trace

Advanced Track & Trace® develops innovative authentication, identification and tracking technologies for a better protection of products, companies, citizens, and trade. For over 15 years, Advanced Track & Trace® has had trust-based relationships with leading customers and partners : companies, governments, institutions, based on its ability to offer creative, valuable, reliable, and durable solutions. www.att-fr.com

