



ILSI 2021 Annual Symposium Session 1: Food Systems Transformation

Transcript of the presentation, How is Research and Innovation Policy Driving Sustainable, Healthy and Inclusive Food Systems? **Karen Fabbri**, PhD, Deputy Head of Unit Bioeconomy and Food Systems, Healthy Planet Directorate, DG Research and Innovation - European Commission, Brussels

So, I'm happy to be here to talk to you about what we're doing in the European Commission, in terms of research and innovation policy driving sustainable healthy, and inclusive food systems. So, my of talk today is going to take you through some of the highlights of the European Green Deal and Farm-to-Fork Strategy, the key role of research and innovation in enabling food system transformation, our work currently in Horizon 2020, the Green Deal call that recently closed, and the work we are doing to build up Horizon Europe, which is our next research and innovation program. So firstly, just to set the policy context, so we are now quite fortunate that we have... There is much impetus now in Europe towards a European Green Deal. This is a new policy framing. These are new policy priorities of the commission, which include a basket of actions, a basket of strategies from clean energy, all the way to financing green projects, looking at the circular economy to make Europe the first climate neutral continent.

So, one of these key strategies is the Farm to Fork Strategy, which focuses on sustainable food systems, and there are others that are of course, very relevant, such as the biodiversity strategy and even the circular economy strategy. So, what does the Farm to Fork Strategy aim to do? It's really a means to bring together member states, stakeholders towards transforming food systems for sustainability health, and inclusion. At the heart of it is really the sustainable development principles. So, the need for economic sustainability, environmental sustainability, and social sustainability. [inaudible 00:02:03]. Key challenges include for instance, healthier diets and to reduce the amount of obese and overweight people, improvements in animal welfare, improvements in social rights for workers in the food system, and food affordability. Environmental aspects include tackling climate change, of course, protecting the environment, preserving biodiversity, reducing food loss and waste, and fostering really a circular bio-based economy. And of course, there's also the economic sustainability aspects such as creating new business opportunities, fostering a just transition, and fair incomes. Overall, the Farm to Fork Strategy has a number of goals.

The climate footprint is very much at its heart. There is also an aspect that really brings in the international or global ambitions that is present. It also highlights the need to tap into new opportunities and really to build resilience across the whole system. Now the Farm to Fork Strategy has quite a lot... At strategic level, the objectives are very wide ranging. However, it does pick out specific targets that we need to achieve by 2030. And some of these are the following. So, we see we will call for the reduction by half of the overall use and risk of chemical pesticides and to reduce the use by 50% of more hazardous pesticides. There's also targets to reduce nutrient losses by half while ensuring no further deterioration in soil fertility, and also reducing the use of fertilizers by at least 20%. So, these are

ambitious goals. We're also keen to reduce the sales of anti-microbials for farmed animals and agriculture, and there's also a target of up to 25% of organic agriculture in Europe. So, the Farm to Fork Strategy contains a total of 27 actions.

So, it's really a huge basket where there's many, many activities and actors busy to roll out either new actions or upgrading existing actions, and this is just an attempt to mention a few here. We are foreseeing revisions of existing legislations, for instance, on food contact materials, on date markings. There will be a new legislative framework for sustainable food systems that is being built up and that's by 2023. There will be work or there has been work already on the European code of conduct for responsible business and marketing. There's mandatory front of pack nutrition labeling to guide healthy choices or sustainable food labeling, and of course there's EU-level food waste reduction targets and much, much more. There's also a set of what we call non actions that are relevant to the Farm to Fork Strategy. For instance, there is a strategy on algae that isn't specifically within the context of the Farm to Fork Strategy, but it is very relevant. So, there's so much activity taking place now that is relevant to food system transformation, not just for Europe, but also in the global context.

So, this brings me to the next point, which is our work on research and innovation policy. So, we launched an initiative called FOOD 2030. This is basically our research and innovation policy framework that we've been built up since 2016. And this was really a first attempt to mobilize our own scientific communities and also other commission services to start talking about food system transformation and the fact that it was an urgent and complex issue that needed to be tackled. So, we did a lot of consultation work, many events. We brought in many experts, and we built this vision up together. So, the vision tries to highlight four priorities through which research and innovation policy could make an important contribution. And the first of that was to move towards nutrition for sustainable and healthy diets and that included or includes all aspects that relate to health, and also food safety. Another priority was to build up climate smart and environmentally sustainable food systems, another one was circular and resource efficient food systems, and finally innovation and empowerment of communities.

