

Impact analysis of the war in Ukraine

First report dated 10 March 2022
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This research was carried out by Wageningen Environmental Research and commissioned and subsidised by the Dutch Ministry of Agriculture, Nature and Food Quality, in the context of the Policy Support and research theme 'Economy'
Wageningen Economic Research Wageningen, March 2022

POLICY DOCUMENT 2022-031



R. Bergevoet, G. Jukema and D. Verhoog, 2022. *Impact analysis of the war in Ukraine; First report dated 10 March 2022.* Wageningen, Wageningen Economic Research, Policy Document 2022-031. 36 pp.; 19 fig.; 6 tab.; 0 ref.

This policy document provides insight into the export of agricultural products from Ukraine, Russia and Belarus. It also provides insight into the trade flows of agricultural goods between the Netherlands and these countries and an initial insight into the number of non-EU residents employed in agricultural production and agro-logistics.

Keywords: Ukraine, Russia, agricultural goods, import, export

This policy document can be downloaded for free at https://doi.org/10.18174/568026 or at www.wur.eu/economic-research (under Wageningen Economic Research publications).

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Wageningen Economic Research Policy Document 2022-031 | Project code 2282300554

Cover photo: Marte Hofsteenge

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Introduction 1

On Thursday, 24 February 2022, Russia invaded Ukraine. In addition to being a humanitarian and military crisis, the war and the measures announced against Russia and Belarus have had an impact on food prices and food supply, both regionally and globally. There are also consequences for Dutch and European agrofood sectors, including the processing industry.

Wageningen Economic Research was asked by the Dutch Ministry of Agriculture, Nature and Food Quality (LNV) to map the effects of this conflict on agricultural production and food security. Consideration is given to the short (<6 months), medium (6 months-2 years) and long term (>2 years).

The beginning of a crisis is always characterised by a great deal of ambiguity. There is often a lack of uncertainty about what is going on, what is going to happen, what decisions need to be made and when. These are uncertain times for decision makers, in both government and industry. As such, there is a great need for information to support decision making. While researching, we carried out and will continue to support decision makers by providing and interpreting information, and evaluating a number of future scenarios. We are well aware that in the early stages of crises, the speed and availability of information may be more important than completeness and extensive reflection. However, maximum effort should be made to ensure that incorrect information is avoided.

The results of this research are presented in a number of reports. For them, we use data, expert knowledge and models. It is also true for researchers that, at the beginning of crises, important details are missing at the time of analysis and estimates of the situation and its consequences must be made based on available professional knowledge and experience. As more information becomes available, these estimates should be re-evaluated and may need to be readjusted.

This document is a preliminary report and will therefore evolve in the near future, be supplemented by new research and be adjusted based on new information.

In this initial report, we provide insight into the trade flows of agricultural products and an initial insight into the number of non-EU residents working in agricultural production and agro-logistics.

Subsequent reports will address:

- key problems for the international food supply
- key problems for the EU and the Netherlands in the various agricultural value chains
- · the possible impact of the war in Ukraine on the production and export of agricultural goods by Ukraine
- the possible consequences of boycotts against Russia and Belarus
- the possible changes to international markets and trade flows.

Trade in agricultural goods

The first two chapters of this report devote a great deal of attention to trade in agricultural goods. In the statistics, agricultural goods are divided into both raw (primary) and processed (secondary) goods. An example of a product in the primary agricultural goods category is milk; cheese is an example of a secondary agricultural good.

These are the first 24 chapters of the CN trade document¹ plus a number of residual products that are collected in another group. The division between primary and secondary chapter divisions in the CN trade document is somewhat arbitrary.

The Commodity Code Lists are defined by Eurostat in the Combined Nomenclature (CN), The Combined Nomenclature contains the classification of commodities prescribed by the European Union for statistics on the International trade in Goods. The CN has an eight-digit format. The annual changes are due to adjustments required for both customs and statistics. https://www.cbs.nl/nlnl/onze-diensten/methoden/classificaties/producten/qoederennaamlijst-internationale-handel

There are also (non-edible) goods produced for the benefit of the agricultural sectors at home or abroad; 'tertiary' or 'agriculture-related' goods. This only concerns products that can be directly attributed to the agricultural sectors. One example is the tractor group. However, there are also products that cannot be attributed to a specific sector. The use of drones in the agricultural sector, for example, cannot be seen in trade figures because drones can be used by all kinds of non-agricultural economic sectors.

Used databases

This report is based on the analysis of international trade data. The analysis in Chapter 2 uses the Comtrade database and SITA, a tool for international trade. The figures from this database are less detailed than the data from the Comtext database presented in Chapter 3.

The definition of 'agricultural' in Comtrade is also less detailed than in Comtext. There is also a different definition of what constitutes an export, and therefore what counts in the figures. In the Comtrade database and SITA, transport is not included in the figures.² In Eurostat/Comext, it is. The figures in Comtrade are also frequently less up to date than in Comtext. TRACES data was used to analyse trade in biological goods with Ukraine, Russia and Belarus.

For the analysis and content of this report, a number of important trade flows have been mapped out. Given the multitude of products, choices have been made about the most relevant ones. We refer interested readers who want to dive deeper into Comtext data to this website.3

In this report, the volume of trade is expressed in euro and not in volume. The above-mentioned website analyses trade in terms of volumes.

The Comtrade and Ciomext data do not allow products to be distinguished on the basis of specific qualities or characteristics, such as GMO free or organic. Organic product flows are recorded in the TRACES system. Chapter 5 describes the trade in organic raw materials in more detail. As such, the available data do not allow for an analysis of the trade in GMO free agricultural goods.

The data also do not allow for insight into the possible transit of Dutch products through EU member states or countries outside the EU to other countries (e.g. the transit of Dutch seed potatoes bound for Uzbekistan that travel through Russia). The data do not give any insight into the extent of possible transit through other countries to avoid possible trade embargoes or intensive import checks either.

 $^{^{\}rm 2}\,$ Transit is not part of the figures in the CBS database either.

In addition to providing insight into trade with Ukraine, Russia and Belarus, this website also provides information on trade with a number of other non-EU countries close to Russia and Ukraine.

Global agricultural exports of Ukraine, 2 Russia and Belarus

2.1 Ukraine

Export of agricultural goods

The export value of Ukrainian primary and secondary agricultural goods in 2020 was EUR 19.4 billion. Over the last two years, exports have been at a higher level than between 2012 and 2018 (Figure 1.1).

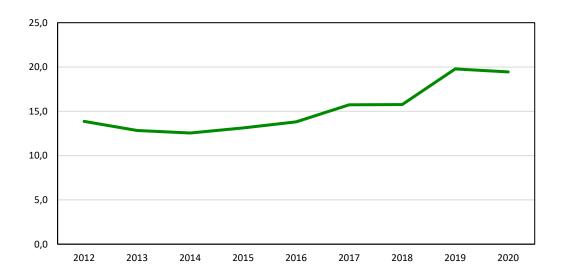


Figure 1.1 Export value of primary and secondary agricultural goods (Chapters 1-24) from Ukraine in

Source: Comtrade/Wageningen Economic Research (database SITA).

Major export destinations

With a total export value of EUR 5.4 billion in 2020, the EU is Ukraine's most important trading partner. If we look at individual countries,

- · China is the most important export destination for primary and secondary agricultural goods (based on the 1-24 trade groups). In 2020, EUR 3.1 billion worth of goods were sent there. This was a significant increase over the previous two years. In 2018, the amount was less than one billion (EUR 991 million).
- India is the second most important export destination, worth EUR 1.3 billion in 2020.
- The Netherlands is Ukraine's third most important export destination. The export value was worth just over EUR 1.2 billion.
- Egypt is number four, valued at just under EUR 1.2 billion.
- Turkey (EUR 934 million), Spain (EUR 860 million), Poland (EUR 665 million), Germany (EUR 503 million), Indonesia (EUR 496 million) and Italy (EUR 495 million) complete the top ten.

These countries account for 56% of Ukraine's total export value. Exports to China account for 16%. India, 7% of the total, and the Netherlands and Egypt account for 6%. Spain accounts for 4%, and the other countries in the top ten account for a rounded 3%.

Most important export products

The most important trade group for Ukraine's exports is grain. Of the EUR 19.4 billion, EUR 8.2 billion are grain exports (over 42% in total). 25.9% of the export value comes from the trade group animal and vegetable oils. Two other important product groups are oilseeds (EUR 1.6 billion) and animal feed

(EUR 1.4 billion). Respectively, these two product groups account for over 8% and 7% of the total amount exported in 2020. Together, these product groups account for almost 84% of Ukraine's total export value.

Looking at the export products in less detail, maize (from the grains tradegroup) is Ukraine's most important export product, with a value of EUR 4.3 billion, closely followed by sunflower and safflower oil, with a value of EUR 4.1 billion. Wheat is export product number three, valued at EUR 3.1 billion. The fourth export product is sunflower oilcake (animal feed) worth EUR 1 billion, followed by rapeseed (EUR 865 million), barley (EUR 768 million), then soybeans (EUR 604 million). In eighth place is sunflower oil and safflower oil. This instance concerns refined versions of these products. Place number nine is taken by cigarettes, valued at EUR 272 million and place number ten in 2020 was (frozen) chicken meat. These ten products account for 81% of all export value.

