## Making and sustaining the transition To a more resilient, sustainable, climate smart

and nature positive food and agriculture system

Insights & key takeaways: workshop on funding, finance and new revenue streams Brussels, September 20th, 2023

> Forum for the Future of Agriculture®

## Foreword

Over the past year, the Forum for the Future of Agriculture has conducted a perceptions inquiry into what it would take to develop and scale regenerative agriculture in Europe. As part of this exercise, we held a series of workshops posing this question to farmers and land-managers; actors within the agri-food value chain and industry stakeholders; and with policy-makers and key opinion leaders. In each group, we explored their definition of regenerative agriculture; the benefits and costs; barriers to adoption; and what it would take to accelerate the development and scaling of regenerative agriculture. This was supplemented by bilateral interviews and consultation with the Forum's own extended network.

One of the key insights and takeaways from this inquiry was the importance of funding and financing farmers and land managers to not only make but to sustain the transition to regenerative agriculture<sup>1</sup>. This topic appears to be so central to the development and scaling of regenerative agriculture that we organised a specific workshop with the key stakeholders to explore key elements in further detail in autumn 2023.

The workshop involved a series of moderated dialogues and working group discussions focused on the following:

- developing a common understanding of what funding and financing the transition means; why it is necessary and how it could potentially unlock other key enablers of the transition;
- understand better the existing funding and finance options and new opportunities available to the EU/ Member States, (including reform of the Common Agriculture Policy) and the agri-food industry to fund the transition
- explore and understand the role that emerging revenue streams from eco-system services can play in enabling farmers to make and sustain the transition and the critical success factors.

Although the workshop was held under the Chatham House rule, the following report summarises some of the key insights and takeaways. We are also grateful for all those who gave their time so generously during the day and would particularly like to acknowledge the following people for their thought-provoking interventions, which stimulated our discussion:

- Professor Erik Mathijs, KU Leuven
- Tassos Haniotis, IIASA
- Mario Guido, European Investment Bank
- Olga Panchenko, Rabobank
- Bart Vandewaetere, Nestlé

Any slides used as part of these interventions can be accessed through the link under each contributor's name.

<sup>1</sup> Perceptions & insights: developing and scaling regenerative agriculture in Europe and beyond - October 2023



Established in 2008, the Forum for the Future of Agriculture has grown quickly from being a conference which brought together stakeholders interested in the future of both the environment and farming. Today, it is one of the leading international forums that works with a wide range of public, civil society and private sector partners and stakeholders to generate new ideas and thinking, ways of working, and solutions that can help build a more resilient, sustainable, climate friendly and nature positive food and agriculture system.

### Find out more at www.forumforag.com

Provocation: Professor Erik Mathijs , KU Leuven



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### Key insights

There was a consensus across the four working groups that without a strong base for public and private funding and finance, farmers and land managers would find it extremely difficult to make let alone sustain the transition to regenerative agriculture. In that respect, unlocking the funding and finance equation was seen as central to the challenge of developing and scaling regenerative agriculture in Europe and beyond.

In the discussion, several groups pointed to the costs involved in making and sustaining the transition, ranging from the need for new machinery, purchasing cover crops and changes to input programs. In addition, the potential for a 'yield-drag' in the early years of the transition, which impacts on farm economics, was seen as an additional cost and one which needs to be 'de-risked'.

These factors are, of course, relatively well known but the groups all felt that not enough work has yet been done to thoroughly interrogate them and determine what the cost of making and sustaining the transition will be over a prolonged period (e.g. 10 years). They also pointed to differences that are likely to emerge between different localities and types of farming. At the same time, this additional work needs to uncover what the economic benefits would also be over that time period for the farmer in terms of improved soil health and biodiversity, impact of operating costs (e.g. fuel consumption, labour etc). and crop yield and quality, and overall farm resilience.

This is central to the 'business case' which the farmer or land manager has to account for in deciding whether to make and then to sustain the transition. Building the research and evidence for this was seen as a critical element for farmers and land managers to draw on and which also should be needed to unlock public funding and private finance.



