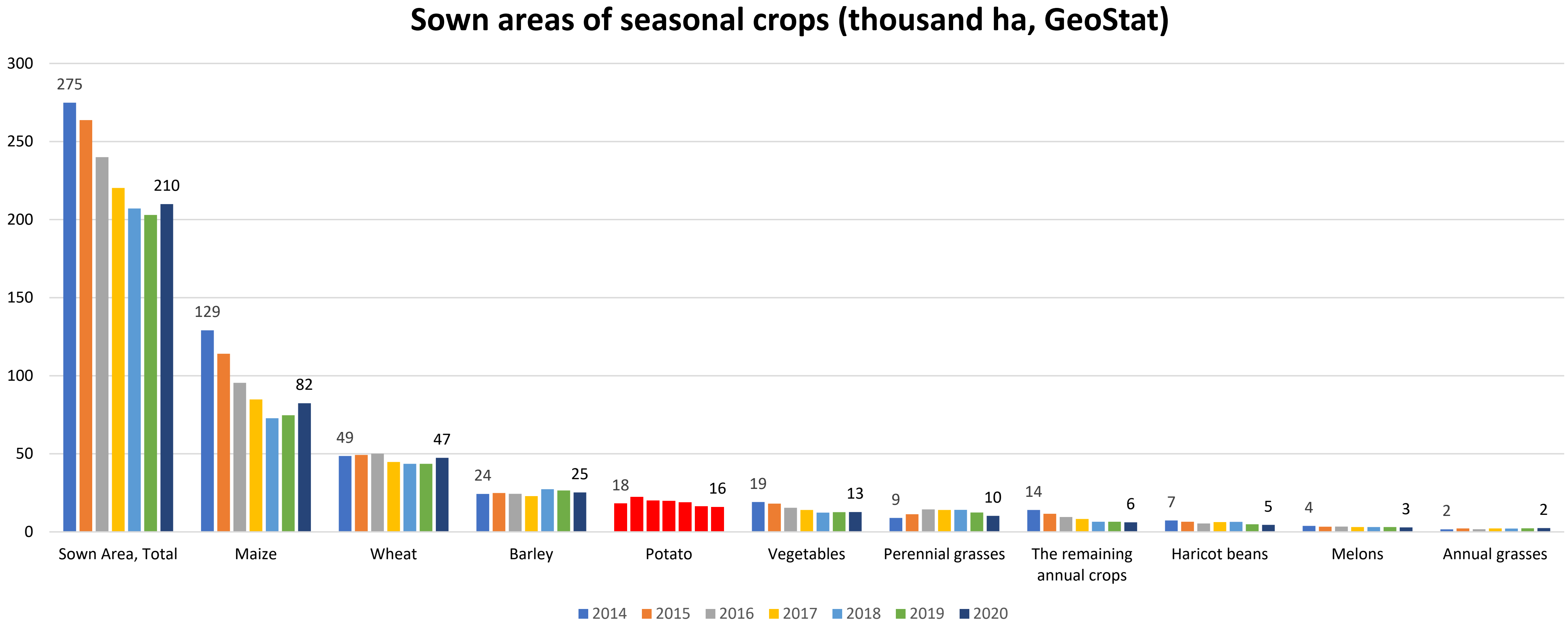
The potato value-chain in Georgia
Development potential