Export product groups by country

China is the main export destination for Ukrainian grain. Exports almost doubled in 2020 compared to 2019. With a value of EUR 1.6 billion, grain accounted for 52% of export value to China in 2020. Animal and vegetable oils (31%) were also significant, valued at EUR 975 million in 2020. Animal feed made up another EUR 427 million in export value and 14% of the total.

- Exports to India consisted almost entirely of grain. It represents 97% of the total, and EUR 1.3 billion of the total value.
- A wider range of products is exported to the Netherlands. But here too, it was mainly animal and vegetable oils (37%), with a value of 463 million, grains (37%), with a value of EUR 454 million, and oilseeds (13%) EUR 165 million, as of 2020. In the next chapter, the trade in agricultural goods between Ukraine and the Netherlands is discussed in greater detail.
- Ukraine's exports to Egypt also mainly consist of grains (82%). The value of this export flow was EUR 980 million in 2020.
- Exports to Turkey, as is the case for the Netherlands, mainly consists of grains (44%) and oilseeds (25%). The export of animal feed is also important (17%). The values of this flow are EUR 414, 238 and 163 million, respectively.
- Exports to Spain mainly consist of grains (55%) and vegetable oils (35%).
- Poland sources a wider range of products from Ukraine. But here too, the most important trade groups are animal and vegetable oils (36%) and feed (20%).
- Of the goods exported to Germany, around 60% are oilseeds, which, together with grains (11%), are the two most important export goods.
- Almost 100% of the export value from Ukraine to Indonesia is grains, with a value of EUR 479 million.
- Animal and vegetable products are the main products exported to Italy.

2.2 Russia

Export of agricultural goods

Russia's export value in 2020 was EUR 24.8 billion of agricultural primary and secondary goods. The export value is rising considerably. In 2012, the export value was still EUR 13 billion (Figure 1.2).

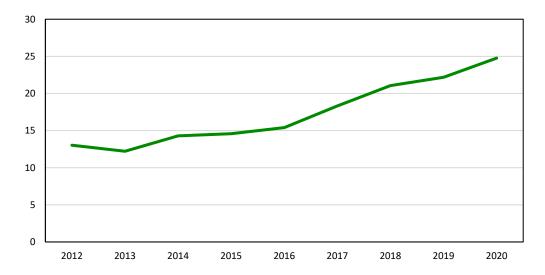


Figure 1.2 Export value of primary and secondary agricultural goods (Chapters 1-24) for Russia in billions of euros

Source: Comtrade/Wageningen Economic Research (database SITA).

Major export destinations

Russia's most important agricultural trading partner is China. With EUR 3.4 billion in export value, China has a 14% share of Russia's agricultural goods exports. Turkey is number two, worth EUR 2.7 billion, and a total share of 11%. Kazakhstan follows with EUR 1.8 billion, and Egypt is number four in terms of export value, at EUR 1.7 billion. Both countries had a 7% share of total export value in 2020. The Republic of Korea is number five at EUR 1.5 billion (6%). Belarus is the sixth largest export destination for agricultural goods, at EUR 1.2 billion (5%). Then comes the Netherlands at EUR 868 million (4%). In 2020, Ukraine was number eight. Saudi Arabia and Azerbaijan complete the top ten, both with a 2% share of the total. The last three countries represent EUR 660, 604 and 604 million respectively. These countries together account for 61% of total agricultural primary and secondary trade goods. Russia's export value to the EU-27 countries was EUR 2.7 billion in 2020.

Most important export products

When it comes to primary and secondary agricultural trade groups, with 33% of the total, grains are Russia's most important export product group. Russia exports just over EUR 8.2 billion of grain. Fish makes up 16% of Russia's export value (EUR 4 billion), and animal and vegetable fats 14% (EUR 3.4 billion); both are important product groups for Russia's exports. The oilseeds category occupied fourth place in 2020, valued at EUR 1.4 billion. Animal feed is also an important product, valued at EUR 1.2 billion. Collectively, these five groups account for 71% of Russia's export value.

If we analyse these products at the six-digit level, wheat is by far the most important, worth 28% of the total export value. Its export value was EUR 6.9 billion in 2020. It was followed by sunflower oil and safflower oil (crude) with 6%, and a value of EUR 1.6 billion. Crabs (EUR 819 million), barley (EUR 785 million), frozen fish (EUR 780 million), sunflower and safflower (refined only) (EUR 571 million), shellfish (EUR 571 million), sunflower seeds (EUR 492 million), raw rapeseed and rapeseed oil (EUR 468 million) and prepared cocoa (EUR 434 million) completed the top ten. Together, these products account for 54% of the total export goods flow.

Export product groups by country

A large portion of Russia's exports to China are fish products – around 40% of the export value is fish products. Of the export value, 28% consists of products from the vegetable and animal fats trade group, and these products have a combined value of EUR 950 million. Oilseeds are number three with a share of 15% and a value of just under EUR 500 million. The export value of these goods has risen substantially in recent years. Since 2019, meat and meat by-products have also been an important export product from Russia to China. In 2020, exports amounted to EUR 274 million, due to a substantial increase in demand for pork owing to the many outbreaks of African swine fever in China.

Turkey is Russia's second largest export destination for primary and secondary agricultural goods. More than 60% of the goods exported to Turkey are grains. The value was around EUR 1.7 billion. Other important products are animal and vegetable oils, with 15% and EUR 400 million in export values, and oilseeds with EUR 261 million (10%) and EUR 235 million in animal feed (9%).

Kazakhstan imports a wide variety of agricultural products from Russia. There is no single product category that really stands out, so it is not be elaborated on.

Egypt is Russia's fourth largest export destination. It owes this status to the amount of Russian grains it imports. Grain is also practically the only product that Egypt buys from Russia; it accounted for 92% of the total export flow, valued at EUR 1.6 billion in 2020.

The same pattern can be seen with the Republic of Korea. Exports account for EUR 1.4 billion.

Belarus imports a wide range of products from Russia. Oilseeds, a group of products described as various products for human consumption, grain preparations, milk and flour, animal and vegetable fats are the most important five product groups, of which the most important group has a share of 13% of the total EUR 1.2 billion export value to Belarus.

The Netherlands is also an important export country for Russia. Of the exports to the Netherlands, 81% are fish products, 9% are animal feed and 4% are animal and vegetable fats. The following chapter describes the trade in agricultural goods between Russia and the Netherlands in greater detail.

Exports to Saudi Arabia are also unbalanced. More than 82% of the total trade between the two countries consists of grain.

2.3 Belarus

Export of agricultural goods

The export value of agricultural products from Belarus was around EUR 5 billion in 2020. The export value has increased in recent years.

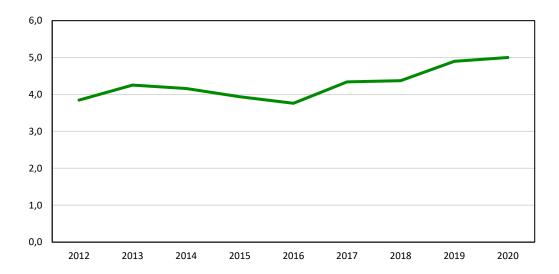


Figure 1.3 Export value of primary and secondary agricultural goods (Chapters 1-24) from Belarus in billions of euros

Source: Comtrade/Wageningen Economic Research (database SITA).

Major export destinations

Belarus's most important export destination by far is Russia. Russia accounts for around three quarters of its export value. The second largest export destination is Kazakhstan, which had a share of 5% in 2020. China, Ukraine, Poland, Uzbekistan, Norway, Latvia and Azerbaijan complete the top ten. China has a share of 4%, Ukraine 3%, Lithuania 2% and the other countries each have a share of around 1%.

Most important export products

The most important trade groups are dairy products and eggs, with an export value of EUR 2.1 billion. Meat follows next, worth EUR 713 in export value. The third export group is meat and fish preparations, with a value of EUR 341 million, animal and vegetable oils and fats have an export value of EUR 298 million. Vegetables have an export value of EUR 224 million.

At the lowest aggregation level is processed and blue cheese (grated), butter, milk powder, rapeseed oil, fresh cheese, beef (both frozen and fresh), soy oilcake, buttermilk, sugar and chicken meat. Together, these products account for 52% of the total export value.

Export product groups by country

Dairy products make up the largest part of Belarus' exports to Russia (48%); EUR 1.8 billion of dairy products were exported to Russia in 2020. Meat accounts for EUR 465 million (12%), and meat and fish preparations for EUR 287 million (7.6%). Animal feed worth EUR 169 million was exported to Russia, vegetables and potatoes worth EUR 157 million. Animal and vegetable fats account for a share of 3.9% and EUR 148 million.

Exports to Kazakhstan consist mainly of meat and dairy products. Both products account for 35% and 34% of total exports to Kazakhstan respectively. The amounts are modest, at EUR 84 million and EUR 80 million respectively. Sugar and meat and fish preparations are relatively important, with EUR 29 million and EUR 22 million of the total export value to Kazakhstan respectively.

An increasing amount of meat and offal has been exported to China since 2018. There was no trade for this product with China in 2017. By 2020, it rose to become the most important trade group with this country, valued at EUR 99 million. Another EUR 78 million worth of dairy and eggs were exported to China. Together, the two trade groups account for 82% of the total trade value between Belarus and China.