### Key takeaways

1. Making and sustaining the transition is not for free and unlocking public funding, private finance and new revenue streams will be critical;

2. At the same time, there is an urgent need to build a research and evidence base on the costs and benefits of making and sustaining the transition. This is needed both to convince the farmer/ land manager to start the transition, provide education and training, and also demonstrate to public funders and private financiers that 'sustainability pays' over the long term; and

3. That all actors, up and down the value chain, will have a role to play in contributing to making and sustaining the transition.

Public funding provocation: Tassos Haniotis, IIASA and Mario Guido, European Investment Bank



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### Key insights

Unsurprisingly, there was a consensus that there is a strong role for public funding in enabling farmers and land managers to make and sustain the transition. Several groups argued, however, that this funding needs to be properly focused on clear objectives and desired outcomes from the transition, which primarily include improvements to soil health and farm productivity and resilience alongside a reduction in emissions and carbon removals. Co-benefits, including positive impacts on water consumption and quality as well as biodiversity (where demonstrable) should also be included.

As to whether this is or could be better accommodated within the European Union's Common Agriculture Policy, there was no consensus. Nevertheless, there was general agreement that there is an opportunity and a necessity for further discussion on this point.

In terms of the role of public funding, the groups identified a number of areas where they felt that public funding should be targeted that would enable farmers and land managers to make and sustain the transition. These included:

- **Investment in extension services** to provide access to agronomic information and advice, research and best practices, advice on how to start and sustain the transition, and practical market/ economic intelligence and insights, particularly on sources of funding, finance and new revenue streams.
- **Infrastructure** including monitoring for soil health and carbon emissions/removals linked to regen ag practice changes.
- **De-risking** the transition through support for investment in initial practice changes, such as tillage practices and cover crops, which have started to be financed through CAP eco-schemes and/ or Rural Development payments.
- **Backstops** for private lending for regen ag practice changes where yield drag or other factors related to the transition have a worse than expected impact on the farm economics leading to defaults.
- **Public investment in research** through Horizon Europe and other mechanisms should be extended in order to speed up up the development of new innovations in practices and technologies that are required by farmers and land managers to make, sustain the transition to regenerative agriculture and maximise the benefits.
- Access to data to inform improved decision making on-farm and throughout the value chain is an important enabler and one where support is needed for the collation, analysis and dissemination in an accessible, open and transparent way at national, regional and local level.

Access to finance provocation: Mario Guido, European Investment Bank



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### Key insights

Given the input from the European Investment Bank, and their work on the topic<sup>2</sup>, there was an extended discussion on the gap in the provision of private finance to farmers and land managers, especially for sustainable or 'green' investments. Several of the groups highlighted the limited access to longer term finance at affordable rates for farmers. Ironically, there were numerous examples cited of this access being particularly constrained for those farmers and land managers under 40 years of age who are, potentially, the most likely to make the transition.

Conversely, there was a consensus amongst the groups that the financial sector potentially has one of the biggest roles to play in supporting the transition to regenerative agriculture by providing access to long term finance (and insurance) at preferential rates.

To do this, a number of key challenges need to be overcome. These include:

### For the farmer/land manager:

- Ability to access and collate the evidence and data which demonstrates the pay-back from making and sustaining the transition over the long-term.
- Ability and willingness to turn this into a compelling business case which is easily understood by financial institutions.
- Ability/ willingness to overcome the 'fear of rejection' factor in making the application for finance.

### For the financial institution:

- Ability and capacity to collate the evidence and to assess the long term benefits in terms of farm productivity, resilience and profitability (including from additional or new revenue streams).
- Ability and willingness to assess and price the risk over the long-term.
- Both of which are linked to deeper knowledge and understanding of farm economics, the environment and climate in which they operate, and willingness to recognise that 'sustainability pays' over the long term.