Dr. Christophe Cordonnier, Team Leader, FinExCoop Georgia

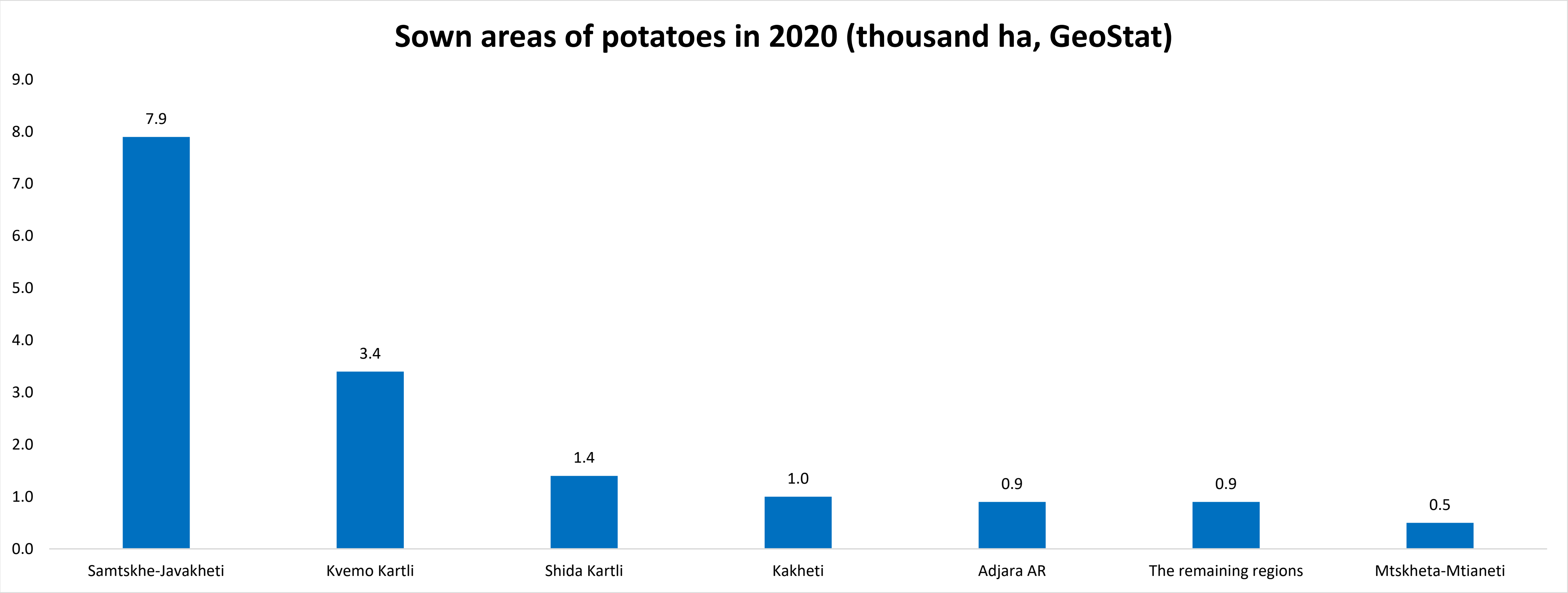
What is the situation?