3 Insight into trade flows

This chapter contains an initial brief analysis of export and import flows to Ukraine, Russia and Belarus. Figures for December 2021 are not yet available for intra-EU trade. As such, the mentioned shares of the total export value of the Netherlands are based on the year 2020. The analysis was carried out using Eurostat data (Comext) in terms of values (euro). This is Dutch exports including transit, so it deviates slightly from CBS figures, which only represent Dutch manufacturing and re-exports.

3.1 Trade between the Netherlands and Ukraine

Summary

Total exports from the Netherlands to Ukraine totalled EUR 1.3 billion in 2021. Of this, EUR 831 million (63%) accounts for non-agricultural goods. The export of primary and secondary agricultural goods amount to EUR 394 million. The most important agricultural exports in 2021 were cacao, ornamental horticultural products, tobacco, dairy and eggs. In terms of shares per product, exports to Ukraine are limited: less than 2%. The export of related agricultural goods (tertiary goods, such as tractors, greenhouses, fertilisers, etc.) was around EUR 88 million in 2021.

The total import value from Ukraine for the Netherlands is just under EUR 2.5 billion. This total consists of EUR 1.8 billion of agricultural goods, EUR 572 million of non-agricultural goods and EUR 7 million of tertiary goods. The main agricultural imports in 2021 were animal and vegetable fats and oils, grains, oilseeds and meat and meat by-products.

The largest share of a product from Ukraine is grain, with 19%.

Total export

In 2012, total exports amounted to EUR 1.3 billion. Exports halved in 2014, likely due to the unrest in Crimea that occurred at the time. There was a gradual recovery after 2014.

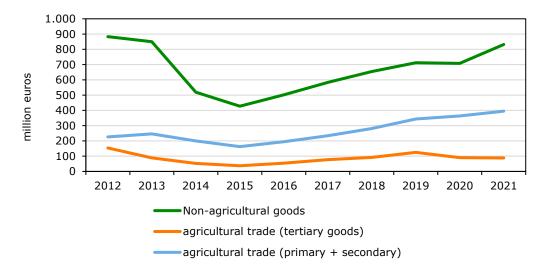


Figure 3.1 Exports from the Netherlands to Ukraine Source: Eurostat, Comext, edited by Wageningen Economic Research.

The total export value to Ukraine had a 0.2% share of the Netherlands' total export value in 2020. For nonagricultural goods, the share was 0.1% of the total. It was somewhat higher for tertiary goods, at 0.7%. In 2020, the share of agricultural goods was 0.4 of total Dutch agricultural goods exports.

Export of primary and secondary agricultural goods

In addition to the export of products produced in the Netherlands, there is a lot of product transit. The most important export product in 2021 for (primary and secondary) agricultural goods by trade group for the Netherlands to Ukraine was cacao (Table 3.1). The export value was just under EUR 88 million. This was followed by ornamental horticultural products, with EUR 69 million, tobacco with EUR 41 million and dairy products and eggs with around EUR 33 million.

For cocoa, the share exported to Ukraine is 1.9% of total cocoa exports, for ornamental horticultural products, 0.5%, and for tobacco, Ukraine had a share of 2.3% of the Netherlands' total tobacco exports. Shares are lower for other products: 1% of total exports of the products in question.

In terms of cocoa, cocoa paste and chocolate are of approximately equal importance, both having an export value of EUR 25 million in 2021. The ornamental horticultural products trade group concerns flowers (EUR 32 million), plants (EUR 19 million) and bulbs (EUR 17 million). With regard to dairy products and eggs, this specifically concerns cheese (EUR 24 million) and butter (EUR 9 million). As for fruit exports, the main products are avocado (EUR 10 million), mangoes/guavas/mangosteens (EUR 4 million) and pears (EUR 2 million). Vegetable seeds (part of trade group 12) account for an export value of EUR 16 million to Ukraine. The export value of processed potato products is EUR 5.2 million, pork, EUR 5.5 million, and frozen mackerel, EUR 4.4 million. The export of seed potatoes (part of trade group 07) amounted to around EUR 1.3 million in 2021.

Table 3.1 Export value from the Netherlands to Ukraine in millions of euros (in decreasing order of importance, figures in accordance with Comext classification)

	2012	2015	2019	2020	2021
18 - Cocoa and cocoa preparations	49,3	34,1	88,0	87,5	86,6
06 - Live trees and other plants; bulbs, roots and the like; cut flowers and	50,7	37,5	51,2	53,0	69,5
ornamental foliage					
24 - Tobacco and manufactured tobacco substitutes	2,6	2,8	43,8	47,0	40,8
04 - Dairy produce; birds' eggs; natural honey; edible products of animal origin,	6,5	1,5	19,2	22,1	33,4
not elsewhere specified or included					
08 - Edible fruit and nuts; peel of citrus fruits or melons	11,5	4,1	19,2	23,1	29,5
21 - Miscellaneous edible preparations	10,5	11,0	17,3	18,3	21,4
12 - Oilseeds and oleaginous fruits; miscellaneous grains, seeds and fruit;	16,9	13,9	17,0	18,3	17,6
industrial or medicinal plants; straw and fodder					
19 - Preparations of cereals, flour, starch or milk; pastrycooks' products	7,4	4,2	9,8	12,6	13,4
20 - Preparations of vegetables, fruit, nuts or other parts of plants	6,4	6,6	7,1	7,7	11,3
02 - Meat and edible meat offal	15,2	5,5	7,8	8,1	10,5
07 - Edible vegetables and certain roots and tubers	9,9	3,9	9,8	15,6	10,5
23 - Residues and waste from the food industries; prepared animal fodder	2,7	3,5	10,5	11,8	9,9
03 - Fish and crustaceans, molluscs and other aquatic invertebrates	0,4	3,8	9,3	6,8	9,0
09 - Coffee, tea, mate and spices	5,3	8,1	10,1	6,7	8,3
Rest - Other agricultural goods	6,6	4,7	8,3	7,3	8,3
22 - Beverages, spirits and vinegar	17,3	5,0	6,7	7,9	8,2
17 - Sugars and sugar confectionery	0,6	6,8	2,8	2,8	3,0
01 - Animals	0,7	0,5	1,0	2,1	1,4
11 - Products of the milling industry; malt; starches; inulin; wheat gluten	0,4	0,2	0,4	0,5	0,9
13 - Lac; gums, resins and other vegetable saps and extracts	0,5	0,6	0,5	0,6	0,8
15 - Animal or vegetable fats and oils and their cleavage products; prepared edible	4,4	2,6	3,4	3,3	0,2
fats; animal or vegetable waxes					
16 - Preparations of meat, of fish or of crustaceans, molluscs or other aquatic	0,0	0,0	0,1	0,1	0,2
invertebrates					
10 - Cereals	0,0	0,0	0,0	0,0	0,1
14 - Vegetable plaiting materials; vegetable products not elsewhere specified or	0,1	0,0	0,0	0,1	0,1
included					
05 - Products of animal origin, not elsewhere specified or included	0,3	1,4	0,2	0,1	0,1

Source: Eurostat, Comext, edited by Wageningen Economic Research.

Export of tertiary agricultural goods

The total export value of tertiary agricultural goods fluctuated hugely in the 2012-2021 period. In 2012, it was valued at EUR 150 million; it fell to EUR 37 million in 2015. In 2021, it was worth EUR 88 million.

Tertiary agricultural goods in 2021 mainly consisted of tractors, which took up 39% of the total tertiary agricultural trade (Figure 3.2). Machinery for the food industry (24%) and other agricultural machinery (17%) also comprised a large share of exports to Ukraine.

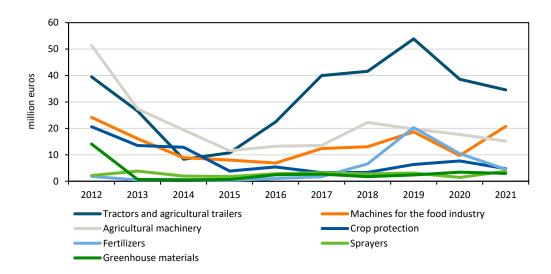


Figure 3.2 Export of tertiary goods to Ukraine

Source: Eurostat, Comext, edited by Wageningen Economic Research.

Import value

The total import value of goods from Ukraine to the Netherlands is just under EUR 2.5 billion (Figure 3.3). The total import value consists of EUR 1.8 billion of primary and secondary agricultural goods, of EUR 572 million of non-agricultural goods and EUR 7 million of tertiary agricultural goods.

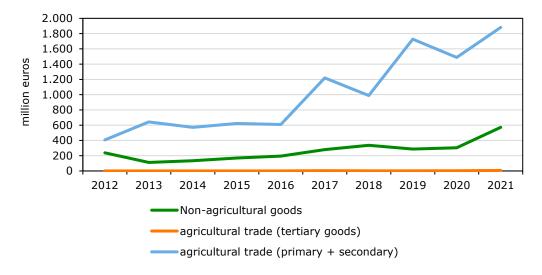


Figure 3.3 Import value Ukraine-Netherlands in million euro Source: Eurostat, Comext, edited by Wageningen Economic Research.

Import value has increased significantly since 2012. There was a particularly large jump in the 2016-2017 period: total imports rose from EUR 805 million to 1.5 billion. After that, imports grew, with ups and downs, to 2.5 billion in 2021. The surge in imports of primary and secondary goods was responsible for this increase.

Ukraine's share of total imports from the Netherlands in 2020 was around 0.3%. The share of nonagricultural goods and tertiary agricultural goods was 0.1%. The share of primary and secondary agricultural goods was 2.1%.