According to several contributors, there is some evidence of this starting to happen as farmers and land managers draw on the data in their management systems as well as that generated by eco-system service programs (e.g. carbon offset credits/insetting-scope 3 emission reduction incentives) and begin to translate this into compelling business cases. At the same time, the level of interest of financial institutions in this area is said to be increasing with commensurate investments in the institutional knowledge required to assess and evaluate the benefits and risks and develop attractive financial instruments accessible to farmers and land managers making the transition.

Finally, several groups highlighted the opportunity for public-private partnership between institutions like EIB, national government bodies and private finance. There are already examples, such as the *Growth and Sustainability Loan Scheme* in Ireland. This benefits from loan guarantees from the European Investment Fund, enabling lower cost longer term loans for farmers to make investments in climate action and environmental sustainability.

<sup>2</sup> Survey on financial needs and access to finance of EU agricultural enterprises 2023



### Key takeaways

1. Public funding and access to private finance go hand-in-hand and when combined could provide a key part of the equation.

2. Data and evidence is key to demonstrating that 'sustainability pays' and justifying targeted, bespoke public funding and unlocking access to financial instruments at preferential rates.

3. Potential for extension of public-private partnerships to unlock longer term lending for the transition at lower rates for farmers.



# 3. The role of the value chain and emergence of new private 'eco-system service' revenue streams

In this session, the groups explored the role that long-term value chain incentives for farmers and land managers could play in making and sustaining the transition. In the second half of the session, the groups explored the emergence of new private 'eco-system service' revenue streams.

### a) Role of the value chain:

### Session provocation: Bart Vandewaetere, Nestlé

Setting and delivering against a **Net Zero target** will ensure a future for the agri-food sector (ingredients/raw materials), address consumer and societal & investor expectations and facilitate innovation to create competitive edge.

**The transition has a cost we cannot pass to consumers.** But the good news is that corporate sustainability budgets and investment are now at similar level to R&D budgets and farmers are keen to implement sustainability and regenerative practices when they are supported through progressive premium financial, technical and collaborative schemes.

This is the time to join together agri-suppliers, farmers, manufacturers and retailers and stand behind net-zero. Regenerative agriculture is an example on how this collaboration across value-chain can generate benefits:

- For farmers (increasing yield and productions, income and profitability, innovation).
- For the environment (biodiversity, crop quality, carbon capture & emission reduction, soil health, water quality).
- For manufactures too (to address greenhouse gas emissions coming from agriculture).

But the scaling-up is not happening everywhere. For this reason, an **EU Food Investment** & **Resilience Plan** is needed to strengthen competitiveness, innovation and resilience of sector while accelerating the transition towards regenerative food systems at scale.



### **Key insights**

There was a consensus amongst the groups that one of the key, and perhaps unique, features of the recent growth in interest in regenerative agriculture, are the public commitments of support and finance now being made by many of the major actors at all levels of the agri-food value chain . Increasingly, these commitments reflect a determination to improve the resilience of the agri-food supply chain and reduce the indirect-Scope 3 emissions, which are now being accounted for against more robust targets.

Several of the groups pointed to the willingness of the value chain to explore new sourcing models and longer-term partnerships, which incentivise farmers and land managers for making and sustaining the transition, to deliver tangible benefits downstream. There is also evidence of input providers and machinery companies also exploring ways to develop programs which incentivise and share new value with growers and land managers for the practice changes adopted.

Whilst these developments were viewed very positively, a number of challenges and questions emerged that will need to be addressed:

- The need for common metrics and agreed outcomes to underpin new sourcing models and long-term partnerships.
- The need for accurate, robust, actionable data to inform both on-farm decision-making and verifiable outcomes from practice changes.

## 3. The role of the value chain and emergence of new private 'eco-system service' revenue streams

- The need to make this work across the whole crop rotation and not inadvertently create competing demands between off-takers.
- The need to understand the costs and benefits to the farmer and land manager of making and sustaining the transition and ensure that value chain long term partnerships (upstream and downstream) account for this and fairly price the incentive.
- The need to recognise that the value chain can only support so much of this and that the inter-play with public funding, private finance, and access to new revenue streams, is critical to a holistic solution.