ევროკავშირი საქართველოსთვის
The European Union for Georgia

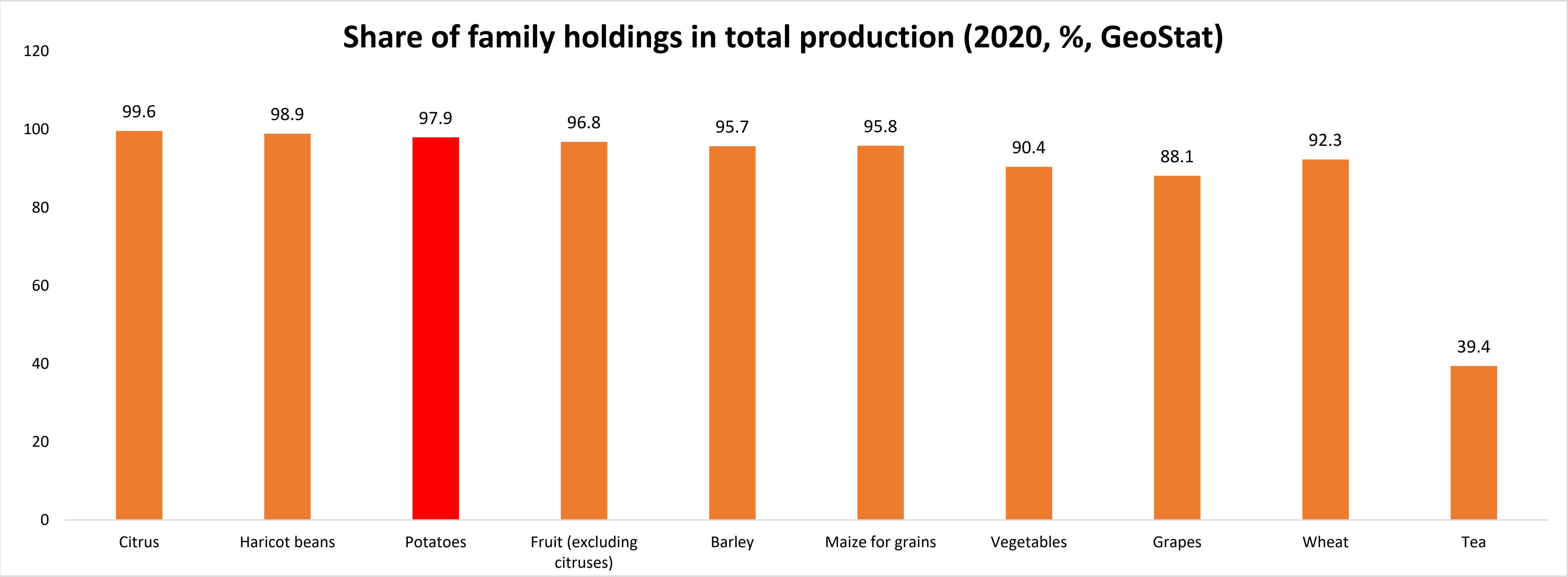
Potatoes are the fourth crop in Georgia by acreage, after maize, wheat and barley



Nearly half of the acreage is located in the mountainous areas of Samtskhe-Javakheti. In Kvemo Kartli, potatoes are produced both in mountainous areas and in lowlands for early varieties. In those regions, potatoes are often cultivated by ethnic minorities (Armenians and Azeris)



As it is usually the case with Georgian agriculture, nearly all output is provided by family holdings. But in Georgian statistics, there is no formal distinction between family farm entrepreneurs (farmers) mainly geared towards the market, and household plots working mainly for self-consumption