Import of primary and secondary agricultural goods

The import value of primary and secondary agricultural goods amounted to EUR 1.8 billion in 2021. The most important goods the Netherlands imports from Ukraine are:

- Animal and plant fats and oils, worth EUR 697 million
- Grains, worth EUR 548 million
- Oilseeds, worth EUR 430 million
- Meat and residual products, worth EUR 106 million.

The import values of other products are well below EUR 100 million (Table 3.2).

The animal and vegetable fats category mainly consists of sunflower oil. Of the EUR 696.5 million import value from the animal and vegetable oils trade group in 2021, the sunflower oil trade represents EUR 599 million. Rapeseed oil follows at EUR 75 million.

Next, cottonseed oil, is an important import product with a value of EUR 24 million. When it comes to grains, EUR 537 million worth of maize was imported from Ukraine to the Netherlands in 2021. As far as oilseeds are concerned, rapeseed (EUR 349 million) and soybeans (EUR 77.5 million) are important imports. Meat and meat products, valued at EUR 106 million, mainly concern the import of poultry meat.

Trade group 23 mainly consists of oilcakes for animal feed (EUR 36 million). With regard to fruit and nuts, it is mainly walnuts (EUR 7.5 million) and frozen berries - such as raspberries, blackberries, mulberries, loganberries and black, white and red currants - (2.5 million) that are of importance.

Import value to the Netherlands from Ukraine in millions of euros (in decreasing order of importance, figures in accordance with Comext classification)

	2012	2015	2019	2020	2021
15 - Animal or vegetable fats and oils and their cleavage products; prepared edible	94,8	134,8	403,9	477,8	696,5
fats; animal or vegetable waxes					
10 - Cereals	137,3	340,7	733,3	552,3	548,4
12 - Oilseeds and oleaginous fruits; miscellaneous grains, seeds and fruit;	112,4	45,3	372,7	282,9	430,4
industrial or medicinal plants; straw and fodder					
02 - Meat and edible meat offal	0,0	39,4	101,7	93,0	106,2
23 - Residues and waste from the food industries; prepared animal fodder	40,3	28,8	67,9	31,3	40,9
Rest - Other agricultural goods	12,5	18,6	22,2	24,0	25,7
08 - Edible fruit and nuts; peel of citrus fruits or melons	3,9	6,2	9,2	10,5	14,2
07 - Edible vegetables and certain roots and tubers	2,8	0,4	2,2	1,0	3,3
20 - Preparations of vegetables, fruit, nuts or other parts of plants	0,0	3,3	3,6	3,1	3,2
19 - Preparations of cereals, flour, starch or milk; pastrycooks' products	0,1	0,8	0,5	1,7	2,7
04 - Dairy produce; birds' eggs; natural honey; edible products of animal origin,	0,0	0,0	4,2	0,2	1,8
not elsewhere specified or included					
03 - Fish and crustaceans, molluscs and other aquatic invertebrates	0,0	0,1	0,5	1,1	1,7
18 - Cocoa and cocoa preparations	0,0	0,1	1,7	1,3	1,3
05 - Products of animal origin, not elsewhere specified or included	0,0	0,0	0,0	1,7	1,1
22 - Beverages, spirits and vinegar	0,2	0,2	0,1	0,6	0,9
16 - Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	0,0	1,5	0,2	2,3	0,8
11 - Products of the milling industry; malt; starches; inulin; wheat gluten	1,3	1,8	1,0	0,9	0,7
17 - Sugars and sugar confectionery	0,0	0,0	0,1	0,3	0,6
21 - Miscellaneous edible preparations	0,4	0,4	1,5	1,3	0,6
09 - Coffee, tea, mate and spices	0,2	0,4	0,4	0,4	0,3
14 - Vegetable plaiting materials; vegetable products not elsewhere specified or included	0,4	0,2	0,1	0,1	0,1
06 - Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	0,0	0,0	0,0	0,0	0,0
24 - Tobacco and manufactured tobacco substitutes	0,0	0,0	0,0	0,0	0,0
01 - Animals	0,0	0,0	0,0	0,0	0,0
13 - Lac; gums, resins and other vegetable saps and extracts	0,0	0,0	0,0	0,0	0,0
·			-	-	-

Source: Eurostat, Comext, edited by Wageningen Economic Research.

Importance of imports from Ukraine

The share of imports from Ukraine is significant for a number of trade groups. For example, trade group 15 (animal & vegetable fats and oils) represents 8% of the total value of animal and vegetable oils imported into the Netherlands in 2020. As for grains, the share imported from Ukraine was around 19%. For oilseeds, this is around 6% of the total oilseeds imported by the Netherlands.

For meat, it represents around 2.4% of the total value of imports. Finally, animal feed represents around 1% of the total import value. Other trade groups represent less than 1%.

Imports of tertiary agricultural goods

Imports of tertiary goods have amounted to less than EUR 7 million in 2022, and fluctuate greatly from year to year (Figure 3.4). Around EUR 3 million worth of fertiliser was imported in 2021. This was unprecedented in the rest of the 2012-2021 period. Almost EUR 2 million worth of agricultural machinery and EUR 1.3 million worth of tractors were imported in 2021.

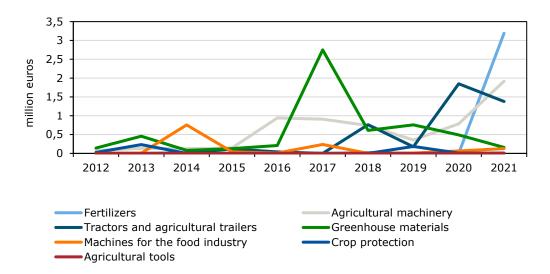


Figure 3.4 Import value of tertiary agricultural goods from Ukraine to the Netherlands, in million euro Source: Eurostat, Comext, edited by Wageningen Economic Research.

3.2 Trade between the Netherlands and Russia

Summary

The total export value from the Netherlands to Russia was EUR 7.6 billion in 2021. Approximately EUR 6 billion of this value was of non-agricultural origin in 2021.

Around EUR 1 billion was primary and secondary agricultural goods. Approximately EUR 550 million was tertiary agricultural goods.

The main agricultural exports in 2021 were ornamental horticultural products, cocoa, oilseeds, fruit (reexport and transit) and other products for human consumption. In terms of shares of total Dutch exports per product, exports to Russia are limited: 3.3% for ornamental horticultural products, and between 1 and 2% for the rest.

The total import value from Russia to the Netherlands is EUR 24.1 billion. Of this, EUR 23.5 billion are nonagricultural goods (energy). The Netherlands imports EUR 458 million of primary and secondary agricultural goods from Russia. The Netherlands' imports of tertiary agricultural goods from Russia amount to just under EUR 100 million.

The main agricultural imports in 2021 were fish, other agricultural goods and fertilisers.

Total export

The total export value from the Netherlands to Russia was EUR 7.6 billion in 2021. The largest part, around EUR 6 billion in value, was of non-agricultural origin in 2021. Primary and secondary agricultural goods represented over EUR 1 billion. Around EUR 550 million were tertiary agricultural goods (Figure 3.5).

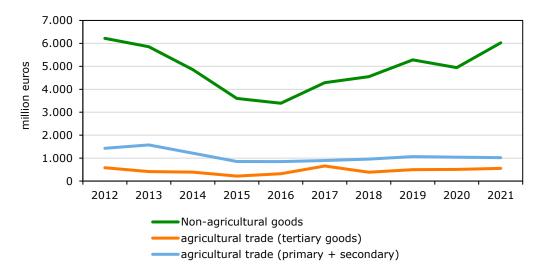


Figure 3.5 Exports from the Netherlands to Russia Source: Eurostat, Comext, edited by Wageningen Economic Research.

Here too, exports fell sharply after 2014 to a low point in 2016 with a value of EUR 4.6 billion. The cause of this sharp decline was mutual trade sanctions. Trade sanctions were imposed on both sides after the unrest in Crimea. Primary and secondary agricultural trade fluctuated less. But here too, 2015 and 2016 represented lows with values of around EUR 850 million. The value of primary and secondary agricultural goods in 2021, EUR 1 billion, was still lower than in 2012 when EUR 1.4 billion worth of primary and secondary goods were exported to Russia.

The total export value of all goods to Russia is about 1.1% of the Netherlands' total export value. For nonagricultural goods, the percentage was 1% in 2020. The same percentage applies to the share of primary and secondary agricultural goods. For tertiary agricultural goods, the figure is somewhat higher at 3.7%.

Export of primary and secondary agricultural goods

Over the last three years, exports of primary and secondary agricultural goods have been stable at around EUR 1 billion. In 2021, the export value was EUR 1 billion. The most important trade group is ornamental horticulture products (flowers, plants, trees and bulbs), with an export value of EUR 344 million (Table 3.3). The group Other agricultural products follows with EUR 88 million. Cocoa, oilseeds, fruit (re-export and transit) and other products for human consumption have an export value of around EUR 70 million.

