Executive summary

The war that began on 24 February 2022 has caused extensive damage and loss of life in key population centres, spread across rural areas, and sparked massive displacement. More than 3.6 million people had been forced to abandon their homes and flee across borders to safety. Millions more are internally displaced. It is clear that the war has resulted in a massive, and deteriorating, food security challenge and disrupted livelihoods during the agricultural growing season in Ukraine and has also affected global food security.

Already prior to the war in Ukraine, international food prices had reached an all-time high. This was mostly due to market conditions, but also high prices of energy, fertilizers and all other agricultural services. In February 2022, the FAO Food Price Index reached a new historical record, 21 percent above its level a year earlier, and 2.2 percent higher than its previous peak in February 2011.

The Russian Federation and Ukraine are prominent players in global trade of food and agricultural products. In 2021, wheat exports by the Russian Federation and Ukraine accounted for about 30 percent of the global market. Russia’s global maize export market share is comparatively limited, standing at 3 percent between 2016/17 and 2020/21. Ukraine’s maize export share over the same period was more significant, averaging 15 percent and conferring it the spot of the world’s 4th largest maize exporter. Combined, sunflower oil exports from both countries represented 55 percent of global supply. The Russian Federation is also a key exporter of fertilizers. In 2020, it ranked as the top exporter of nitrogen fertilizers, the second leading supplier of potassium, and the third largest exporter of phosphorous fertilizer.

Nearly 50 countries depend on the Russian Federation and Ukraine for at least 30 percent of their wheat import needs. Of these, 26 countries source over 50 percent of their wheat imports from these two countries. In that context, this war will have multiple implications for global markets and food security, representing a challenge for food security for many countries, and especially for low-income food import dependent countries and vulnerable population groups.

Joint, coordinated actions and policy responses are needed to address the current challenges for the people most in need and to mitigate the impact on food insecurity at global level.
Suggested action by the Council
The Council is invited to note the information and to provide guidance as deemed appropriate.

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I. **Background**

1. The war in Ukraine has already caused extensive damage and loss of life in key population centres, spread across rural areas, and sparked massive displacement. It is clear that the war has resulted in a massive, and deteriorating food security situation in Ukraine, disrupting livelihoods during the agricultural growing season, creating constraints for physical access to inputs, and damage to homes, productive assets, agricultural land, roads and other civilian infrastructure. The war has led to port closures, the suspension of oilseed crushing operations and the introduction of export licensing restrictions and bans for some crops and food products. Key cities are being encircled and continue to experience heavy bombardment, leaving people isolated and facing severe shortages of food, water and energy supplies.

2. The Russian Federation and Ukraine are among the most important producers of agricultural commodities in the world (Figure 1). Both countries are net exporters of agricultural products, and they both play leading supply roles in global markets of foodstuffs and fertilizers, where exportable supplies are often concentrated in a handful of countries. This concentration could expose these markets to increased vulnerability to shocks and volatility.

3. Combined, the two countries, on average and respectively, accounted for 19, 14 and 4 percent of global output of barley, wheat and maize between 2016/17 and 2020/21. In the oilseed complex, their contribution to global production was particularly important for sunflower oil, with just over half of world output originating, on average, in the two countries during this period.

4. In 2021, either the Russian Federation or Ukraine (or both) ranked amongst the top three global exporters of wheat, maize, rapeseed, sunflower seeds and sunflower oil, while the Russian Federation also stood as the world’s top exporter of nitrogen fertilizers, the second leading supplier of potassium fertilizers and the third largest exporter of phosphorous fertilizers.

5. As a result, this war has sent shockwaves through global markets, when food markets are already struggling with soaring prices and the challenges that the world has been facing as a result of the COVID-19 pandemic.

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**Figure 1: Share in global production of selected crops (2016/17-2020/21 Avg.)**

Source: FAO XCBS system

6. Many countries that are highly dependent on imported foodstuffs and fertilizers, including numerous that fall into the Least Developed Country (LDC) and Low-Income Food-Deficit Country (LIFDC) groups, rely on Ukrainian and Russian food supplies to meet their consumption needs. Many
of these countries had already been grappling with the negative effects of high international food and fertilizer prices prior to the war.