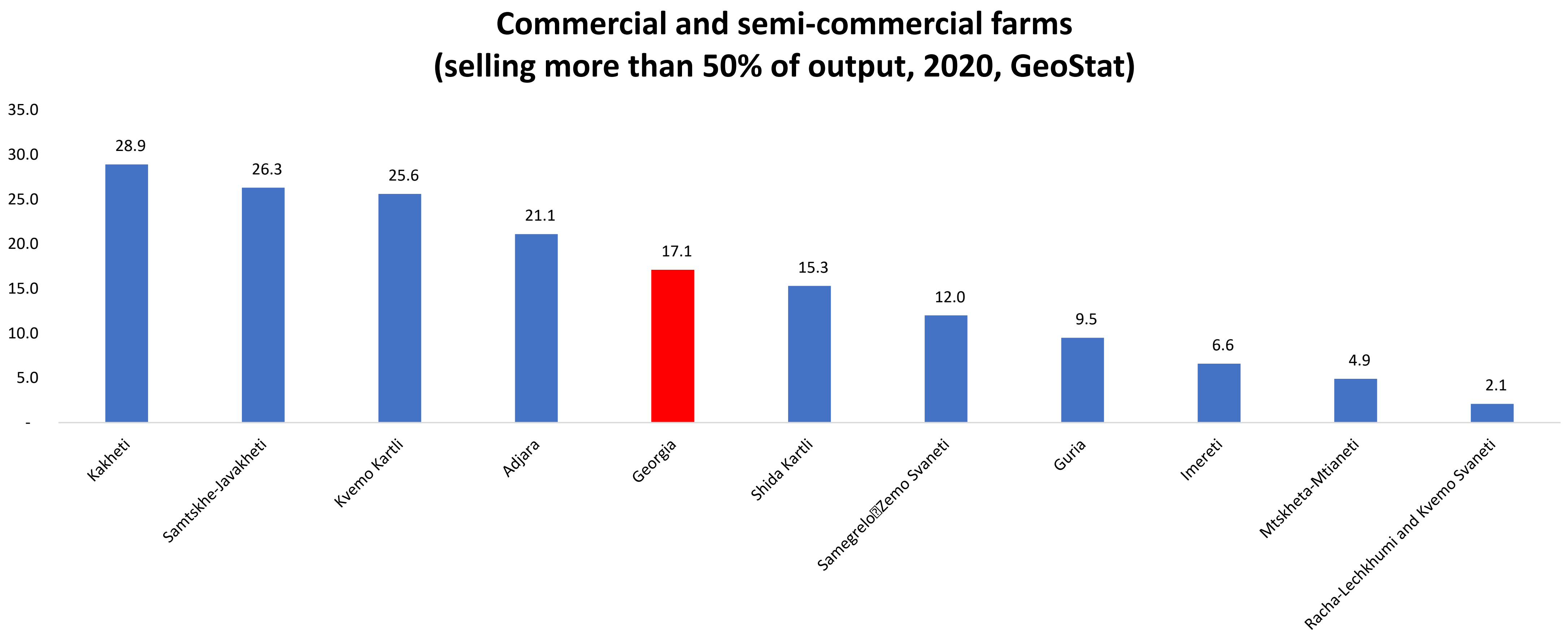


ევროკავშირი საქართველოსთვის
The European Union for Georgia

GEORGIA FinExCoop

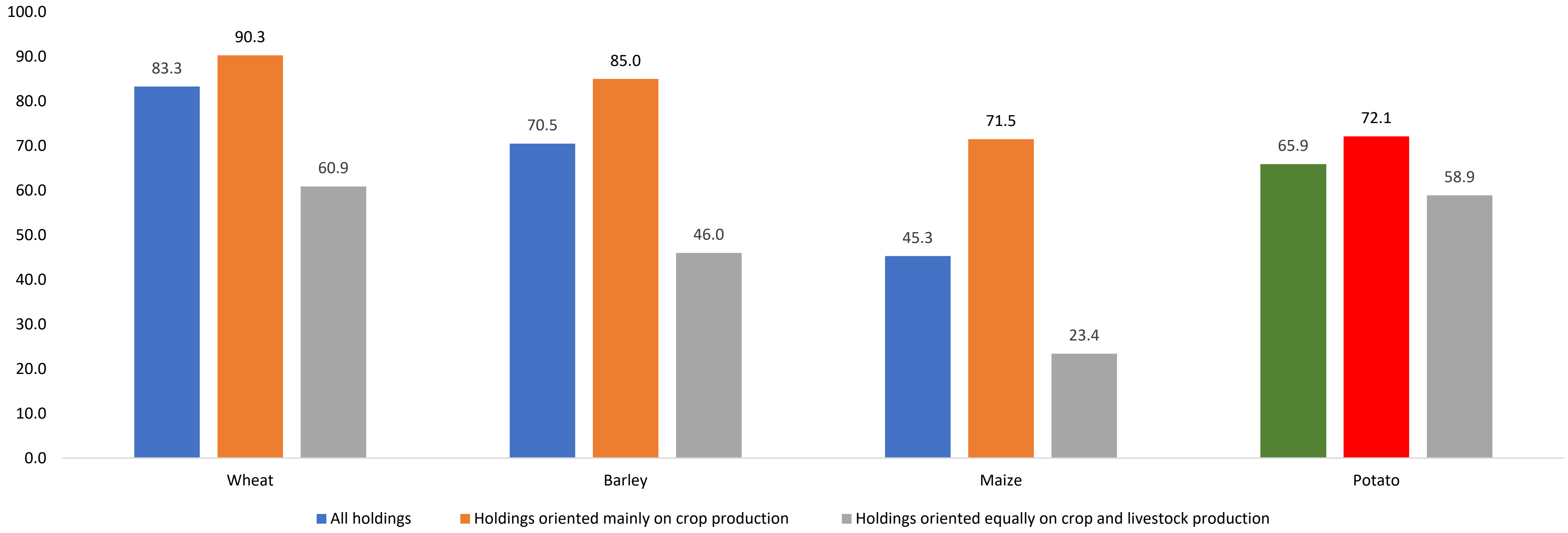
AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