Table 3.3 Export value of primary and secondary agricultural goods from the Netherlands to Russia, in millions of euros (in decreasing order of importance, figures in accordance with Comext classification)

	2012	2015	2019	2020	2021
06 - Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	367,2	196,1	323,6	324,0	344,0
Rest - Other agricultural goods	55,1	65,5	66,5	65,0	88,4
18 - Cocoa and cocoa preparations	68,6	57,6	56,4	67,9	79,7
12 - Oilseeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	102,1	47,7	69,8	79,0	78,2
08 - Edible fruit and nuts; peel of citrus fruits or melons	58,0	52,9	69,6	57,8	73,2
21 - Miscellaneous edible preparations	66,9	39,5	56,7	53,2	66,7
19 - Preparations of cereals, flour, starch or milk; pastrycooks' products	53,5	62,3	75,1	70,1	51,2
20 - Preparations of vegetables, fruit, nuts or other parts of plants	41,0	38,4	47,0	42,8	47,8
23 - Residues and waste from the food industries; prepared animal fodder	126,6	61,7	73,4	66,1	46,3
22 - Beverages, spirits and vinegar	18,5	15,8	28,8	26,2	27,2
09 - Coffee, tea, mate and spices	4,8	1,8	14,4	16,5	24,5
01 - Animals	16,3	33,8	33,6	15,8	18,7
15 - Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	79,7	51,6	8,5	17,5	15,6
07 - Edible vegetables and certain roots and tubers	64,1	38,0	26,4	26,7	14,8
24 - Tobacco and manufactured tobacco substitutes	4,5	3,0	32,6	39,6	12,6
04 - Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	187,4	75,0	67,1	55,8	11,1
17 - Sugars and sugar confectionery	11,2	5,0	6,2	7,0	8,3
11 - Products of the milling industry; malt; starches; inulin; wheat gluten	2,4	2,8	6,8	6,1	7,3
13 - Lac; gums, resins and other vegetable saps and extracts	3,3	2,5	1,9	2,6	3,6
05 - Products of animal origin, not elsewhere specified or included	3,5	0,9	1,9	1,1	1,1
10 - Cereals	0,0	0,0	0,0	0,7	0,5
03 - Fish and crustaceans, molluscs and other aquatic invertebrates	4,3	0,0	0,1	0,0	0,1
14 - Vegetable plaiting materials; vegetable products not elsewhere specified or included	0,1	0,0	0,1	0,1	0,0
16 - Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	5,8	0,0	0,0	0,1	0,0
02 - Meat and edible meat offal	83,4	1,3	0,0	0,0	0,0

Source: Eurostat, Comext, edited by Wageningen Economic Research.

The export value of ornamental horticulture products to Russia is approximately 3.3% of the Netherland's total export of ornamental horticulture products. The export value of Other agricultural products is 1.7% and cocoa, 1.5%. For oilseeds, this is 2% of the total. This kind of percentage can only be found in two trade groups: 24 tobacco and 13 resins and gums and plant saps. The importance is lesser in other trade groups.

Further zooming in for more detail:

- For ornamental horticulture products, this mainly concerns cut flowers (EUR 243 million), for plants and trees, EUR 54 million, and for bulbs, EUR 31 million.
- · Other general agricultural goods include industrial fatty alcohols, raw materials and flavourings for the drink industry, and starch. In the case of cocoa, the main item is cocoa powder (EUR 38 million).
- As far as trade group 12 is concerned, this mainly concerns vegetable seed; EUR 71 million in export value.
- For fruit, this concerns the transit of avocados (EUR 10 million) and guavas/mangos/mangosteens.
- Extracts, essences and concentrates from tea or maté or trade group 21 is an important commodity there, valued at EUR 16 million.
- From trade group 19, baby food is an important export product, amounting to EUR 44 million.
- From trade group 20, frozen potatoes account for an important share of the group, namely EUR 19 million.
- Cat and dog food, valued at EUR 17 million, and other animal feed, valued at EUR 28.5 million, are important products in trade group 23.
- Seed potatoes (part of trade group 07) had an export value of just under EUR 1.5 million in 2021.

Export of tertiary agricultural goods

As far as tertiary goods are concerned, exports are mainly of goods such as tractors (Figure 3.6). Tractors represent a value of EUR 370 million (70% of the total of tertiary goods). Of the agricultural machinery exported by the Netherlands, around 13% (EUR 73 million) went to Russia in 2021. Approximately EUR 54 million worth of machinery for the food industry and just under EUR 21 million worth of greenhouse materials were exported to Russia. This is 10% and 4% respectively of the total exports of these product groups.

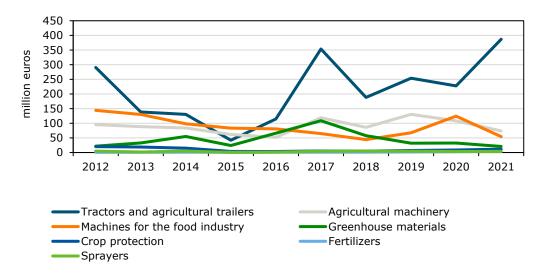


Figure 3.6 Export of tertiary goods to Russia

Source: Eurostat, Comext, edited by Wageningen Economic Research.

A dip in the exports of tertiary agricultural goods can also be seen in 2015. At that point in time, the export value was only EUR 216 million. In 2020, the export value was almost back at the same level as 2012, when it was EUR 580 million.

Import value

Russia's import value is dominated by non-agricultural goods (Figure 3.7). Of the total import value of EUR 24.1 billion, EUR 23.5 billion are non-agricultural goods (mainly energy). The import value of primary and secondary agricultural goods is EUR 458 million, and the import value of tertiary agricultural goods is about EUR 100 million

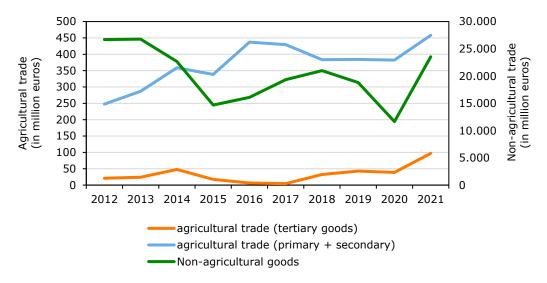


Figure 3.7 Import value from Russia to the Netherlands, in millions of euros Source: Eurostat, Comext, edited by Wageningen Economic Research.

Of all goods imported into the Netherlands in 2020, approximately 2.3% came from Russia. This was several percent higher in previous years. For non-agricultural goods, the percentage was slightly higher at 2.6%. The import value of primary and secondary goods was 0.5% of the total import value of this group. For tertiary agricultural goods, the share is also very limited at 0.7%.

Import of primary and secondary agricultural goods

The import value of primary and secondary agricultural goods from Russia in 2021 was around EUR 458 million (Table 3.4). Of this, EUR 186 million came from the other agricultural goods trade group. Fish is also an important product from Russia: in 2021, a total of EUR 164 million of fish was imported. The three product groups animal and vegetable oils, oilseeds and fodder are also quite important, worth approximately EUR 23 million.

Representing 6% of total fish imports into the Netherlands, this share of fish is important. Other agricultural products from Russia account for 2% of the total import value of that product group. Of all the other trade groups, only fodder still exceeds an import share of 1%.

Some of the timber imports fall under the definition of agriculture. In total, EUR 180 million worth was imported form this trade group in 2021. If we examine it in greater detail, wooden pallets, which are of great importance in the distribution sector, are an important product, worth EUR 79 million in trade value.

Import value of primary and secondary agricultural goods into the Netherlands from Russia, in millions of euros (in decreasing order of importance, figures in accordance with Comext classification)

	2012	2015	2019	2020	2021
Rest - Other agricultural goods	53,5	64,6	85,2	93,5	186,1
03 - Fish and crustaceans, molluscs and other aquatic invertebrates	111,9	210,6	208,7	186,5	164,3
15 - Animal or vegetable fats and oils and their cleavage products; prepared edible	23,9	4,8	22,8	24,5	23,6
fats; animal or vegetable waxes					
12 - Oilseeds and oleaginous fruits; miscellaneous grains, seeds and fruit;	3,6	12,8	18,1	9,5	23,4
industrial or medicinal plants; straw and fodder					
23 - Residues and waste from the food industries; prepared animal fodder	1,2	6,5	21,2	34,4	23,2
18 - Cocoa and cocoa preparations	1,7	2,9	7,5	12,7	11,0
21 - Miscellaneous edible preparations	0,5	0,1	1,5	0,4	7,3
10 - Cereals	30,7	29,3	6,3	5,0	4,5
07 - Edible vegetables and certain roots and tubers	12,3	0,1	4,8	4,5	4,4
22 - Beverages, spirits and vinegar	1,4	2,7	1,2	2,3	3,5
17 - Sugars and sugar confectionery	5,3	2,7	2,4	2,6	2,8
05 - Products of animal origin, not elsewhere specified or included	0,0	0,1	3,6	2,8	1,6
09 - Coffee, tea, mate and spices	0,1	0,4	0,3	0,5	0,7
16 - Preparations of meat, of fish or of crustaceans, molluscs or other aquatic	0,0	0,1	0,2	0,7	0,5
invertebrates					
19 - Preparations of cereals, flour, starch or milk; pastrycooks' products	0,0	0,0	0,1	2,3	0,2
01 - Animals	0,0	0,0	0,0	0,0	0,2
06 - Live trees and other plants; bulbs, roots and the like; cut flowers and	0,0	0,0	0,0	0,1	0,1
ornamental foliage					
14 - Vegetable plaiting materials; vegetable products not elsewhere specified or	0,2	0,2	0,0	0,0	0,1
included					
11 - Products of the milling industry; malt; starches; inulin; wheat gluten	0,0	0,1	0,2	0,0	0,1
24 - Tobacco and manufactured tobacco substitutes	0,1	0,0	0,0	0,0	0,1
20 - Preparations of vegetables, fruit, nuts or other parts of plants	0,0	0,2	0,0	0,0	0,1
08 - Edible fruit and nuts; peel of citrus fruits or melons	1,2	0,4	0,0	0,0	0,0
04 - Dairy produce; birds' eggs; natural honey; edible products of animal origin,	0,0	0,0	0,0	0,0	0,0
not elsewhere specified or included					
13 - Lac; gums, resins and other vegetable saps and extracts	0,0	0,0	0,0	0,0	0,0
02 - Meat and edible meat offal	0,0	0,0	0,0	0,0	0,0

Source: Eurostat, Comext, edited by Wageningen Economic Research.