### b) Emergence of new 'eco-system service' revenue streams

Session provocation: Olga Panchenko, Rabobank

- Effective decarbonization strategy is only possible through participation and collaboration of multiple participants of the supply chain.
- Switching to sustainable farming practices is only possible through a holistic approach. A focus only on carbon is not sufficient.
- In order to transition to regenerative agriculture, education is key, both for the growers and for the investors.
- Regarding eco-system services, we need to assess both risks and opportunities in order to come up with a targeted solution; there's no "one size fits all", so these projects require not only financing, but also time, open discussions and team work.



### Key insights

The groups agreed that the emergence of new revenue stream from eco-system services that farmers and land managers provide is an interesting and exciting development, even if challenges remain in terms of different levels of integrity and robustness of the outcome claims made.

Given the relative level of maturity, there was a strong focus on the extent to which carbon emissions and removals in agriculture can be measured, reported and verified. It is clear from the discussion that within this space, there are differences in the level of maturity and robustness amongst programs. Setting the right policies, standards and rules around these programs is clearly going to be critical if they are to realise their potential.

Nevertheless, the potential to monetize these claims, either through 'insetting' within the agri-food value chain or beyond the chain, through credits that compensate for unavoidable emissions could lever in additional revenue for farmers and land managers to use in making and sustaining the transition.

It could also be that by maturing these options, they will also point the way to unlocking scalable payments for other eco-system services such as water use/quality and – potentially – biodiversity.

Another benefit from these approaches, is that the data generated through them can be used to inform and continuously improve on-farm decision making as well as being used to demonstrate that 'sustainability pays' in justifying public funding and/or unlocking access to private finance on preferential terms.

# 3. The role of the value chain and emergence of new private 'eco-system service' revenue streams

That said, the groups did highlight challenges that need to be overcome, including:

- Guaranteeing the integrity and accuracy of the outcome claims made and the extent to which liability sits at the farm level or with project/program developers.
- Ensuring that eco-system service payments are durable over the long-term, and don't just support transition, and that they are accessible to small as well as large farms.
- Does not distract from/replace existing and necessary efforts to improve the sustainability of the farming system.



### **Key takeaways**

1. These new emerging 'eco-system service' revenue streams do have the potential to be part of the funding and financing solutions and can unlock additional forms of funding and finance but that they are not a panacea.

2. There are key challenges and questions, however, that do need to be addressed if these revenue streams are to command the trust and confidence of suppliers (farmers and land managers), purchasers and societal stakeholders.

3. Not all eco-system services are purely 'market' goods. Often they have the characteristics of public goods, more often they combine characteristics of both private and public goods which might imply being financed both by the market and the taxpayer. In these cases, blended finance could be a solution.



## 4. A Holistic solution needed?

This workshop highlighted and reinforced the view held by many that developing and scaling regenerative agriculture will depend on the availability of and access to funding and financing mechanisms, which include new revenue streams emerging for the eco-system service efforts that farmers make. That said, for this to come about, there does appear to be a need for the development of a holistic and systemic approach, that maximises the opportunities for farmers and land managers to fund and finance the transition and to sustain it.

### Funding and financing the transition. A holistic solution





## 5. Final thought and next steps

Finally, we asked the workshop participants to use 1-2 words to describe that they thought will enable the funding and financing for farmers and land managers to make and sustain the transition to regenerative agriculture.

From what you heard today, use 1-2 words to describe what will enable us to fund and finance farmers making and sustaining the transition to regenerative agriculture?

Wordcloud Poll: 47 responses; 24 participants

Leadership & Vision				
Public PLUS private		Methodology		
	Altruism	goal alignm	ent colla	
Creativity		Coordin	ation	Privar Public
Stepwise		aliann	ación	True cost accounting
Value chain collabor		anymnent		Simplicity
Education	Trust	Farmer le	ed Date	Agility
Co benefits	Market driven		Data	Long term thinking
Value chain contract		Replace CAP		
Change in politics			Landscape approach	

As part of its Call to Action, the Forum will take forward our work on how to fund and finance the transition which can be sustained over the long-term. In particular, we will explore in more depth the key takeaways from this workshop to identify the key features of an investment and finance plan for the agri-food system in the European Union. We look forward to working with all stakeholders as we progress this work.



