EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR AGRICULTURE AND RURAL DEVELOPMENT

FUTURE OF AGRICULTURE:

DISCUSSION PAPER

FOOD SECURITY

1. AIM

This discussion paper provides an overview of certain, selected food security issues as approached from the angle of (1) land use and food supply, (2) fair prices for producers and consumers, and (3) food environment. The questions listed for each theme will support the discussions at the technical workshop on food security on 5 February 2024.

Food security and its different dimensions

At the World Food Summit in 1996, food security was defined as 'when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life'. This widely accepted definition points to four dimensions of food security ([1]):

- **Food availability:** the availability of sufficient quantities of food of appropriate quality, supplied through domestic production, imports or food aid;
- **Food access**: individuals having adequate resources to acquire appropriate foods for a nutritious diet, as well as physical access to these foods;
- **Utilisation**: an individual's nutritional well-being reached through adequate nutrient and energy intake as the result of good care and feeding practices, food preparation, diversity of the diet and intra-household distribution of food;
- **Stability**: the condition by which the dimensions of availability, access and utilisation are sufficiently met, and in which the whole system is stable, thus ensuring that households are food secure at all times.

The High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security highlights two additional dimensions ([2]):

([1]) What is Food Security? There are Four Dimensions (worldbank.org)

([2]) HLPE. 2020. Food security and nutrition: building a global narrative towards 2030. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome

- **Agency:** the capacity of the food system's actors to make their own decisions about food;

- **Sustainability:** the long-term ability of food systems to provide food security in a way that does not compromise the economic, social, and environmental bases that generate food security for future generations.

The three themes discussed below cut across these six dimensions. They have been selected to focus the exchange of views during the workshop on specific questions that are considered as relevant for policy development in the near future. It should be underlined that other important policy questions that affect food security, e.g. climate adaptation or restoration of biodiversity, are discussed in other workshops.

This discussion paper draws significantly on the Commission Staff Working Document on drivers of food security, published on 4 January 2023 [(3)] as well as the work done in the European Food Security Crisis preparedness and response Mechanism (EFSCM) [(4)].

([3]) SWD (2023) 4 final

([4]) Ensuring global food supply and food security - European Commission (europa.eu)

Theme 1: Land use and food security

1. SCOPE

- Food availability is not at risk in the EU today. The EU is largely self-sufficient for key agricultural products and achieves a substantial food export surplus. The EU is a main wheat and barley exporter and covers its own consumption in plant products except for some feed crops like maize and oilseeds. The EU is also largely self-sufficient for animal products, particularly for dairy and meat, with the notable exception of seafood. However, food availability has vulnerabilities due to the need for external inputs like fertilizer and feed for animals.

- Changes in land use can affect future food production and availability. Land is a finite and scarce natural resource that is subject to competing claims. Land is also an integral part of ecosystems and indispensable for biodiversity and ecosystems services. In addition, access to land for farmers is often a challenge in particular in the context of generation renewal.

- The demand for (fertile) land is set to increase due to the need for food and feed (global market demand), renewable energy from e.g. biomass, afforestation, biofuels, solar panels. Moreover, land is needed for housing, roads and industrial development (soil sealing) as well as nature restoration and carbon storage. Additionally, land degradation and climate change are putting overall land availability under pressure.

- At the same time, some trends may reduce demand for agricultural land (e.g. dietary shifts towards more plant-based diets ([5]), more technology-intensive forms of agriculture e.g. vertical farming). Moreover, abandonment of land is an important trend experienced especially in the more remote areas of the Union territory due to a decline in rural populations, lack of infrastructure and attractiveness of those areas and better opportunities offered elsewhere.

- The allocation of agricultural land use is shaped by market demand for different products and services as well as by public policy (regulation, incentives, etc) ([6]). So far, additional needs for land have not come at the expenses of permanent grassland and forests but rather cropland. The question is whether a similar trend might be seen also in the future. For example, between 2005 and 2023 10 million hectares of total arable land were lost [(7)], without significantly affecting production due to increased productivity gains. However, with declining productivity growth and increasing volatility in production conditions in recent years, it might be that a

([5]) provided that lower EU consumption is not compensated by higher exports

([6]) Study on competition for land use and sustainable farming *(Reference: AGRI/2022/OP/0005)* Rural and agricultural land use change (RALUC)

([7]) Medium term outlook 2023

shrinking cropland surface affects food availability if current trends are not reversed.