Imports of tertiary agricultural goods

The most important import product from Russia among the tertiary agricultural goods is fertilisers. Of the EUR 97 million in import value from this group, EUR 95 million was allocated to fertilisers in 2021. Fertiliser imports rose sharply last year. In 2020 the value was still EUR 36 million (Figure 3.8).

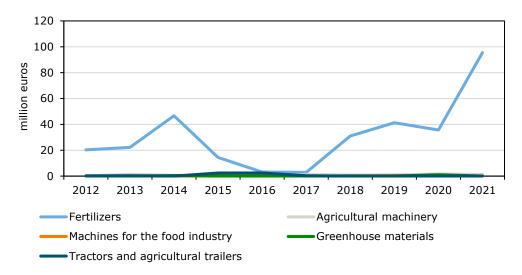


Figure 3.8 Import value of tertiary agricultural goods from Russia into the Netherlands, in millions of euros

Source: Eurostat, Comext, edited by Wageningen Economic Research.

3.3 Trade between the Netherlands and Belarus

Summary

The Netherlands exports EUR 230 million to Belarus and imports EUR 255 million from there. Trade between the two countries is thus almost in balance.

For both flows, the value of non-agricultural goods is highest.

Exports to Belarus involve EUR 89 million of agricultural goods, EUR 64 million of which are primary and secondary goods.

The main product group exported to Belarus is ornamental horticulture products. After this comes fruit, oilseeds and vegetables (including potatoes).

The value of imports of primary and secondary agricultural goods was EUR 62 million in 2021. Tertiary goods are hardly imported at all. The import value in 2020 was EUR 5 million. It mainly concerns products from other agricultural groups. Other important trade groups are animal and plant oils, vegetables and cocoa.

Export value

The export value from the Netherlands to Belarus in 2021 was around EUR 230 million. This includes EUR 141 of non-agricultural goods, EUR 64 million primary and secondary goods and EUR 25 million tertiary agricultural goods (Figure 3.9).

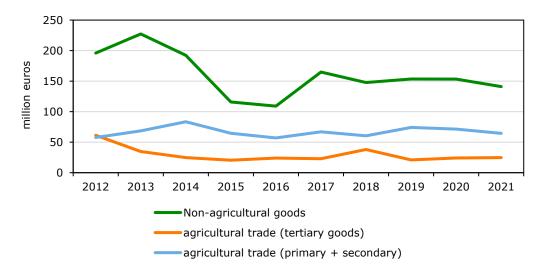


Figure 3.9 Exports from the Netherlands to Belarus

Source: Eurostat, Comext, edited by Wageningen Economic Research.

In 2014, exports to Belarus were higher. Exports peaked in the period shown in 2013 at EUR 331 million, after which, there was a sharp decline. Export value was at a low in 2016, at EUR 190 million. After that, there was a cautious recovery, up until 2020. Export value decreased slightly in 2021.

The shares in the total export value from the Netherlands to Belarus are very limited. It amounts to 0.04% for all goods. This can be broken down into non-agricultural goods (0.03%), primary and secondary agricultural goods (0.1%) and tertiary goods (0.2%), with the last proving the most important, relatively speaking.

Export of primary and secondary agricultural goods

The export value of goods from the Netherlands to Belarus for primary and secondary agricultural goods amounted to around EUR 64 million in 2021. This is also roughly the average for the 2012-2021 period. There was a peak in 2014, where export value almost reached EUR 84 million (Table 3.5).

Ornamental horticulture products (such as flowers, plants, trees and bulbs) are the main products exported to Belarus. These are followed by fruit, oilseeds and agrofood products. These are relatively limited amounts given the total exports of these goods from the Netherlands.

Table 3.5 Export value of primary and secondary agricultural goods from the Netherlands to Belarus, in millions of euros (in decreasing order of importance, figures in accordance with Comext classification)

06 - Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage 08 - Edible fruit and nuts; peel of citrus fruits or melons 12 - Oilseeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder 07 - Edible vegetables and certain roots and tubers 23 - Residues and waste from the food industries; prepared animal fodder 18 - Cocoa and cocoa preparations 09 - Coffee, tea, mate and spices 21 - Miscellaneous edible preparations 03 - Fish and crustaceans, molluscs and other aquatic invertebrates 04 - Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included 02 - Meat and edible meat offal	9,5 9,0 5,4 12,5 9,2 0,2 0,1	14,9 11,1 7,8 16,6 4,6	20,5 11,5 7,9 15,8	21,2 12,0 7,3	16,4 10,9 7,9
08 - Edible fruit and nuts; peel of citrus fruits or melons 12 - Oilseeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder 07 - Edible vegetables and certain roots and tubers 23 - Residues and waste from the food industries; prepared animal fodder 18 - Cocoa and cocoa preparations 09 - Coffee, tea, mate and spices 21 - Miscellaneous edible preparations 03 - Fish and crustaceans, molluscs and other aquatic invertebrates 04 - Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	5,4 12,5 9,2 0,2	7,8 16,6 4,6	7,9		
12 - Oilseeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder 07 - Edible vegetables and certain roots and tubers 23 - Residues and waste from the food industries; prepared animal fodder 18 - Cocoa and cocoa preparations 09 - Coffee, tea, mate and spices 21 - Miscellaneous edible preparations 03 - Fish and crustaceans, molluscs and other aquatic invertebrates 04 - Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	5,4 12,5 9,2 0,2	7,8 16,6 4,6	7,9		
industrial or medicinal plants; straw and fodder 07 - Edible vegetables and certain roots and tubers 23 - Residues and waste from the food industries; prepared animal fodder 18 - Cocoa and cocoa preparations 09 - Coffee, tea, mate and spices 21 - Miscellaneous edible preparations 03 - Fish and crustaceans, molluscs and other aquatic invertebrates 04 - Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	12,5 9,2 0,2	16,6 4,6		7,3	7,9
07 - Edible vegetables and certain roots and tubers 23 - Residues and waste from the food industries; prepared animal fodder 18 - Cocoa and cocoa preparations 09 - Coffee, tea, mate and spices 21 - Miscellaneous edible preparations 03 - Fish and crustaceans, molluscs and other aquatic invertebrates 04 - Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	9,2	4,6	15,8		
23 - Residues and waste from the food industries; prepared animal fodder 18 - Cocoa and cocoa preparations 09 - Coffee, tea, mate and spices 21 - Miscellaneous edible preparations 03 - Fish and crustaceans, molluscs and other aquatic invertebrates 04 - Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	9,2	4,6	15,8		
18 - Cocoa and cocoa preparations 09 - Coffee, tea, mate and spices 21 - Miscellaneous edible preparations 03 - Fish and crustaceans, molluscs and other aquatic invertebrates 04 - Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	0,2			10,9	6,5
09 - Coffee, tea, mate and spices 21 - Miscellaneous edible preparations 03 - Fish and crustaceans, molluscs and other aquatic invertebrates 04 - Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	•		3,9	5,0	4,5
21 - Miscellaneous edible preparations 03 - Fish and crustaceans, molluscs and other aquatic invertebrates 04 - Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	0,1	0,8	1,9	2,8	3,6
03 - Fish and crustaceans, molluscs and other aquatic invertebrates 04 - Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included		0,0	2,2	2,5	3,5
04 - Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included	0,5	1,1	2,6	2,7	3,0
not elsewhere specified or included	0,6	1,5	2,5	1,3	2,1
·	0,1	0,1	0,5	1,0	2,1
02 - Meat and edible meat offal					
oz Treat and Cable meat onal	2,7	0,2	0,0	0,4	1,4
20 - Preparations of vegetables, fruit, nuts or other parts of plants	0,8	0,6	1,0	0,9	1,1
Rest - Other agricultural goods	1,6	0,5	1,0	1,0	0,7
22 - Beverages, spirits and vinegar	0,2	1,7	0,9	0,5	0,3
15 - Animal or vegetable fats and oils and their cleavage products; prepared edible	0,8	0,6	0,6	1,0	0,2
fats; animal or vegetable waxes					
01 - Animals	1,1	0,4	0,5	0,0	0,1
19 - Preparations of cereals, flour, starch or milk; pastrycooks' products	0,7	1,0	0,9	0,8	0,1
14 - Vegetable plaiting materials; vegetable products not elsewhere specified or	0,0	0,0	0,0	0,0	0,0
included					
17 - Sugars and sugar confectionery	1,1	0,4	0,0	0,1	0,0
05 - Products of animal origin, not elsewhere specified or included	1,1	0,0	0,1	0,0	0,0
24 - Tobacco and manufactured tobacco substitutes	0,1	0,6	0,1	0,0	0,0
11 - Products of the milling industry; malt; starches; inulin; wheat gluten	0,2	0,1	0,0	0,0	0,0
13 - Lac; gums, resins and other vegetable saps and extracts	0,0	0,0	0,0	0,0	0,0
10 - Cereals	0,0	0,0	0,0	0,0	0,0
16 - Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates	0,0	0,0	0,0	0,0	0,0

Source: Eurostat, Comext, edited by Wageningen Economic Research.

