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Ukraine-Crisis impacts on food security: tackling the short-term shock must be done with a vision in mind of the larger-scale and longer-term threats of the Climate- and Biodiversity-Crises

Dear Vice-President Timmermans, dear Commissioners Wojciechowski, Sinkevičius, Kyriakides, dear Norbert Lins MEP,

The scientific community has always had the role to support society and its needs. In such a critical time, every scientist – beyond expressions of personal solidarity – seeks to offer help within the context of one’s professional expertise.

The war on Ukraine is not only creating a humanitarian crisis, but also constitutes a shock to global trade and markets. The war is having profound and detrimental impacts on the agricultural sector and infrastructure of Ukraine, a major exporter of important agricultural commodities, specifically to low-income countries in the Near East and East Africa. Russia may still be exporting to the world’s markets, yet possibly through more complex routes and at higher costs. Accordingly, lower deliveries from Russia and Ukraine will affect the world’s markets and impact food security, particularly in recipient countries that depend on these products to feed their human population.

While these short-term food security concerns – for obvious reasons – attract much media attention, two less salient crises pose much larger-scale and long-term challenges to the global agricultural and food systems. The **climate crisis** places a major threat to humanity, putting circa 3.4 billion people at risk according to the most recent IPCC report, particularly in low-income countries. The **biodiversity crisis** is putting ecosystem functions and services at an additional risk, with farmland ecosystems degrading most rapidly. These two crises are tightly intertwined: soil erosion, water scarcity, extreme weather events and loss of pollinators and pest control, are further exacerbating the resilience of farming systems especially on intensively-used lands.

While the war in Ukraine is a humanitarian disaster that generates a short-term global shock to the world’s food situation, the risks generated by the environmental crisis are long-term, worsening, and affecting many more people on Earth. For that reason, any response to the shocking effects of the invasion of Ukraine, must bear the greater risks in mind. A response to the war which enhances these pressures can expand and accelerate the ecological crisis, leading to much greater impacts on humanity and ecosystems alike.

In recent days, we have heard loud voices expressing concerns on the impacts of the war on European food security, asking for a revision of agricultural policies to withdraw the environmental protection measures introduced in the CAP reform, and to scale down the Green Deal’s food system ambitions as laid out in the Farm to Fork and Biodiversity Strategies. These calls are echoed by a request by the AGRI Committee of the European Parliament, made on 9.3.2022 to the Commission.

We note these attempts to dismantle environmental measures with great concern. We strongly argue that one should avoid false dichotomies between food security and environmental sustainability, responding

wisely to the shock while keeping the larger challenges in mind. We also reject the productionist discourse that equates food security with the further intensification of production.

We must warn that if such calls are adopted, their implications can be severe for the following reasons:

1. Further intensifying production entails further losses of natural elements in many parts of the EU. These are providing key ecosystem services that are essential for production, including a healthy soil, water, pollination and pest control, to name just a few.
2. We question the validity of COMAGRI's proposal to open Ecological Focus Areas (EFA) for production. The potential benefit in terms of releasing land for production is very likely to be disproportional in relation to the costs of removing the remaining shares of land that is not under production. This would damage wildlife and essential ecosystem services, possibly to the point of ecosystem collapse.

Therefore, we call on the Commission, the Parliament and the agricultural ministers to employ the best knowledge delivered by science, and to harness this knowledge to provide guidance for: a) absorbing this shock in the most effective way, b) addressing real food security issues to those who were already food insecure prior to the outbreak of the war, both in and beyond Europe, and c) strengthening the resilience and sustainability of food systems to make them less susceptible to similar and additional shocks in the future.

Before we propose solutions, we highlight the following central considerations that we feel have so far been neglected in the discussion.

1. Shortages of cereals and grains affect different parts of the world differently. While Ukrainian and Russian imports are key to feeding populations in import-dependent countries in Africa and the Middle East, the European Union is less import-dependent with a degree of self-sufficiency for e.g. meat of >120%¹ and for grains of >100%². Imports from Ukraine to the EU are often used as livestock feed to produce animal products (dairy, meat), much of which are destined for export out of the EU. In times of scarcity, the key question should therefore be how to achieve an optimal allocation of food crops, to ensure humans' basic needs are prioritized over less essential uses - both in Europe and globally.
2. Time scales matter: the war in Ukraine and its impact on the world food-situation mostly poses a short-term challenge to be tackled within the next months, depending of course on the duration of the war. In the longer term, the main threat to global food security remains, by far, the combined impact of climate-change and environmental degradation, including land degradation, extreme weather events, pests, soil erosion, water shortages and loss of biodiversity. Consequently, failing to accelerate the transition of the European food system, let alone cancelling environmental safeguards, will bear heavy costs, both financially and societally.
3. With >70% of the EU agricultural area being used for feed and fuel, and with significant feedstuff-imports from abroad, the EU demand has a major effect on global markets. If demands are altered smartly, this can be used to absorb the short-term shock, and at the same time to address a

¹ In the year 2020, the degree of self-sufficiency for beef is 108%, for pork 131% and poultry 106%. See Federal Ministry for Food and Agriculture, 2021, Statistical Yearbook Agriculture, Berlin, pp. 299.