2. STATE OF PLAY / BACKGROUND

The European Union has 410 million hectares of land [8]. Woodland covers the largest share at about 41.1%, agricultural areas cover 39% (cropland 24.2%, and grassland accounts for 17.4%). Artificial and built-up land amounts to 4.2%.

At EU level, several policy instruments can impact soil and land use either within the CAP or beyond.

Examples within the CAP:

- Good agricultural and environmental conditions:
    - GAEC 1: maintaining the ratio of permanent grassland to total agricultural area
    - GAEC 5, 6, 7: addressing the quality of soil via tillage management, soil cover and crop rotation
    - GAEC 8: minimum share of non-productive area or features, minimum share of 4% of arable land for non-productive purposes
    - GAEC 9: maintain permanent grassland in Natura 2000 areas
- Requirements for agricultural areas to be eligible to CAP income support:
    - To avoid land being used for speculation purposes only or to obtain subsidies disconnected from farming activities, land should be legally at the farmer's disposal; i.e. available for farmers, aiming to perform an agricultural activity on the land.
    - Predominance of agricultural activity. The areas must be predominantly used for an agricultural activity, in case it is also used for non-agricultural activities.

Examples outside the CAP:

- Limits on biofuel production and use: Renewable Energy Directive III, Directive 2023/2413: a 7% cap has been set for first generation biofuels and biofuels that cause high indirect land use change (ILUC) should be gradually phased out by 2030.

(8) SWD, (2023)4 drivers of food security, p.82

- As part of the Commission proposal on soil monitoring and resilience [9], Article 11 (b) provides that Member States should "compensate as much as possible the loss of soil capacity to provide the multiple ecosystem services".

([9]) COM(2023) 416 of 5 July 2023: Proposal for a Directive on Soil Monitoring and Resilience - European Commission (europa.eu)

3. QUESTIONS FOR DISCUSSION

1. *Considering the role played by different drivers of food security (e.g. climate change, growing resource scarcity, increased demand for renewable energy, urbanisation and dietary shifts, new production methods in controlled-environments (vertical farming), etc.), is there a risk for land availability in the EU? And if yes, is this a concern that requires policy action?*

2. *Should the EU prioritise that land is used for food and feed production? If so, what tools would be appropriate?*

3. *Which policies should the EU consider to ensure that land is available and accessible for young farmers?*

4. *Should the EU consider measures to stop soil sealing?*

5. *Which EU policy actions should be considered in response to land degradation linked to climate change?*