And by communities, we mean neighborhoods, we mean regions, cities, towns. It could be rural areas, but really focusing on places where people live and work. So, the place-based aspect. And how are we going to, or how are we going to address these priorities, which needed to deliver co-benefits really? Well, it was through different drivers. So, by promoting research breakthroughs, by promoting innovation and investment, open science, and of course, international cooperation within research and innovation. And that's how we set up our FOOD 2030 visioning. And then as we were working towards the new framework program for research and innovation, which is called Horizon Europe, which just began, I'll say a little bit more about this later, we decided to focus on a number of areas, and these are our 10 FOOD 2030 pathways for action that we released last October on the occasion of World Food Day. And all of them, why did we pick these? Because we felt that these were really leverage points where research and innovation could really deliver transformative change. And I'll just read the about. The first is urban food systems, the next is dietary shift and alternative proteins.

We have a pathway on smart, personalized nutrition, another one on the digital aspects of food that we call food and data. Another one specifically focuses on transforming food systems in Africa, because we do have a high-level policy dialogue between the EU and the African Union. We also have a pathway that deals with food waste and circularity resource efficiency and food systems. Another pathway that is directed to blue food or food from seas and oceans, because often this aspect is not sufficiently covered. It's embedded in many of the other themes, but it really needs to be highlighted as an area. There's also work we're doing on the microbiomes or food systems and microbiomes that connects the microbiome,

from let's say, Farm to Fork. And we have a pathway on food system science and governance because we feel that much, much innovation also has to be relevant to institutions. So institutional innovation, governance innovation to really help transform the system and these actors to work together just as John Ingram mentioned. And the last pathway is related to food safety and traceability.

And all of these pathways, as I mentioned, they were also chosen because in bringing them forward, we felt that they could all deliver on these four priorities. So, all of them deliver a number of co-benefits to these four priorities that I mentioned, the inner circle there: the nutrition, the climate, the circularity, and the innovation for communities. And all of this fits within Horizon Europe because we are deploying this concept, we are deploying calls for proposals that are related to these 10 different pathways. And not only are we deploying research and innovation calls for proposals, we're also working very closely with member states and with other actors, including the industry and civil society organizations to really align and leverage. So, align research and innovation agenda [inaudible 00:10:37] in these particular areas.

Now I'm going to mention our latest call. This is actually quite an impressive call. We had a €1 billion call launched related to the European Green Deal. The call closed in January of this year, and we're just now coming out of the evaluation process. And now within that call, which was quite ambitious because we were really looking to foster systemic solutions that would demonstrate tangible results and bring in citizens also. And within that context, we had a Farm to Fork topic that actually got the largest number of proposals, an outstanding number of proposals. It was a topic that was for 74 million, and within that topic, they were six subtopics. Basically, all of them were demonstrators. So, achieving climate neutral farms was one, achieving climate neutral food businesses was another, reducing the dependence on pesticides and reducing nutrient losses was another demonstrator, then reducing the dependence on anti-microbials. Another one on food losses and waste, and finally, one on sustainable healthy diets.

So, we received 260 proposals for this topic and the evaluations have just completed. So, we'll be notifying the lucky winners, the successful proposers shortly, but it just shows how much interest and how much need there is to really advance on these topics. So, these projects will probably start sometime before the end of this year. So, a few words on Horizon Europe now, because horizon Europe is the new research and innovation policy framework for the next seven years. So, it began in 2021 in January of this year. It will continue on to 2027. Setting up the Horizon Europe program is a lengthy task. There's many iterations with member states, with stakeholders. There's a legal basis, there's an orientation document, a strategic plan and a work program. It's just to say that it's quite a lengthy process to get us to where we're at today. We're now about to launch our own work program very, very shortly within the next weeks. But before I go into that, I'm just going to mention that the structure of this Horizon Europe has three main pillars. The first one is really...

Pillar one and pillar three are more about bottom-up initiatives. So, there's the excellent science pillar, which is part of the European Research Council, and it also includes European infrastructures and fellowships that are related to the Marie Skłodowska-Curie Actions. So, these are bottom up in the sense that we give overarching areas that are relevant and then proposers submit their research, which is purely evaluated on excellence. In pillar three, it's also bottom up, but it's what we call... We've now launched the European Innovation Council. There's also the need to use this pillar to foster innovation ecosystems, and it's through it that we also program the work of the European Institute of Innovation and Technology. Then we have pillar two, which is where we address the global challenges like health, culture, creativity, civil security for society, all the digital industry and space aspects, the climate, energy

and mobility, and finally the area where I'm coming from say, which is food, bioeconomy, natural resources, agriculture, and environment.