## About the Forum for the Future of Agriculture

The Forum for the Future of Agriculture (ForumforAg) is the premiere meeting place in Brussels to debate sustainable agriculture and environmental challenges. The Forum is where agriculture and environment meet for an open dialogue at the Annual Conference and other events throughout the year.

The European Landowners' Organization and Syngenta came together in 2008 to create a new, open and inclusive place in Europe where all stakeholders interested in contributing to a more sustainable agriculture system could come together to debate and share knowledge and expertise on how this could be achieved. They remain committed to that goal and invited other organisations to join and help take forward the Forum for the Future of Agriculture on the next phase of its journey.

The strategic partners support the mission of the forum to contribute to the development of a more sustainable food and agriculture system. In doing so, they work together with the founding partners under the guidance of the Chairman to enable the strategic development of the Forum for the Future of Agriculture and help to shape its annual work program. The ForumforAg partners also act as a sounding board and provide counsel on our thought leadership activities and positions. The Partners also exchange knowledge and expertise on what works on the ground, as well as constructively challenging each other, as well as other stakeholders in their community, to help create a more sustainable food system.

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# The CAP in Context, Perspective and Retrospective or, alternatively, the CAP between a rock and a hard place!

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> EAAE Congress, Rennes 31 August 2023

\*Views expressed are strictly personal. For the past assessment of the CAP, they rely heavily on my previous public presentations while at the Commission. However, for the future prospects of the policy, views are not in any way related to my previous professional activity at the Commission, or my current research affiliation.

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# • The lessons that are (not) drawn from the CAP past

- The shifting goalposts of today's polarised policy debate
- The challenges, prospects and dilemmas for the CAP future

# The CAP past at a glance

## **Between a rock and a hard place?**

## Three distinct phases characterise the evolution of the CAP

## The CAP evolution was, and continues to be, part of global changes in food systems

- A major transformation of food supply systems is already taking place (**Food and Farming 4.0**)

The **CAP** continues to be a **big part of a small budget**, generating "subsidy envy" among other EU policies... ...with disproportionate focus on its weaknesses due to the dual role of agriculture as carbon emitter and sink... ...and the **weak focus on facts** relating to the asymmetric impact of existing best practices and experiences

The "defensive/introvert" phase – and the need to reform as limitations in its initial design became evident The "offensive/extravert" phase – and the will to reform the policy by shifting from "what" to "how" to produce The "uncertainty" phase – when reform fatigue coincides with pressure to reform to facilitate other policies

Changes also characterise **food demand**, driven by **mixed and asymmetric shifts** in tastes and preferences **Globalisation** opened up markets and increased economic welfare, but **winners failed to compensate losers** 

# Most often focus on the CAP is on its budget...



*Source: EC-DG AGRI. Budget figures are actual in nominal terms.* 

# Steady increase in agricultural output volume and value ...



Source: EC-DG AGRI. Budget figures are actual in nominal terms.

# ...strongly benefited farm income and ag trade...



Source: EC-DG AGRI. Budget figures are actual in nominal terms.

# ... but brought contrasting progress on GHG emissions...



*Source: EC-DG AGRI. Budget figures are actual in nominal terms.* 



# ...that needs to be placed in a global context ...

Source: DG AGRI based on FAOSTAT.

# The broader environment impacting the CAP debate

# The inverse reality of EU's farm policy debate

## Two price booms: "déjà vu" or a new (ab)normal

## A non-exhaustive list of polarisation hampering the farm policy debate

EU's agriculture is the only major agriculture contributing to emission reductions – and gets no credit for it! Land management and soil are at the core of improving farming's footprint – yet most proposals sideline this! Farm productivity is central in economic growth – sustainably improving it should not imply undermining it!

