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Lessons from European agriculture's dependence on imported fertilizers

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On Tuesday 19 May, the European Commission published its fertilizer action plan, which aims to address problems of fertilizer availability and cost on European soil. The plan comes against a backdrop of rising fertilizer prices, driven largely by the closure of the Strait of Hormuz, which has once again exposed the vulnerability of European agriculture to ever more frequent market disruptions. This blog post examines the risks of these strategic dependencies and identifies two levers to reduce the vulnerability of European farmers. To support their implementation, IDDRI sets out four recommendations in this Policy Brief (IDDRI, 2026).

The closure of the Strait of Hormuz: one incident is enough to destabilize Europe's agricultural economy

The European Union (EU) consumes around 10 million tonnes of synthetic nitrogen fertilizers each year, of which nearly half is imported. The remaining half is produced from inputs (ammonia and natural gas) that are themselves largely imported. The EU's direct dependence on resources transiting through the Strait of Hormuz is in fact limited: it imports nitrogen fertilizers mainly from Russia, Egypt and Algeria, and natural gas from Norway, the United States and Algeria. Even so, the closure of the strait has pushed nitrogen fertilizer prices up sharply, hitting European farmers hard: prices on the common market have risen by 37.5%, from €400/tonne in January 2026 to €550 in April. Some forms of nitrogen fertilizer have climbed even more steeply, with urea jumping from €540/t at the start of the year to €822/t in May 2026.

These are still well below the prices seen in 2022, when the war in Ukraine broke out and nitrogen fertilizers crossed the €1,200/t mark, with the EU at that point importing nearly half its fertilizers from Russia, Belarus and Ukraine. But fertilizer purchases account on average for 16% of European cereal farmers' operating costs, which makes a price rise of more than a third in 2026 a major economic shock. French cereal farmers' margins, for example, could be halved in 2026 as a result.

A food system marked by multiple dependencies

Mineral fertilizers are an essential component of today's European agricultural system: they deliver the high yields that underpin farms' productivity and, in turn, their competitiveness in ever more contested markets. They are also key to ensuring that crop production meets the standards of the agri-food industry. The EU's low self-sufficiency in synthetic nitrogen fertilizers is therefore a genuine strategic dependency.

The situation is even more critical for other mineral fertilizers (potassium and phosphate), as well as for plant proteins (mainly in the form of soya) and the amino acids used in animal feed. Other inputs, also largely imported, potentially add to the sector's vulnerability: vitamins and vaccines for livestock, plant protection products, seeds, and fuel. While the European Commission's Vision for agriculture and food (2025) does identify these dependencies, the pathways for reducing them remain unclear and, above all, receive little attention.

Circularity and diversification: two levers for reducing the vulnerability of agricultural systems

To reduce the vulnerability of agricultural systems to these dependencies, two key levers command broad consensus: greater diversity in production, particularly in crops; and a higher degree of circularity, particularly in nutrient management. Diversification helps to spread risk through a more varied production portfolio, increases EU autonomy in critical sectors and, where it allows the development of nitrogen-fixing plants such as legumes, reduces reliance on nitrogen fertilizers. Circularity, meanwhile, aims to recycle as much as possible of the nutrients already present in the food system, by making better use of various "co-products" with fertilizing potential (livestock effluents, organic waste), thereby cutting losses and reducing the need for imported fertilizers at the same time.

Increasing the circularity and diversity of the food system, however, does not depend on farmers alone. It requires a significant reorganization of value chains. Complex as such changes are, they are essential if European agriculture is to be made structurally less vulnerable to the range of hazards to which the sector is highly exposed but often powerless to respond. Such a shift would, moreover, bring greater stability and predictability to farmers' incomes, while making a significant contribution to the environmental transition that European agriculture must undertake.

Two levers that also have environmental and economic implications

Environmentally, circularity and diversification offer substantial potential. Greater diversity in crop rotations reduces the need for pesticides, for instance, which helps biodiversity recover. Savings on nitrogen fertilizers cut ammonia emissions, improving air quality, and also reduce emissions of nitrous oxide, a potent greenhouse gas.

However, few farmers and processors currently see diversification and circularity as economically attractive approaches. Among the reasons: higher production costs linked to more complex work, potentially lower yields, and poorly structured market outlets. These approaches only become economically sound risk management strategies once the system is hit by so many hazards that it can no longer deliver secure, predictable farm income. Even then, they still entail risk-taking on the part of farmers and other value chain actors, alongside investments that are sometimes costly. Public action is therefore required to provide economic support and to help structure value chains.

Improving risk and crisis management in the post-2027 MFF and CAP

European and national stakeholders are currently negotiating the multiannual financial framework (MFF) and the common agricultural policy (CAP) that will be in force from 2028 to 2034. The Cypriot presidency has made risk and crisis management a priority of its mandate,[1] as has the European Commission. The proposed solutions,[2] however, do not directly address the EU's strategic dependencies. The legislative proposals for the 2028-2034 period focus mainly on the *ex-post* management of risks, rather than on reducing farms' and Member States' exposure to hazards, or reducing their vulnerability through a preventive approach.

This is why IDDRI sets out four recommendations (IDDRI, 2026) aimed at strengthening the preventive dimension of the risk and crisis management architecture of the post-2027 MFF and CAP, with a particular focus on diversification and circularity.

1

Cyprus holds the rotating presidency of the Council of the EU from January to June 2026.

2

For an analysis of the European Commission's proposals for the post-2027 MFF and CAP, see: Régnier, E., Catallo, A., & Aubert, P.-M. (2025). *European Financial Framework 2028-2034: Key issues for the agricultural sector* (Issue Brief No. 5). IDDRI.