It must be highlighted that in 2020, only 17.1% of total Georgian farms were selling more than 50% of their agricultural output



But in the case of potatoes, the share of sold output tends to be higher than on average in agriculture. To a large extent, potatoes can be considered as "the" cash crop of mountainous areas with 65.9% of output of potato sold in the market

Share of sold products in crop products produced by agricultural holding by agricultural orientation (%, 2020, GeoStat)



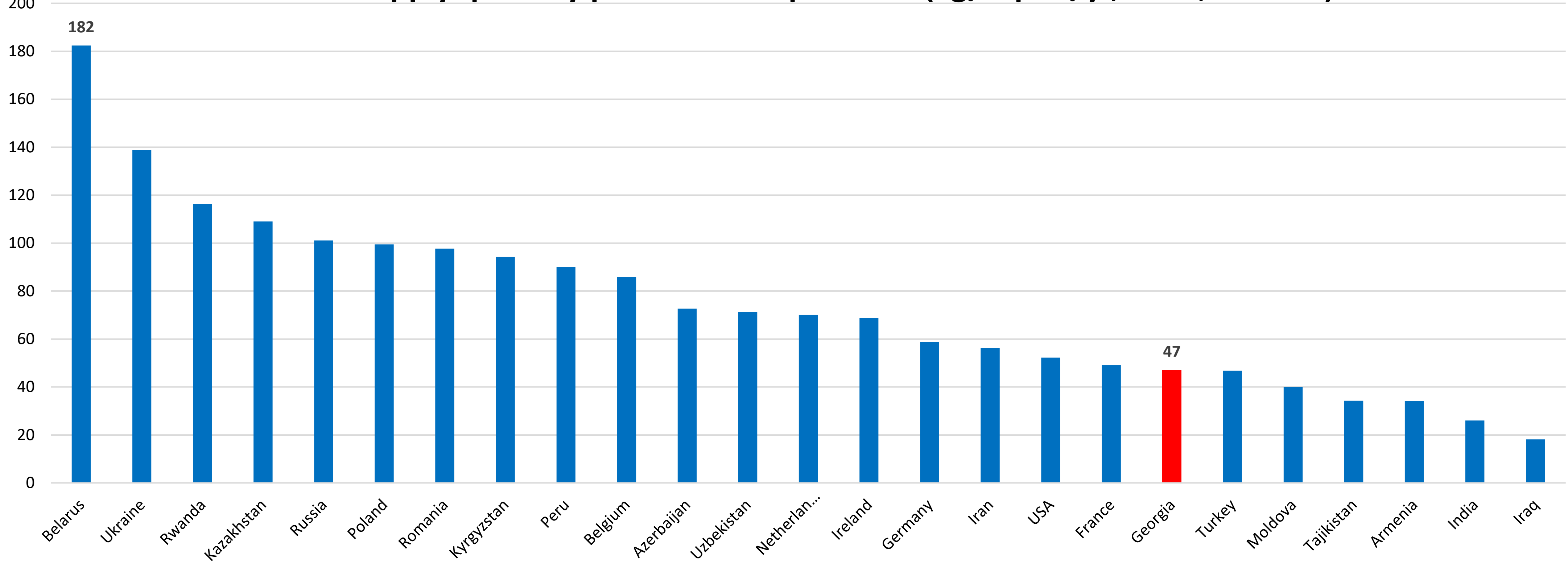
ევროკავშირი საქართველოსთვის
The European Union for Georgia