High price level, co-movement and volatility in all commodities reflect similarities between 2008 and 2021 *Macroeconomic factors differ* (demand-driven debt crisis vs supply chain bottlenecks/inflation) – and there is war **Exogenous factors dominate the current price surge**, limiting options in the (EU and global) farm policy toolkit

False dilemma No 1: food security vs climate action – both are global problems requiring global solutions False dilemma No 2: public money for public goods – markets also fail private goods especially in the food chain False dilemma No 3: "go local" as the solution – more local focus mitigates, but does not solve global problems



Source: World Bank. Note: 2023 is based change of Jan-Jul 2023 with respect to the same 2022 period.

Commodity prices move in longer cycles ...



Source: Rebasing (2000=100) based on own calculations from the and the World Bank for consumer and producer prices, repsectively.

# ... but differ on what farmer receives and consumer pays

**Global food price indexes (2000=100)** 

# Population dynamics is the main food demand driver...



Source: Own calculations based on USDA 2023 projections.



Source: Own calculations based on FAOSTAT trade. Wheat includes wheat flour. Note: Net trade is the difference between reported exports and imports. Reference years are 3-year averages of 1994-96 and 2019-21.

# ... for past (1996-2021) wheat net trade changes ...



Source: Own calculations based on USDA's February 2023 projections. Note: Net trade is the difference between reported exports and imports.

# ...and future (2032) wheat net trade expectations

# Back to the CAP's future...

## The inevitable, yet less prone to change, issues in the EU's farm policy debate

# The inevitable, and very relevant for change, issues in the EU's farm policy debate

## The difficult questions that we rarely ask and even more rarely try to answer

**Total income of farm households – national tax systems** already address this, and it should stay like that **Equalise direct payments –** opportunity costs of land and labour hugely differ among MS, DPs should reflect this **Reverse the downward trend of farmers –** this will continue, it is the broader economy in rural areas that matters

How to better target support – more focus on better land management to help income and environment How to measure the impact of the CAP – big picture matters for performance, which indicators best reflect it? How to balance national and EU interests – flexibility is possible, but CAP legitimacy requires MS transparency

Who is afraid of productivity? Without a real boost in productivity EU agriculture will lose its global influence Who is afraid of science? Weakening the knowledge-base of EU agriculture contradicts EU research priorities Who is afraid of trade? EU agriculture only loses from trade restrictions; but needs net gains in trade agreements

# ...and its link to global agriculture

- What to expect from the "Fork" side of the F2F?
- What are the long-term prospects for price developments?
- What impact on EU agriculture from the energy transition?
  - The EU fertiliser industry heavily depends on prospects of natural gas and hydrogen markets
- - Food security is linked to broader security considerations (including in Africa)

> To adjust, the farming sector needs to know which direction EU citizens will follow as consumers

Farm prices can resume their long-term downward trend in terms-of-trade, but what about food prices?

# What impact on global agriculture and its big players from the global realignment of forces?

# In Summary (with the help of abusing lyrics of some of my favourite songs)

# "It's the end of the world as we know it..." But do we feel fine?

- Adjustments are not a betrayal of noble objectives, but a necessary precondition for achieving them...

## "We are on the road to nowhere, come on inside"... Is this a strategy, let alone the right one?

- When will we admit that "aspirational" targets failed to inspire?

# "If you feel like letting go (hold on); if you think you've had too much... well hang on..."



Assumptions made following the Paris Agreement must be revisited, soon, and where necessary adapted Mistakes are a problem that, potentially, can be solved; not admitting mistakes is a problem that can't be solved

Did we put the cart in front of the horses in the soil/water/air/biodiversity sequence, forgetting soil's priority? Do we have the right balance between adaptation and mitigation strategies w.r.t. to known best practices?

There is a well-established multitude of practices that demonstrate what, and under which conditions, works! A huge increase in research money, prioritising climate action and (to a lesser extent) food security is available As ag economists, we can identify ways to shift the S-curve to the right by jointly decreasing costs and footprint