II. Food security challenges in Ukraine

7. The war in Ukraine has already caused extensive damage and loss of life in key population centers, spread across rural areas, and sparked massive displacement. Populations in active war zones are facing severe shortages of food, water and energy supplies. As insecurity persists and both local and national supply chains are disrupted, people are likely to fall deeper into hunger and malnutrition.

8. Key immediate areas of concern include:

- disruption to winter harvesting and spring planting;
- agricultural labor availability, impacted by displacement;
- access to and availability of agricultural inputs, particularly fuel, seeds, fertilizers and pesticides;
- disruption of logistics and all elements of the food supply chains;
- abandonment of and reduced access to agricultural land;
- damage to crops due to military activity, especially during vegetative stages in spring; and
- destruction of agrifood system assets and infrastructure.

9. FAO has carried out an initial rapid assessment in 19 areas, with some key findings including:

- food shortages are expected immediately or in the next three months in over 40 percent of areas assessed, and supply of and access to food is a significant issue across all trading sectors;
- fuel availability is a major challenge to both food production and supply chains – just one-fifth of agribusinesses surveyed by the Government indicated that they had sufficient fuel to plant this spring; and
- there is limited availability of critical agricultural inputs including seeds, fertilizers, pesticides and equipment.

FAO’s ongoing humanitarian response in Ukraine

10. FAO already had a significant presence in the country (81 employees), focusing mainly on development issues but with staff also in eastern Ukraine supporting recovery coordination.

11. Since the war began, FAO’s programme has pivoted towards humanitarian programming and, with staff now in relatively safer areas, an additional 12 humanitarian specialist staff have been surged to support the scale-up.

12. FAO’s response programme in Ukraine focuses on four main activities (Figure 2):

(i) immediate support to spring vegetable planting (together with multipurpose cash) for the most vulnerable; (ii) cluster coordination; (iii) planning for broader support to small and medium scale farmers to secure cereal and livestock production and bolster supply chains; and (iv) regular reporting on the food security and agriculture situation within Ukraine.

13. Within the United Nations Flash Appeal, launched on 1 March 2022, FAO developed a rapid response plan requiring USD 50 million to assist about 100 000 vulnerable household family farms (or 240 000 people) for the upcoming spring season. This plan is being implemented within the framework of a longer-term support programme focusing on reinforcing agricultural livelihoods and the agriculture sector in Ukraine.

14. As of 25 March, over USD 5 million had been received, sufficient to assist about 23 000 families with a mix of multipurpose cash and input packages for vegetable and potato production in time for the spring planting season starting in April. If additional resources are made
available now, FAO can quickly expand to reach all those targeted. FAO is already procuring over 744 tons of vegetable and potato seeds. Access and fuel shortages are the main challenges to distributing seeds, and FAO is actively working with the Government and partners to identify solutions.

15. FAO’s interventions build on the Organization’s recent experience in cash transfers in Ukraine, as well as best practices from other contexts, especially those where FAO already has significant cash plus interventions. Planning regarding FAO response activities beyond the Flash Appeal, and looking at potential recovery needs in the agrifood system has been initiated, building on discussions with the Ministry of Agrarian Policy and Food.

16. Globally, through the Director-General’s participation, FAO plays an active role in the Inter-Agency Standing Committee (IASC) Principals’ coordination meetings on Ukraine. This is supported by constant engagement in the IASC Emergency Directors’ Group and other related fora. Inside Ukraine, UN and partner efforts are coordinated through the Humanitarian Country Team. FAO co-leads the Food Security and Livelihoods Cluster, and currently has key staff in place to support these efforts, including a senior cluster coordinator and information manager. At present, of the over 52 partners in the Cluster, FAO is the only organization working on agricultural livelihoods assistance.

17. The situation will require constant monitoring. As such, FAO has already set up a two-tier system, working closely with the Ministry of Agrarian Policy and Food, to identify needs and impediments facing the agriculture sector, as well as those faced by households and internally displaced people. The two tiers of the monitoring system are:

- At the administrative unit (rayon) level – providing an accurate and regular picture of the status of supply chains for agricultural inputs, input prices, market functioning, etc. Data will be collected through key informant interviews and cover the whole of Ukraine. The first round of analyses is expected at end of March, and then on a biweekly basis.
- At the household level – focusing on internally displaced people and host communities in areas in the west: their food security, agricultural impacts and priority needs to protect food production and income