Theme 2: Fair prices for farmers and consumers in the value chain

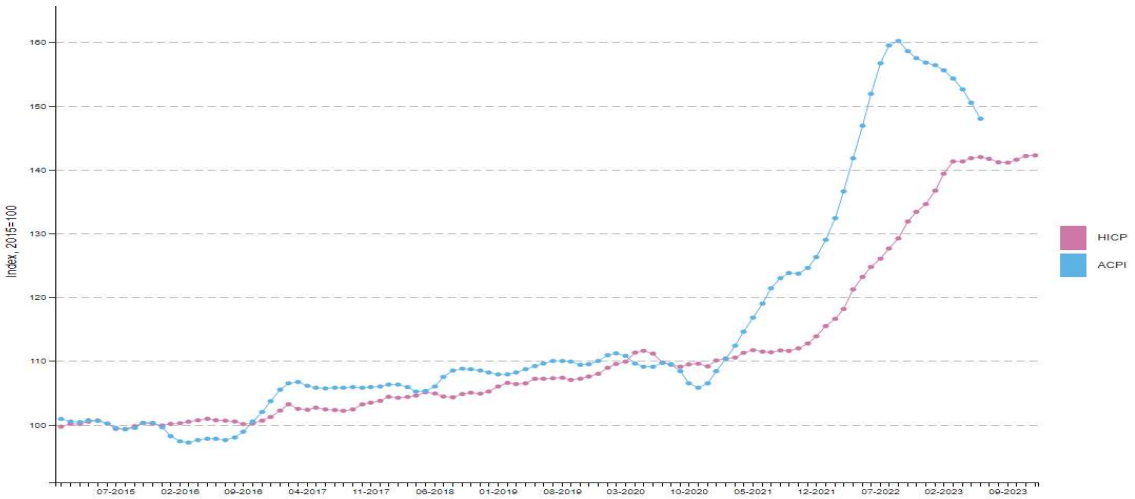
1. SCOPE

- Following Russia's war of aggression against Ukraine, the increased inflationary pressure has brought about renewed concerns over the functioning of price transmission mechanisms in the food supply chain, in which stronger players (e.g., those marketing agricultural inputs, food processors, distributers and retailers) interact with other food chain actors with weaker bargaining power, such as farmers and SMEs. In some cases, this can lead to imbalanced distribution of value along the chain to the detriment of both farmers and consumers.

- This is a particular challenge for low-income households, also taking into account the difficulties that they are already facing to absorb inflation in other areas of their life (housing, heating, transport, banking, etc.).

- Price transmission between farm-gate prices and consumer prices is not straightforward. While 70% of agriculture products are sold to the food processing industry, price dynamics at the farm-gate and at consumer level often diverge. From 2021, agricultural prices have increased faster than consumer prices. Agricultural prices have peaked halfway 2022, food consumer prices continued their increase until 2023, however, not at the same pace.

FIGURE 1: TIME TRENDS IN CONSUMER AND AGRICULTURAL COMMODITY PRICES



Evolution of the Harmonised index of consumer prices for food (HICP) and the Agricultural commodity price index (ACPI) in the EU between 2015 and 2023. Source: eurostat (2023).

- The transition towards more sustainable food systems as initiated by the Farm to Fork and Biodiversity Strategies under the Green Deal has raised farmers' concerns, including in terms of its financial implications. While potentially beneficial in the long term, in the short term, additional sustainability requirements may lead to further cost increases.

- Both positive and negative externalities related to environment and climate, human health, animal health and welfare and social elements, including the livelihood of

farmers, are often not reflected in the market price paid by final consumers. These hidden costs to society result in a situation where healthy and sustainable choices are less affordable for consumers and less profitable for producers.

- Against this backdrop, we must seek to strike the right market-based balance to ensure an equitable and fair distribution of costs and benefits for a resilient and sustainable food supply chain, in which farmers are adequately rewarded for their efforts while consumers have access to healthy, nutritious, and sustainable food at affordable prices.

2. STATE OF PLAY / BACKGROUND

At EU level, several tools are already in place which may impact price formation at farm level and price transmission in the food chain:

Examples within the CAP:

- Regulation (EU) No 1308/2013 (Common Market Organisation Regulation) provides European farmers with tools that can support fair remuneration, by e.g., supporting cooperation (among others in producer groups, producers' organisations and inter-branch organisations), introducing certain exclusions from competition law such as the new Article 210a for sustainability agreements or for negotiation on prices conducted by recognized producer organisations for their members that concentrate supply, promoting contractualization, collective negotiations and market transparency, as well as providing for exceptional cooperation measures in times of crisis.

- Regulation (EU) 2021/2115 (Strategic Plan Regulation) provides for sectoral interventions for certain agricultural sectors (fruit and vegetables, apiculture, wine, hops, olive oil and table olives and 'other' sectors). For example, in the fruit and vegetable sector, recognised producer organisations and associations of producer organisations may implement approved operational programmes for a period of 3-7 years, which cover investments, promotion, risk management, crisis interventions, etc. The aim of the sectoral interventions is to, among other things, provide incentives for the concentration of supply by recognised producer organisations.

- Directive (EU) 2019/633 on unfair trading practices in business-to-business relationships in the agricultural and food supply chain protects all EU farmers, their organisations as well as small and mid-range agri-food suppliers against 16 unfair trading practices.

- Article 39 of the Treaty on the Functioning of the European Union, sets reasonable prices for consumers as one of the objectives of the CAP. While the CAP helps ensure sufficient food supplies, thereby exerting a downward pressure on food prices over the years, there are limited additional policy tools in the CAP, including the CMO Regulation, to address food affordability specifically.