The share of ornamental horticultural products being exported to Belarus is limited. Only 0.2% of the total export value of ornamental horticulture products in 2020 went to Belarus. The share in other trade groups is of a similar magnitude. One specific product that should be mentioned is the export of seed potatoes. This amounted to about EUR 655,000 in 2021.

Export of tertiary agricultural goods

The most important agricultural goods exported to Belarus are tractors, machinery for the food industry and other agricultural machines. One million crop protection products were also exported in 2021. Other tertiary goods are of less importance. Since 2014, the export value of these products has been around EUR 24 million, with a one-off spike in 2018 or EUR 37 million (Figure 3.10).

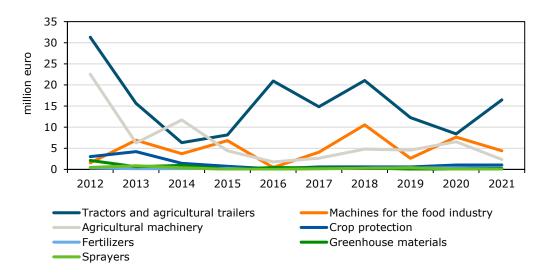


Figure 3.10 Export of tertiary agricultural goods to Belarus Source: Eurostat, Comext, edited by Wageningen Economic Research.

Import value

The value of imports from Belarus to the Netherlands in 2021 was just under EUR 256 million. Import value has never been so high as it was in this period. The import value increased mainly for non-agricultural goods (Figure 3.11).

The import value of non-agricultural goods was EUR 188 million in 2021, and EUR 62 million of primary and secondary agricultural goods were imported in 2021. Hardly any tertiary goods were imported. Their import value in 2020 was EUR 5 million.

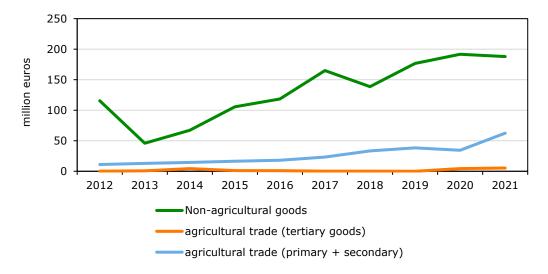


Figure 3.11 Import value from Belarus to the Netherlands Source: Eurostat, Comext, edited by Wageningen Economic Research.

The import values are relatively small. Belarus' share of total exports to the Netherlands is also small. Only 0.04% of total imported goods come from Belarus. Broken down, this is 0.04% non-agricultural goods, 0.05% for primary and secondary goods and 0.08% for tertiary agricultural goods.

Import of primary and secondary agricultural goods

In 2021, primary and secondary goods worth around EUR 62 million were imported from Belarus. These were mainly (77%) products that fell into the other agricultural goods category. Other important trade groups are animal and vegetable oils, vegetables and cocoa (Table 3.6).

About 0.6% of the total imports of other agricultural goods into the Netherlands came from Belarus. This is even lower for other trade groups.

If we look in greater detail, it becomes clear that timber is a product of particular importance. Of the other agricultural goods group, approximately EUR 44 million is timber imports. 4Moreover, in 2021, EUR 17 worth of rapeseed was imported from Belarus. Of the vegetables category, the most important import product was chanterelles, with an import value of EUR 1.8 million.

Table 3.6 Import value of primary and secondary agricultural goods from Belarus to the Netherlands, in millions of euros (in decreasing order of importance, figures in accordance with Comext classification)

	2012	2015	2019	2020	2021
Rest - Other agricultural goods	8,9	14,7	30,3	28,1	48,2
15 - Animal or vegetable fats and oils and their cleavage products; prepared edible	0,0	0,1	5,7	2,5	9,6
fats; animal or vegetable waxes					
07 - Edible vegetables and certain roots and tubers	0,1	0,2	1,6	1,9	1,9
18 - Cocoa and cocoa preparations	0,0	0,0	0,0	0,7	0,7
19 - Preparations of cereals, flour, starch or milk; pastrycooks' products	0,0	0,0	0,0	0,1	0,7
08 - Edible fruit and nuts; peel of citrus fruits or melons	1,5	0,5	0,4	0,4	0,5
06 - Live trees and other plants; bulbs, roots and the like; cut flowers and	0,5	0,4	0,2	0,3	0,3
ornamental foliage					
12 - Oilseeds and oleaginous fruits; miscellaneous grains, seeds and fruit;	0,1	0,3	0,1	0,1	0,3
industrial or medicinal plants; straw and fodder					
10 - Cereals	0,0	0,0	0,0	0,0	0,1
02 - Meat and edible meat offal	0,0	0,0	0,0	0,0	0,0
17 - Sugars and sugar confectionery	0,0	0,0	0,0	0,4	0,0
09 - Coffee, tea, mate and spices	0,0	0,0	0,0	0,0	0,0
22 - Beverages, spirits and vinegar	0,0	0,0	0,0	0,0	0,0
21 - Miscellaneous edible preparations	0,0	0,0	0,0	0,0	0,0
20 - Preparations of vegetables, fruit, nuts or other parts of plants	0,0	0,0	0,0	0,0	0,0
24 - Tobacco and manufactured tobacco substitutes	0,0	0,0	0,0	0,0	0,0
16 - Preparations of meat, of fish or of crustaceans, molluscs or other aquatic	0,0	0,0	0,0	0,0	0,0
invertebrates					
03 - Fish and crustaceans, molluscs and other aquatic invertebrates	0,0	0,0	0,0	0,0	0,0
23 - Residues and waste from the food industries; prepared animal fodder	0,0	0,0	0,0	0,0	0,0
05 - Products of animal origin, not elsewhere specified or included	0,0	0,0	0,0	0,0	0,0
04 - Dairy produce; birds' eggs; natural honey; edible products of animal origin,	0,0	0,2	0,1	0,0	0,0
not elsewhere specified or included					
11 - Products of the milling industry; malt; starches; inulin; wheat gluten	0,0	0,0	0,0	0,0	0,0
14 - Vegetable plaiting materials; vegetable products not elsewhere specified or	0,0	0,0	0,0	0,0	0,0
included					
Final total	11,1	16,4	38,4	34,4	62,4

Source: Eurostat, Comext, edited by Wageningen Economic Research.

Imports of tertiary agricultural goods

The import value of tertiary agricultural goods worth about EUR 5 million from Belarus consists almost exclusively of fertilisers. Incidentally, this is not a structural import. Only in 2014, 2020 and 2021 have there been substantial imports of this product from Belarus to the Netherlands (Figure 3.12).

See previous comments about wood. Total timber imports from Belarus in 2021 were EUR 562 million higher than indicated above because not all timber species fall under the definition of an agricultural commodity.

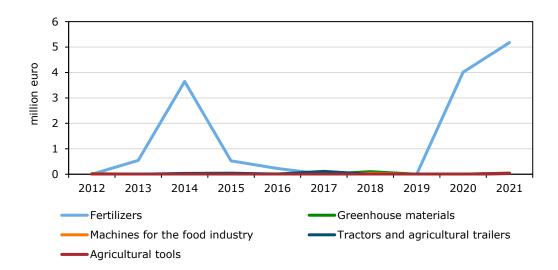


Figure 3.12 Import of tertiary agricultural goods from Belarus into the Netherlands Source: Eurostat, Comext, edited by Wageningen Economic Research.

Trade in organic agricultural goods 4

There are signs that the war in Ukraine is putting pressure on the availability of raw materials for organic feed, and thus on the organic animal product chain. The following chapter provides insight into the trade in organic goods and the roles of Ukraine, Russia and Belarus in it.

In 2020, the import volume of organic agricultural goods into the EU was 2.8 million tonnes. This is equal to the volume imported in 2019; in 2017, the import volume was 2.7 million tonnes. Unfortunately, no trade data about organic products from trade between EU Member States have been made available.

The most important countries are shown in Figure 4.1. Ukraine is the fourth largest importer of organic goods in the EU. Its imports make up around 8% of total imports in 2020. The volume of goods stood at 217,000 tonnes. In previous years, this was 10%. Russia is 22nd; 1% of the total with just under 32,000 tonnes. Belarus is 63^{rd} with 1,500 tonnes, accounting for 0.1% of the total.

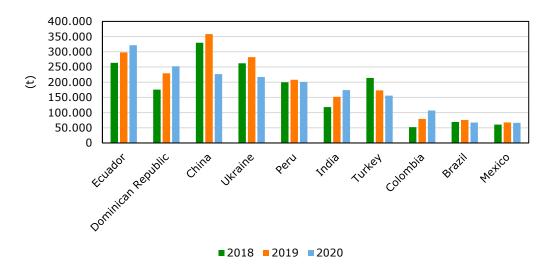


Figure 4.1 Countries importing organic goods in the EU Source: TRACES.

Figure 4.2 shows the most important countries in terms of organic good imports for the Netherlands. In 2020, Ukraine was the third largest country in terms of importing organic goods for the Netherlands. In 2019, it was even the leading supplier of organic products by volume, In 2020, China and the Dominican Republic were more important.