Supporting host communities and refugees in Moldova

18. Following a request from the Government of Moldova, FAO has approved an emergency Technical Cooperation Programme project in support of the Government in responding to shortages of fertilizers, fuel and seeds, and the impacts of the refugee influx.
III. Global agricultural market and global food security

19. The critical role that the Russian Federation and Ukraine play in global agriculture is all the more evident from an international trade perspective. Both countries are net exporters of agricultural products, and they both play leading roles in supplying global markets in foodstuffs, for which exportable supplies are often concentrated in a handful of countries, exposing these markets to increased vulnerability to shocks and volatility. The Russian Federation stands out as the top global wheat exporter, shipping a total of 32.9 million tonnes of wheat and meslin (in product weight), or the equivalent of 18 percent of global shipments. Ukraine stood as the sixth largest wheat exporter in 2021, exporting 20 million tonnes of wheat and meslin and with a 10 percent global market share.

20. The prominence of the two countries in the world trade arena is similarly noteworthy in global markets of maize, barley and rapeseed, and even more so in the sunflower oil sector, where their substantial production bases endowed them with a combined world export market share of close to 63 percent.

21. The high export concentration that characterises food commodity markets is also mirrored by the fertilizer sector, where the Russian Federation plays a leading supplier role. In 2021, the Russian Federation ranked as the top exporter of nitrogen (N) fertilizers, the second leading supplier of potassium (K) fertilizers and the third for phosphorous (P) fertilizers.

22. The Russian Federation and Ukraine are key suppliers to many countries that are highly dependent on imported foodstuffs and fertilizers. Several of these countries fall into the Least Developed Country (LDC) group, while many others belong to the group of Low-Income Food-Deficit Countries (LIFDCs). As exhibited in Figure 3, for instance, Eritrea sourced the entirety of its wheat imports in 2021 from both the Russian Federation (53 percent) and Ukraine (47 percent). The figure also illustrates that wheat imports of many countries situated in North Africa and Western and Central Asia are highly concentrated towards supplies from the Russian Federation and Ukraine. Overall, more than 30 net importers of wheat are dependent on both countries for over 30 percent of their wheat import needs.

23. The upshot is that countries that are highly dependent on the Russian Federation and Ukraine for essential food and fertiliser supplies will need to prepare contingency plans to source from other countries, in the expectation that these countries can exact a rapid supply response.
24. As a result of the significant role played by both Ukraine and the Russian Federation on food exports to the world FAO has identified a series of risks grouped in three groups: (i) risk associated to the food and agriculture market, (ii) macroeconomic risks, and (iii) humanitarian risks. We have looked at the humanitarian risks already, and in the following sections the key risks on agricultural markets and macroeconomic risks will be assessed.

**Trade associated risks**

25. War-induced disruptions to food exports by the Russian Federation and Ukraine expose global food markets to heightened risks of tighter availabilities, unmet import demand and higher international food prices.

26. Based on FAO’s forecasts for the ongoing 2021/22 season (July-June), issued before the war, and on the pace of exports registered to date, Ukraine was expected to export approximately 6 million tonnes of wheat between March and June 2022, while the Russian Federation was anticipated to ship another 8 million tonnes during this period. However, port closures in Ukraine and anticipated sales difficulties in the Russian Federation because of economic sanctions call into question whether these exports will actually be realized. In early March, Ukraine also announced that it would implement license requirements for exports of various commodities, including wheat and maize, although the effect of this measure is likely to be overshadowed by other export limiting factors, such as port closures.

27. Although a sudden and steep reduction in shipments by the two countries could increase exports by alternate origins, such as the European Union and India, the potential for other exporters to fully make-up for lower shipments by Ukraine and the Russian Federation is anticipated to be limited. Indeed, wheat inventories are already especially tight in Canada and the United States of America following reduced harvests in 2021/22.

28. Among other suppliers, Argentina’s exports during the ongoing season will also likely remain limited by Government efforts to control domestic inflation, while Australia has reached its maximum shipment capacity logistically. In such a setting of significantly reduced global export availabilities, other countries could enforce measures (formal or informal) to slow or restrict exports in order to protect domestic supplies and/or address domestic price inflation, as several countries have already announced since the start of the war.