Examples outside the CAP:

- During recent periods of high food inflation, several Member States implemented voluntary or compulsory measures aiming to affect the pricing of food (for example by nudging retailers to offer a basket of staple foods or by setting up VAT reduction

schemes). However, there is no exhaustive and comparable picture of the different food affordability policies implemented at Member State level or their effectiveness. This complicates understanding the role of these national measures among the many other factors affecting the costs of consumer access to healthy and sustainable diets or the existence of likely trade-offs. Market transparency information collected and disseminated helps for this purpose but does not cover exhaustively all dimensions.

- State aid may provide a limited avenue to support farmers, i.e. finance the investments required to adapt their production to the demands of the green transition.

- Concerning food affordability, there are some social policy tools at EU level such as the Fund for European Aid for the Most Deprived (FEAD), in addition to aid at national level (e.g. food stamps, etc.).

3. QUESTIONS FOR DISCUSSION

1. *How can we increase the uptake of existing instruments in the Common Market Organisation and Strategic Plan Regulation aimed at strengthening the farmers' position in the food supply chain and ensuring their fair remuneration? Is there a need to revise existing instruments to overcome the barriers for their take up? If so, which existing rules should be revised and how?*

2. *Should the existing CAP toolbox be expanded to address the Treaty objective of guaranteeing food supply at reasonable prices? If yes, which new policy tools (e.g., labels, soft law incentives, taxation, subsidies, food stamps, contractualisation, price control mechanisms, strategic food reserves) could be envisaged in the CAP? If not, which other EU policies should be mobilised and how?*

3. *Which type of market information is missing and would be needed to better understand and take appropriate decisions to accompany the transition towards a sustainable and resilient food system?*

4. *Which governance structure would you recommend so that all actors in the agri-fish-food supply chain and public authorities, at EU level and other territorial levels, would be able to cooperate and exchange on challenges and solutions to have functioning market mechanisms supporting the transition to sustainable food systems.?*

Theme 3: Food environment

1. SCOPE

- The food environment is commonly defined as the physical, economic, political and socio-cultural context in which consumers engage with the food system to make their decisions about acquiring, preparing and consuming food ([10]). This can include, among others, the price of food products, advertisement and marketing techniques, as well as availability of certain products over others, consumers' knowledge of food preparation and diets, etc.

- The food environment is an important element of food security insofar as it bears on the agency of food system actors to influence and take ownership of their own decision on what type of food to consume and contributes to the access to and the appropriate utilisation of nutritious, sustainable food. It can be assumed that consumer behaviour and dietary habits are particularly constrained and formed by the food environment.

- While the EU food system provides for a high level of food safety, availability and diversity, current food consumption patterns are unsustainable from an environmental and public health perspective. Nutrition and dietary issues are becoming a growing concern, with overweight, obesity and diet related non-communicable diseases dramatically increasing in the past decades. This puts a significant financial burden on Member States' health systems. According to the Food and Agriculture Organization (FAO), 82% of the hidden costs of food systems in European countries are associated with unhealthy dietary patterns, which lead to diseases and lower labour productivity ([11]).

- European diets are not in line with international and national dietary guidelines. Fruit and vegetable, legumes and nuts consumption are below recommendations while consumption of products high in fat, salt and sugar, red and processed meat are higher than dietary recommendations [(12)]. This is especially true for low-income households, which adds to socio-economic and health inequalities. An improved food environment can accelerate the shift towards healthier and more sustainable diets, and thereby reduce dietary inequalities and environmental and economic impacts, while strengthening food security.

- By improving the access to and facilitating the appropriate utilisation of sustainable food through favourable food environments, the resulting increasing demand for

([10]) https://foodpolicycoalition.eu/wp-content/uploads/2021/10/Food-Environments-for-SFS_EU-FPC.pdf

([11]) "The State of Food Agriculture 2023 – Revealing the true cost of food to transform agrifood systems" https://www.fao.org/documents/card/en/c/cc7724en

([12]) It is estimated that in the EU in 2017, over 950,000 deaths and over 16 million disability adjusted life years (DALYs) are attributable to dietary risks due to unhealthy diets, (see Global Burden of Disease (GBD) 2017 study at: https://knowledge4policy.ec.europa.eu/health-promotion-knowledge-gateway/eu-burden-non-communicable-diseases-key-risk-factors_en). Overweight and obesity alone are responsible for removing up to 3.3 % of GDP growth and consuming up to 8.4% of health budgets, (see at: https://www.oecd.org/health/health-systems/Heavy-burden-of-obesity-Policy-Brief-2019.pdf).

sustainable food can also valorise and incentivise sustainable practices at primary production level and throughout the entire value chain. Food environments can therefore be an important, positive tool to accelerate the transition to sustainable food systems.