² For grain, BLE is reporting a degree of self-sufficiency of on average 104% for the years 2016/17 to 2018/19, see German Federal Agency for Agriculture and Food (BLE), Report on the Market and Supply Situation Cereals 2020, p.35, <https://bit.ly/3tPZo44>.

possible food-shortage in 2022/3. Here it is essential to question the substantial conversion of grains into fodder and biofuels, whereas they could be used for human consumption.

4. In the medium term and in view of the challenges of food-scarcity in developing countries, some arable land could be used more wisely to respond on medium-term shortages. At the global scale, around 800 Mio. people in 2020 were suffering severe hunger and starvation³, and even many Europeans have been suffering from food insecurity and poverty already before the outbreak of the war. There is large consensus that this is caused by a lack of food access due to low income and insufficient social/economic support schemes, rather than a shortage of production.

With these points in mind, and based on the available evidence, we list several recommendations on measures that can contribute to absorbing the war's shocks:

- a. Put an immediate halt to the obligatory (or subsidized) blending of mineral fuels with biodiesel or bio-ethanol, which are both based on agricultural commodities that could be made available for the world's food supply. Such actions need to be coordinated among the G7, since the US is using substantial shares of their maize production for bio-ethanol.
- b. Scale back subsidies in support of non-essential, intensive land-use. Primarily, we call for the urgent reconsideration of the support for intensive livestock production, particularly "coupled payments" which support intensive animal production that are known to be harmful to the climate and environment⁴, as well as subsidies of biofuels. Instead, the focus should be on supporting circular agriculture, meaning a) using fertile land to grow crops for human consumption, b) feeding animals with waste streams and on marginal lands, and c) switching toward more plant-based consumption.
- c. Release parts of the emergency stocks for grain and maize as targeted food aid to the World Food Program. In the longer-term, the EU should invest in improving access to food among the most vulnerable European citizens by increasing the pressure on Member States to progressively realize the right to food and invest in more generous social support schemes.
- d. Call for reduced dependency not only on fossil fuels but on fuels in general, such as by cutting on non-essential travel or car-use. This is essential not only for reducing the dependence on Russian energy fossil fuels and the potential for mitigating indirect benefits for Russia from the war (through increased fuel prices), but also for reducing the pressure on land. Without such action, efforts to reduce the reliance on fossil fuels may translate into enhanced pressures on land through increased biofuel production, with grave longer-term consequences.
- e. Call on European citizens to reduce their consumption of animal products. To shift toward more sustainable consumption practices on a longer term, complement the Farm to Fork Strategy with more effective instrument mixes to change dietary behavior, including food education, fiscal policy interventions, sustainable procurement, and food environment interventions.

These proposals are fully in line with the Farm to Fork and Green Deal strategies, which stress the need to address both production and consumption sides to achieve a sustainable and resilient food system. To

³ See FAO 2020; Hunger and food insecurity; Food and Agricultural Organization of the UN (FAO), Rome, url: <https://www.fao.org/hunger/en/>

⁴ Jansson, T., I. Nordin, F. Wilhelmsson, P. Witzke, G. Manevska-Tasevska, F. Weiss and A. Gocht 2021: Coupled Agricultural Subsidies in the EU Undermine Climate Efforts, *Applied Economic Perspectives and Policy* 43, 4, p.1503-1519, <https://doi.org/10.1002/aep.13092>

realize the above recommendations, these strategies would have to be complemented with additional policy actions, both at EU, national and international levels.

In summary, we wish to express our deep concern in light of various political actors currently calling to re-open the Farm to Fork and reverse important environmental elements of the CAP. We must warn that these calls are not aligned with science and the evidence of cause and effects, nor with the actual uses of land in Europe. We regard these calls as misleading, and they must be examined with great caution vis-à-vis scientific facts. Otherwise, the risk is that misguided responses to short-term shocks can lead to long-term damages that we may severely regret.

We stand ready to support the Commission and the ministries with relevant evidence and advice where required, and call for an urgent meeting to discuss the scenarios ahead and their short-, mid- and long-term implications.

Sincerely,



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