29. The resulting supply gaps for importers may be especially important for buyers in the Near East and North Africa and, given the importance of wheat as a food staple, they could result in some countries increasing imports now in order to secure supplies out of fear that wheat markets will become tighter and that prices will rise further. This would put additional pressure on global markets.

30. Of the top global wheat importers, Egypt, Turkey, Bangladesh and the Islamic Republic of Iran source, on average (2016/17 – 2020/21), 60 percent or more of their wheat imports from Ukraine and the Russian Federation. Based on 2021/22 import forecasts and actual imports for the first half of the marketing year, Egypt, Turkey, Bangladesh and the Islamic Republic of Iran have outstanding imports of approximately 6.6, 4.0, 3.7, and 1.7 million tonnes, respectively, for the second half of 2021/22 marketing season. Lebanon, Tunisia, Yemen, Libya, and Pakistan also rely heavily on wheat originating in Ukraine and the Russian Federation, sourcing on average (2016/17-2020/21) half of their wheat purchases from these origins.

31. As for maize, based on FAO’s forecasts drawn before the war and on available export data to date, for the remainder of the 2021/22 season, Ukraine and the Russian Federation were expected to export approximately 14 million tonnes and 2.5 million tonnes of maize, respectively. As in the case of wheat flows, it is unlikely that these exports, or at least the large majority, will be realized. While maize exports from the Russian Federation do not make up a significant portion of global maize trade, Ukraine’s maize exports in 2021/22 were forecast to make up 18 percent of the 2021/22 global trade in the grain, which would have made the country the world’s third largest maize exporter.
32. Maize supply gaps for importers could be especially relevant for China and the European Union (Ukraine’s primary maize export destinations so far this season), but also for Egypt and Turkey, which on average (2016/17 – 2020/21) source approximately one third of their maize imports from Ukraine. FAO estimates that China, the European Union, Egypt and Turkey have approximately 11.5, 3.7, 4.6, and 1.6 million tonnes, respectively, of outstanding imports for the second half of 2021/22.

**Price associated risks**

33. As measured by the FAO Food Price Index (FFPI), international export quotations of basic foodstuffs have seen near-uninterrupted increases since the second half of 2020 and, in nominal terms, in February 2022 they stood at an all-time high. Although prices of all the commodity groups encompassed by the FFPI¹ have registered gains since the latter part of 2020, the global cereal and vegetable oil markets, in which both Ukraine and the Russian Federation play significant roles, have been amongst those most affected. Over the course of 2021, international prices of wheat and barley rose 31 percent over their corresponding levels in 2020, buoyed by strong global demand and tight exportable availabilities resulting from weather-induced production contractions in various major wheat and barley exporting countries. In the case of wheat, additional support stemmed from uncertainty regarding export measures put in place by selected suppliers in a bid to contain domestic inflationary pressure. In the rapeseed oil and sunflower seed oil sectors, annual price increases registered in 2021 were in the order of 65 and 63 percent, respectively. These increases were spurred by protracted global supply tightness and robust demand, with the latter coming also from the biodiesel sector in the case of rapeseed oil.

34. International benchmark prices of fertilizers rose similarly throughout 2021, with many quotations reaching all-time highs. The most notable increases were registered for nitrogen fertilizer. Prices of urea, a key N fertilizer, have risen by two and a half times over the past 12 months, with prices of phosphorous fertilizer rising in tandem over the same period, while those of potash (K-fertilizer) remained less affected. Similar to other commodity prices, these fertilizer price dynamics were determined by the interplay of supply and demand. On the demand side, the higher output (crop) prices registered in 2021 boosted affordability of fertilizers, thereby influencing fertilizer prices upwards. On the supply side, high and volatile energy prices were also observed, especially for natural gas, which plays a pivotal role in the production of N-fertilizer and the prices of which underwent a sharp increase in 2021 due to a host of reasons, including weather-induced disruptions to renewable energy and coal production. Additional upward pressure on fertilizer prices stemmed from supply disruptions and high transportation costs following the imposition of export restrictions and due to sharp increases in bulk and container freight rates caused by the COVID-19 pandemic.