It's there that I'm going to now drill into to tell you a bit what we're doing on food systems in that context. So, let's consider cluster six and under cluster six, we have seven, what we call, intervention areas. Food system is one, and with this image or this table, rather in light green is just to show that these 10 pathways that I mentioned before is what we're weaving into the food systems intervention area that will then be deployed through Horizon Europe cluster six. So, the other intervention areas consist of environmental observation, biodiversity and natural resources, agriculture, forestry and rural areas, seas, oceans, and inland waters, bio-based innovations and systems of the EU Bioeconomy and circular systems. So, under food systems, we work very, very closely with all of these other intervention areas, but in particular, with the agriculture forestry and rural areas because it's that intervention area that is really looking into all the primary production related food system transformation work that needs to get done also, like agricultural processes or regenerating soil or reducing pesticides. So, we're working very, very closely together on these issues.

Back to our FOOD 2030 pathways, just to say that the approaches that we are deploying through the Horizon Europe program need to be systemic. This means they need to involve all the main actors across the whole food systems to identify and assess and develop strategies together, and we are very much putting at the center of the research and innovation workplace-based approaches to test, to demonstrate, to deploy and to partner. Another thing I'd like to mention is that under Horizon Europe, we are now fostering larger partnerships to federate many of the initiatives that are already out there, and we do foresee a candidate food systems partnership, which is entitled to safe and sustainable food systems for people, planet and climate, which should start in 2023. So, the objective there is really to align and boost research and innovation investments and to transform food systems for co-benefits that be of course, needs to be relevant with the Farm to Fork Strategy and other Green Deal related priorities.

The current convening platform is the European Commission's Standing Committee for Agricultural Research, which has a food systems working group. Now the Standing Committee for Agricultural Research brings together ministries from all over Europe that are programming research and innovation policy within their own countries. So, we are really working very closely with the member states on this partnership. And in this respect, thematic stakeholder workshops and a co-design process has been ongoing, and we will have further workshops this year, and we expect to launch what we call a coordination and support action shortly to further support the setup of this partnership. Another thing I'd like to mention related to Horizon Europe is the concept of missions. These can be equated to the European Green Deal's version of sending the man to the moon. So, we have five thematic missions that we have been building up and these go beyond research and innovation because they aim to also bring on board, explore synergies with other financing instruments and see to which extent policy solutions can also be tweaked or found to really make large leaps forward.

One of the missions is on adaptation to climate change, including societal transformation, which has quite a bit of relevance also to food system transformation. There's one that is dealing with cancer, which also... I mean, all of these missions are really relevant to food systems in one way or another, because the cancer mission is also likely to have some elements within it that will explore, for instance, prevention strategies. We have a mission on healthy ocean, seas and coastal waters, another one on climate neutral in smart cities, and last but not least is one entitled soil health and food. Caring for soil is caring for life. So much activity is going to be taking place around these issues in the next years in

Europe. A few key milestones and next steps since the beginning of this year, so I mentioned the Green Deal call that was launched in January and projects should be starting before the end of this year in relation to those. We've recently launched a study tender on food systems investment gaps. So why is it that in some countries, we see much greater investments in research and innovation than others?

And which parts of food systems can we invest more in, in terms of research and innovation? How can we get better return on investments? So, this is at the heart of this study that the outcome is expected in end 2021. We've recently launched an expert group, an EC high level expert group as a contribution to the UN Food Systems Summit that is really looking into how we can strengthen the global science policy interface, but to meet the ambitions that the summit will set forth. And this group will be having... So, we're setting up an EC stakeholder dialogue on this global science policy interface on the 29th of April. So that's coming soon. I hope that you'll all join us for that. And then the outcome of this expert group process will be presented during the summits of science days in early July, and we expect to have some kind of consultation process throughout the summer to then explore options for what this, let's say, renewed or reinforced the global science policy interface could be by May of next year.

We will be launching our first Horizon Europe calls shortly anytime. With respect to these, we will be having info days on the 25th to 28th of May. So, if you're interested in any of the topics that we're setting forth, please do take part in the info days. Our Horizon Europe program is open to all countries. So please do join us for that. We also have our flagship event coming up called R&I Days on the 23rd and 24th of June, where we have a session on food systems, and of course there is the UN World Food System pre-summit and summit events coming up, and the Farm to Fork conference that will take place on 14th and 15th of October of this year. And we are joining forces for the first time with our colleagues in DG AGRI and DG SANTE to have a joint event on food systems this year.

So in summary, the EU Farm to Fork Strategy and Green Deal really sets a new ambition, and it comes at a very timely moment, if I can, connecting this up to the UN Food Systems Summit, that policymakers really do look at research and innovation policy to enable real food system change for co-benefits, and that the commission is putting in place EU funding and policies to support these kinds of research innovation investments and communities there. I stop here, and with that, I'd like to thank you for your attention.