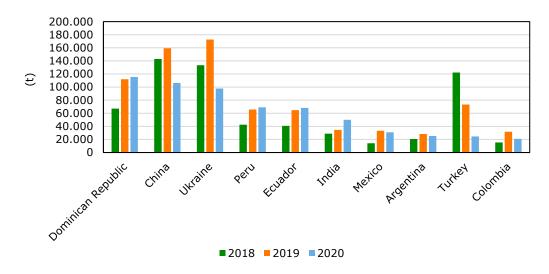


Figure 4.2 Countries that import organic goods from the Netherlands Source: TRACES.

Within the EU, the Netherlands is the main importer of organic products from Ukraine (Figure 4.3). A total of 977,000 tonnes of organic products were imported by the Netherlands. With this, the Netherlands has a 45% total share of EU imports from Ukraine. However, imports fell sharply compared to 2019.

In addition to imports from Ukraine, the Netherlands is also the most important importer of organic products from Russia, representing 39% of EU imports in 2020. However, this does just mean a rather modest sum of 12,600 tonnes of goods. Incidentally, the most important EU importer of organic products from Belarus is Lithuania.

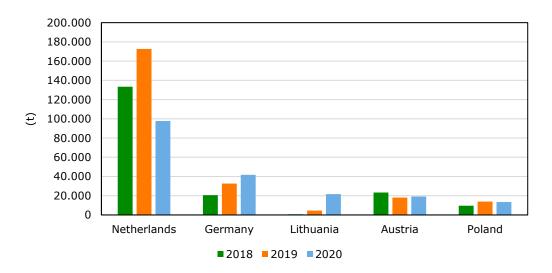


Figure 4.3 Most important five EU countries importing organic products from Ukraine Source: TRACES.

The main products that the Netherlands imports from Ukraine are maize (excluding seed), wheat and meslin, oilcakes (from pressing sunflower seeds), peas and rapeseed (Figure 4.4). These five products account for almost 90% of total imports.

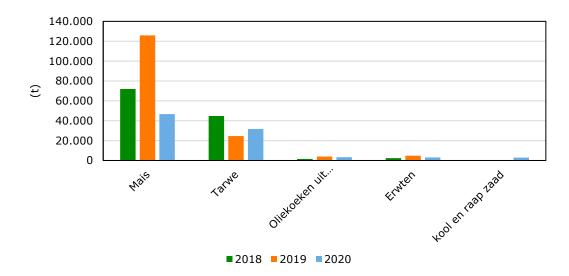


Figure 4.4 Top five organic products imported into the Netherlands from Ukraine Source: TRACES.

Of the organic maize imported by the Netherlands from outside the EU, 87% comes from Ukraine. Of the organic wheat imported by the Netherlands from outside the EU, 95% comes from Ukraine. Rapeseed also makes up an important share of organic imports, at 93%. In the case of oil cakes (based on sunflower seeds), Ukraine is the only supplier to the Netherlands from outside the EU. The same is true for barley. For peas (27%) and, for example, soybeans (15%), the share of the total is less. The main organic products that the Netherlands imports from Russia are peas, sunflower seeds and wheat.

5 Contribution of non-resident workers to agricultural production and agro-logistics

Background

The war has potential implications for the availability of labour in agricultural production and agro-logistics. This chapter outlines the initial findings based on a quick scan of the available data and existing literature.

Workers born abroad, whether residents or not, are an important group of workers in agriculture and agrologistics, who both perform permanent vital roles in agriculture and carry out seasonal activities. In the Netherlands, these roles are performed by both EU and non-EU workers. This analysis does not just focus on workers from Ukraine, but also on workers from EU Member States that border Russia and Ukraine. It does the latter because if tensions rise further, these countries may call on their nationals abroad to return to their homeland.

Number of workers working in the Netherlands born abroad

According to the CBS statistics 'Werknemers geboren in buitenland; wel/niet ingezeten, persoonskenmerken'5 (employees board abroad; resident/non resident, personal characteristics) there were 215,400 non-resident employees in the Dutch economy in 2020. Most non-resident workers (64%) work through temporary employment agencies. Over 7% of non-resident workers work in industry. Furthermore, 6% are workers employed without the intermediary involvement of an employment agency in the agricultural and horticultural sectors; 6% and 4% work directly in transport and trade respectively.

Non-resident workers in more detail

Almost 97% (208,800) of the non-resident workers are from Europe, 94% of which (202,600) are from EU countries. The non-resident workers from Europe are mainly from Poland (48.8%), Romania (12.6%), Belgium (9%), Germany (8%) and Bulgaria (5.2%). Almost 3% (6,200) of the non-resident workers are from Europe, but not the EU. Finally, 3% of non-resident workers come from the rest of the world (Africa, America, Asia and Oceania).

Workers in agriculture, forestry and the fishing industry

There are 12,900 (6%) non-resident workers directly employed in agriculture, forestry and the fishing industry. 100% of these employees come from Europe, 98.4% (12,700) from the EU and 1.6% (200) from European countries outside the EU. The vast majority of non-residents working in agriculture, forestry and the fishing industry are from Poland (8,800), followed by Romania and Bulgaria, with 2,300 and 700 workers respectively. From non-EU European countries, 200 non-resident workers work directly in agriculture, forestry and the fishing industry.

According to the Algemene Bond Uitzendondernemingen (Federation of Private Employment Agencies) (ABU), labour migrants are mainly placed in logistics (44%), horticulture (19%) and the food industry (13%)6. According to the CBS statistics 'Werknemers geboren in buitenland; wel/niet ingezeten, persoonskenmerken' (employees board abroad; resident/non resident, personal characteristics), 138,100 non-resident employees work in other sectors of the Dutch economy using temporary employment agencies. Of these, 136,000 come from Europe, 78,900 from Poland, 20,900 from Romania, 8,800 from Bulgaria and 4,100 from non-EU European countries, an estimated 1,025 of which are workers in agriculture and horticulture. Together with the 200 workers calculated earlier who work directly in agriculture, forestry and the fishing industry without an intermediate employment agency, we arrive at a total of 1,225 non-resident workers from non-EU European countries.

https://opendata.cbs.nl/statline/#/CBS/nl/dataset/84750NED/table?ts=1646225168502

https://www.abu.nl/arbeidsmigranten-in-nederland-de-cijfers/

Food industry

Based on the aforementioned number of 4,100 non-resident employees from non-EU European countries working in the Netherlands through temporary employment agencies and the percentage for the food industry being 13%, we can calculate that there are just over 530 non-resident employees in the food industry.

Trade, transport and storage

According to the CBS statistics 'Werknemers geboren in buitenland; wel/niet ingezeten, persoonskenmerken' (employees board abroad; resident/non resident, personal characteristics), 22,000 non-resident employees work directly in the trade, transport and storage sectors. Of these, 21,100 come from Europe, 500 from non-EU European countries. In addition, an estimated 1,845 workers are employed through temporary employment agencies. If we add these to the 500 who work in these industries directly, we arrive at a total of 2,345 employees from non-EU European countries.

Concluding remarks

Most European non-residents working in Dutch agriculture and agro-logistics are from Poland. It is estimated that just over 4,100 non-resident non-EU workers are employed in agriculture, forestry and the fishing industry (1,225), the food industry (530), and trade, transport and storage (2,345).

Conclusions 6

This first phase of our research provides insight into the agricultural production of Ukraine, Russia and Belarus, and into the trade flows of agricultural goods between these countries and the Netherlands. It also leads us to the following conclusions:

- The Netherlands exports mainly cocoa, ornamental horticulture products, tobacco, dairy products and eggs to Ukraine; however, this is only a limited percentage of total Dutch exports of these products. Our imports from Ukraine are mainly:
 - o animal and vegetable fats and oils (sunflower oil),
 - o grains,
 - o oilseeds, and
 - o meat and meat offal (poultry meat).
- Exports from the Netherlands to Russia have been at a low ebb since 2014 owing to reciprocal trade restrictions following the occupation of Crimea and they mainly concern ornamental horticultural products. The main import from Russia is energy; the share of agricultural products is limited, and these are mainly limited to fish and wood.
- Exports of agricultural goods from the Netherlands to Belarus are limited. Of the imported agricultural goods, wood and fertiliser are particularly important products.
- The main country of origin that imported organic agricultural goods into the Netherlands is Ukraine. The Netherlands is also the main destination for organic products from Ukraine. Organically grown maize and wheat are imported from Ukraine. A limited proportion of the organic products imported by the Netherlands come from Russia.
- Exporting agricultural goods is very important for Ukraine, being valued at EUR 19.4 billion. The most important destinations for exports are the EU (with the Netherlands as the main destination), China, India, Egypt and Turkey. The most important export products are grains, vegetable oils (sunflower oil).
- At EUR 24.8 billion, the value of Russia's total exports of agricultural goods is only slightly higher than that of Ukraine. The main export countries are similar to those of Ukraine, but with the important exception of the EU. Russia's export value to the EU-27 countries in 2020 was EUR 2.7 billion. Important export products are grains, fish and animal and vegetable fats.
- · Belarus' main trading partner for the export of agricultural goods is Russia. Dairy, eggs and meat are the main exports.
- It is estimated that just over 4,100 non-resident non-EU workers are employed in Dutch agriculture, forestry, the fishing industry, food industry, trade, transport and storage, the majority of whom are from Poland.

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