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¹ The commodity groups covered by the FFPI are cereals, vegetable oils, meat, dairy products and sugar.
The second week of March 2022 saw a notable relaxation in the European gas market, with key quotations for natural gas declining by more than 50 percent from their tops in just 10 days. This allowed prices for urea to stabilize and is likely to re-establish positive upgrading margins for fertilizer producers going forward. That said, with gas prices remaining at levels around four times their long-term average, the main source of fuel for N-fertilizer production – could render once-unprofitable investment in energy production commercially viable, such as fracking installations in the United States of America. This would eventually ease international fertiliser prices.

**Logistical risks**

In Ukraine, there are also concerns that the conflict may result in damages to inland transport infrastructure and seaports, as well as storage and processing infrastructure. This is all the more so given the limited capacity of alternatives, such as rail transport for seaports or smaller processing facilities for modern oilseeds crushing facilities, to compensate for their lack of operation.

More generally, apprehensions also exist regarding increasing insurance premiums for vessels destined to berth in the Black Sea region, as these could exacerbate the already elevated costs of maritime transportation, compounding further the effects on the final costs of internationally sourced food paid by importers.

**Production risks**

Although early production prospects for 2022/23 winter crops in both countries were favourable, the escalation of war casts uncertainty over the winter-cereal harvest in Ukraine. In particular, the war triggered population displacements, caused damage to civil infrastructure and restricts the movements of people and goods, preventing farmers from attending to their fields, harvesting and marketing their crops. This is further to disruptions to essential public services such as provision of water, energy, transport, markets, and banking.

Broad mobilization of military reserves could also decrease the number of agricultural labourers and workers along the supply chains, although steps have been taken in the country to ensure agricultural operations are sufficiently staffed. To these effects, as of early March 2022, the Government of Ukraine introduced policies granting a deferment from conscription during

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mobilization based on submission of a list of critical employees in order to enable them to carry out spring and summer fieldwork in a timely manner.

40. Despite high fertilizer prices, it is likely that large and industrial farmers secured fertilizer supplies necessary for the upcoming months ahead of time. However, a lack of access to fields and lack of fuel could still prevent producers from using the fertilizers. Nitrogenous fertilizers (such as urea and ammonium nitrate) can also be directed to other uses, such as explosives. Even if farmers could have similarly stocked up on pesticides, crop protection materials and other inputs, market disruptions could have prevented them from purchasing an adequate amount of supplies or could do so in the future.

41. In Ukraine, Vinnytsya, Donetsk, Zaporizhzhya, Kirovohrad, Mykolaiv, Kherson and Kharkiv regions accounted for half of total wheat production in 2020. Vinnytsya, Zhytomyr, Kyiv, Poltava, Sumy, Khmelnytskyi, Cherkasy and Chernihiv regions produced 70 percent of the total maize volume harvested, while 60 percent of sunflower seeds were produced by Chernihiv, Kharkiv, Sumy, Poltava, Mykolaiv, Luhansk. Kirovohrad, Zaporizhzhya, Dnipro and Vinnytsya regions\(^3\).

42. Overlapping the most productive agricultural areas of Ukraine with possible scenarios of the territorial spread of the war, in early March, FAO anticipated that 20 percent of winter planted areas may not be harvested as a result of direct destruction, constrained access or lack of economic resources. Yet, more recent assessments issued by local sources put these area losses at 28 percent, anticipating that out of 7.6 million hectares planted with winter wheat, rye and barley, only 5.5 million hectares could be available for harvesting\(^4\).

43. FAO’s expectations regarding yield outcomes for winter-cereals are also negative, pointing to national yields falling 10 percent below average levels due to delayed or missed application of fertilizers and an inability to control pests and diseases. The lower yields would be in addition to potential harvest delays and greater postharvest losses that could occur due to labour force shortages or from a lack of storage infrastructure.

44. As for upcoming agricultural activities, sunflower and spring cereals, including maize, will be planted from April onwards, while the 2022/23 rapeseed sowing season will not open until September 2022.

45. Available information on input availability for these crops in Ukraine paints a mixed picture. According to estimates issued by the Ministry of Agriculture of Ukraine, 80 percent of Ukrainian farms would have sufficient fertilizer stocks for the spring planting campaign, considering expected decreases in planted areas. As for seeds, although volumes available (comprising both local and imported seeds) would be sufficient to plant 70 percent of the anticipated spring area, their safe delivery to farmers was perceived as a major challenge\(^5\).