- In this context, it is important to assess the contribution and role of current EU policies, including the Common Agriculture Policy (CAP), to improve food environments to ensure that the healthy, sustainable food option becomes the most obvious choice for consumers and stimulate the uptake of sustainable practices through market incentives, while leaving to consumers the final choice on what to eat.

2. STATE OF PLAY

- The EU policies most directly related to food environments are the ones regulating food composition, labelling, promotion, prices and trade and are sometimes considered as insufficient when it comes to promoting a healthy food environment. ([13])

- In some of these fields, the EU has already developed policies intended to improve the food environment and drive consumers towards healthier and more sustainable diets. These include:

    - A comprehensive set of rules on food safety which ensures that the EU has one of the highest food safety standards in the world;

    - Rules on information to consumers, including food labelling, providing mandatory information, such as nutritional characteristics, to enable consumers to make informed and health-conscious choices (Regulation (EU) No 1169/2011);

    - Rules on nutrition and health claims that ensure that any claim made on a food's labelling, presentation or advertising is clear, accurate and based on scientific evidence (Regulation (EC) 1924/2006);

    - Rules on advertising through audio-visual media, which prohibit product placement in children's programming and encourage Member States to use self- and co-regulation through codes of conduct regarding inappropriate advertising in children's programmes for foods and beverages high in fat, salt and sugar (Directive 2010/13/EU).

    - A Code of conduct on Responsible Food Business and Marketing Practices developed by the industry as part of the Farm to Fork Strategy introducing a set of voluntary commitments, including measures which can contribute to improved consumption patterns and a food environment that makes it easier to choose healthy and sustainable diets.

([13]) Policy Evaluation Network (PEN) (2021). The Healthy Food Environment Policy Index (Food-EPI), (March 2021). https://www.jpi-pen.eu/images/reports/Food-EPI_EU_FINAL_20210305.pdf

- CAP measures that have the potential to contribute to improving diets of Europeans include:

    - Targeted support for the fruit and vegetable sector through producer organisations;

    - Promotion measures, including under the EAFRD, sectoral interventions, and the agricultural promotion policy. The latter's budget for 2024 amounts to €186 million, of which €18 million are allocated to the promotion of fresh fruit and vegetables. The EU promotion programme under the CAP is a lot smaller than the advertising budget of the food supply chain actors (estimated to be of several billion euros per year in the EU alone). A revision of the promotion scheme is under consideration in the context of the Farm to Fork Strategy.

    - The EU School Scheme: the programme supports the distribution of fruit, vegetables, milk and certain milk products to schoolchildren as well as educational measures on food production and healthy diets, with an allocation of maximum €221 million per year. A revision of the school scheme is ongoing in the context of the Farm to Fork Strategy.

- In addition, as part of the Farm to Fork Strategy, a series of initiatives are being developed to improve further the food environment. These include animal welfare labelling, and a legislative framework for sustainable food system, including sustainability labelling and sustainable public procurement. Work on these initiatives is ongoing.

- On top of this, 12 Member States have put in place national /regional taxes on products associated with unhealthy diets, such as high fat and sugar sweetened ones, which intend to incentivise product reformulation by manufacturers and contribute to shifting consumption to healthier products.

- Despite all the efforts, the shift to healthy and sustainable food consumption remains a serious challenge to be further addressed. Despite a slow decline in average animal protein consumption, current trends do not indicate that consumer behaviour is changing significantly.

3. QUESTIONS FOR DISCUSSION

1) *Should EU agricultural policy play a more important role in improving the food environment in the EU? Or should other instruments be mobilised, outside the CAP? If so, which ones?*
2) *How could the CAP better support the shift to healthier, more sustainable diets while continuing to achieve its main objectives as defined in the Treaty? Are the tools available under the CAP fully used by Member States?*
3) *How can actors from across the food value chain cooperate to improve food environments and incentivise the shift to healthier, sustainable diets?*