46. While livestock and poultry rearing as well as production of high value crops, such as fruits and vegetables, could also be constrained in Ukraine, for both maize and sunflower seed, early March forecasts issued by FAO indicated that, compared to 2021, 30 percent less area could be planted in spring 2022, with yields likely declining 20 percent below average levels. Expected cuts in sunflower seed plantings were also linked to infrastructural factors. Instead of producing crops to be exported as oil and given the risk of deteriorating export infrastructure and crushing plants, farmers – particularly those cultivating smaller extensions – could choose to plant crops that are more directly relevant to local food security, such as potatoes or spring wheat. Nevertheless, much like winter wheat expectations, local sources in Ukraine forecast even greater area cuts for these crops, putting them at 40 percent for spring grains and at 35 percent for sunflower seed\(^6\). Meanwhile, forecasts by the

\(^3\) ukrstat.gov.ua
\(^5\) https://www.csis.org/events/agriculture-and-food-security-casualties-war-ukraine
\(^7\) https://www.apk-inform.com/en/news/1525713
Ministry of Agrarian Policy and Food of Ukraine indicate that Ukrainian farmers will plant 50 percent of planned spring area with certainty, whereas planting of about 20 percent of the planned area remains questionable, and the balance would be highly unlikely to be planted.

**Energy risks**

47. The Russian Federation is a key player in the global energy market. As a highly energy-intensive industry, especially in developed regions, agriculture will inevitably be affected by the sharp increase in energy prices that has accompanied the conflict.

48. Agriculture absorbs high amounts of energy directly, through the use of fuel, gas and electricity, and indirectly, through the use of agri-chemicals such as fertilisers, pesticides and lubricants.

49. With prices of fertilizers and other energy-intensive products rising as a consequence of the conflict, overall input prices are expected to experience a considerable boost. The higher prices of these inputs will first translate into higher production costs and eventually into higher food prices. They could also lead to lower input use levels, depressing yields and harvests in the 2022/23 season, thus giving further upside risk to the state of global food security in the coming years.

50. Higher energy prices also make agricultural feedstock (especially maize, sugar and oilseeds/vegetable oils) competitive for the production of bioenergy and, given the large size of the energy market relative to the food market, this could pull food prices up to their energy parity equivalents.

**Exchange rate, debt, and growth risks**

51. The Ukrainian hryvnia reached a record low against the United States dollar (USD) in early March 2022, with likely repercussions for Ukrainian agriculture, including a boost to its export competitiveness and curbs on its ability to import.

52. Although their extent remains unclear at this stage, conflict-induced damages to Ukraine’s productive capacity and infrastructure are expected to entail very high recovery and reconstruction costs.

53. The economic sanctions imposed on the Russian Federation have also led to a significant depreciation of the Russian rouble. Although this should make Russian exports of agricultural commodities more affordable, a lasting rouble depreciation would negatively affect investment and productivity growth prospects in the country.

54. Weakening economic activity and a depreciated rouble are also expected to have serious effects on countries in Central Asia through the reduction of remittance flows, as for many of these countries remittances constitute a significant part of gross domestic product (GDP).

55. The current conflict may also have global spillovers. While its impact on the global economy remains uncertain at this stage and will depend on several factors, the most vulnerable countries and populations are expected to be hit hard by slower economic growth and increased inflation, at a time when the world is still attempting to recover from the recession triggered by the COVID-19 pandemic.

56. Agriculture is the backbone of the economies of many developing countries, the majority of which rely on the United States dollar for their borrowing needs. As such, a lasting appreciation of the USD vis-à-vis other currencies may have significant negative economic consequences for these countries, including for their agrifood sectors. Moreover, the potential reduction of GDP growth in several parts of the world will affect global demand for agrifood products with negative consequences.

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for global food security. Lower GDP growth will also likely reduce the availability of funds for development, especially if global military expenses increase.

IV. Policy recommendations

57. The conflict in Ukraine is raising significant concerns over its potential negative impact on food security, both domestically and internationally. Domestically, the escalation could directly constrain the countries’ agricultural production, which, coupled with limited economic activity and increasing prices, could undercut the purchasing power of local populations. Globally, were it to result in a sudden and prolonged reduction in food exports by either country, the war could exert additional upward pressure on international food commodity prices to the detriment of low-income food-deficit countries (LIFDCs), in particular. In order to avert this set of circumstances from materializing, it would be advisable to:

a. **Keep trade in food and fertilizers open** by preventing the war from negatively affecting productive and marketing activities in both countries in order to enable them to meet domestic production and consumption needs, while also satisfying global demands. In order to ensure that supply chains continue to function properly or are in a position to resume operations swiftly, such efforts should include steps to protect productive assets, including standing crops, livestock, inputs and machinery, from damage or any war-induced disruption. This must also extend to food processing infrastructure, such as grain mills and oilseed crushing facilities, as well as ancillary storage, transportation and distribution systems.

b. **Find new and more diverse food supplies.** Countries that directly rely on food imports from Ukraine and the Russian Federation will have to absorb the shocks and remain resilient. This can be attained by relying on other international trade sources, since countries that import foods from many different trade partners are less vulnerable to place-specific shocks. It can also be achieved by relying on existing food stocks and by enhancing the diversity of domestic production to ensure the supply of food necessary for healthy diets.

c. **Support vulnerable groups, including internally displaced people.** In line with the FAO Ukraine Rapid Response Plan, March-May 2022⁹, such efforts should include:

i. **Support for internally displaced people, refugees and those directly affected by the war.** Until the start of the war, Ukraine’s social protection system was reaching 30 percent of the population and 77 percent of the poorest quintile.¹⁰ The government of Ukraine has stated that despite the disruptions caused by the ongoing hostilities, it will continue to provide social protection support (cash benefits and subsidies) to its population, in accordance with information contained in the Unified Social Information System. Payments will be made electronically to beneficiaries’ bank accounts¹¹. In addition, the Federation of Trade Unions of Ukraine (FPSU) and the Confederation of Free Trade Unions of Ukraine (KVPU) have joined in efforts to provide for people’s basic needs by providing food and shelter. The population in need of social protection support is larger than that reached by the national system and reaching them is difficult due to security risks and mobility – within and beyond national borders. The social protection response can come through the national system and, for those that have crossed international borders, through the social protection systems of host countries.

ii. **Support for vulnerable groups.** More specifically, steps should be taken to: Monitoring prices and food security outcomes of groups that were already vulnerable before the war.

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escalation, as well as groups pushed into hunger and poverty by deteriorating economic conditions resulting from the war and the respective increase in prices, in both urban and rural areas. Providing timely and well-targeted social protection interventions to alleviate the hardship caused by the war on affected local populations and to foster a recovery from it. In doing so, due consideration should be given to the fact that high prices of food and energy are regressive on poor consumers (since a larger share of their disposable income is spent on these necessities), as they may entail a reduction in quantities and/or qualities of food consumed, thereby leading to more hunger and malnutrition, or less money for other necessities such as health and education. Curtailing such important expenditures could send communities into a vicious cycle of deepening and entrenching food insecurity and poverty, with potentially irreversible effects.

d. **Avoid ad hoc policy reactions.** Measures put in place in countries affected by potential disruptions ensuing from the war must be carefully weighed against their potentially detrimental effect on international markets in the short-term and over the longer term. For instance, while reductions in import tariffs and/or the use of export restrictions could help improve availability in domestic markets in the short term, they would inevitably add to the upward price pressure on international markets and exacerbate the situation globally. Ad hoc policy measures must always be avoided.

e. **Contain the spread of African swine fever (ASF)** by: (i) improving biosecurity and good husbandry practices; (ii) ensuring measures are taken to facilitate early detection, timely reporting and rapid containment of the disease, as delays can lead to a rapid spread of the diseases; (iii) implementing surveillance schemes that support detection of ASF in both pigs and wild boars; and (iv) implementing targeted sampling of animals rendering a higher likelihood of detecting the virus.

f. **Strengthen market transparency and dialogue.** Global market transparency plays a key role when agricultural commodity markets are under uncertainty and need to adjust to shocks affecting supply and demand. Initiatives like the G-20’s Agricultural Market Information System (AMIS) strive to increase such transparency through the provision of objective, timely and up-to-date market assessments that enable informed policy decisions. Through its Rapid Response Forum, AMIS also provides a unique platform for policy dialogue and coordination among members (which include the Russian Federation and Ukraine). Policy dialogue and coordination are necessary to minimize disruptions and ensure that international markets continue to function properly and that trade flows efficiently in order to meet global demand and safeguard food security.