GEORGIA FinExCoop

AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

On the demand side, compared to most countries of the region, the consumption of potatoes and potato products per capita in Georgia remains modest, nearly one-fourth of that of Belarus

Food supply quantity potatoes and products (kg/capita/yr, 2018, FaoStat)

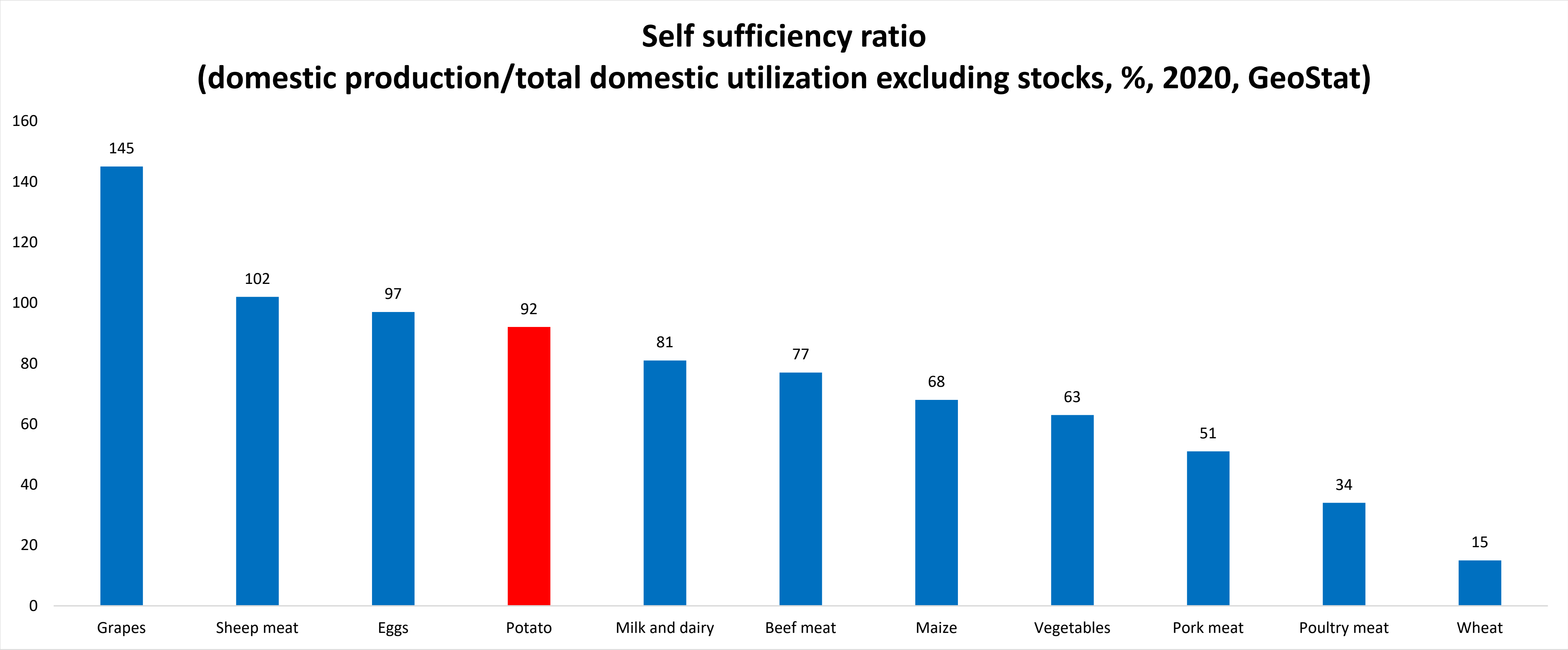


ევროკავშირი საქართველოსთვის
The European Union for Georgia

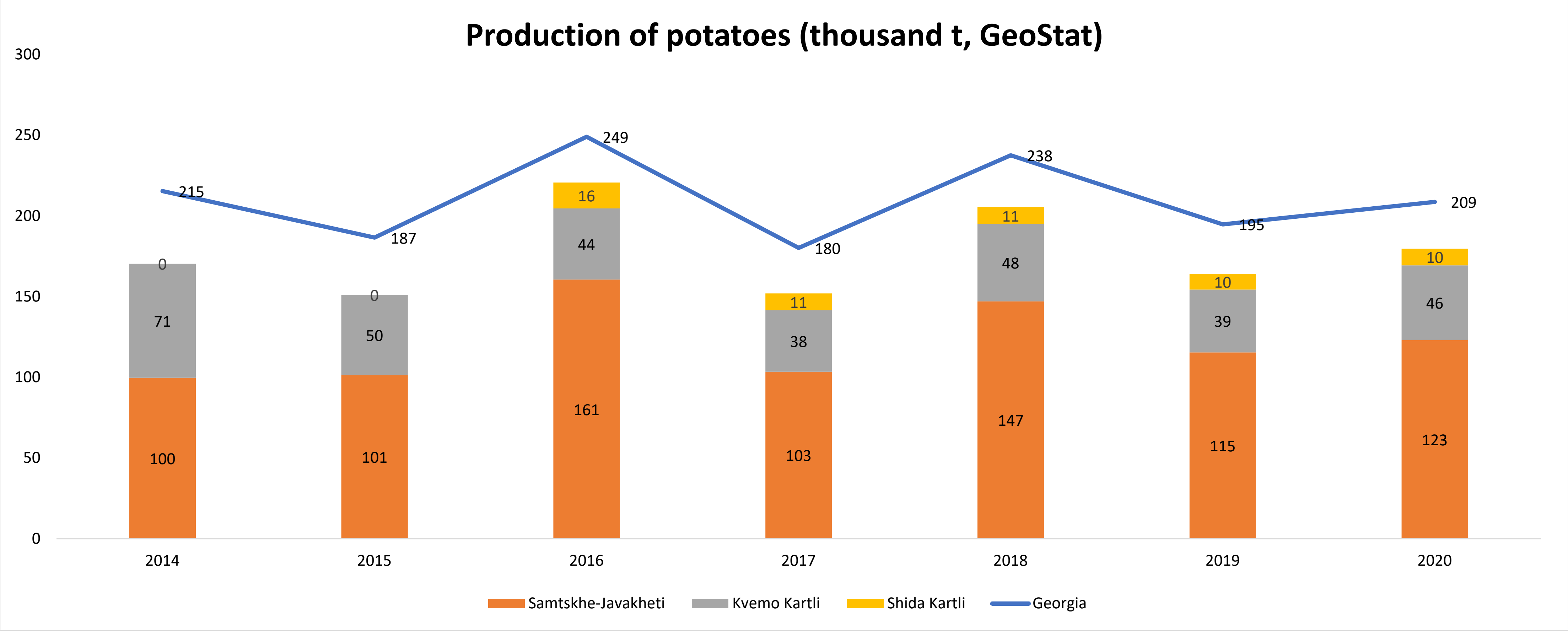
GEORGIA FinExCoop

AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

But despite this rather modest consumption, Georgia is a net importer of potatoes as its output remains too small to cover its needs



Since the adoption in 2014 by GeoStat of a new methodology, there has been no substantial increase in recorded output. That of Samtskhe-Javakheti has been quite volatile because of larger agronomic risks than elsewhere, especially for non-irrigated plots

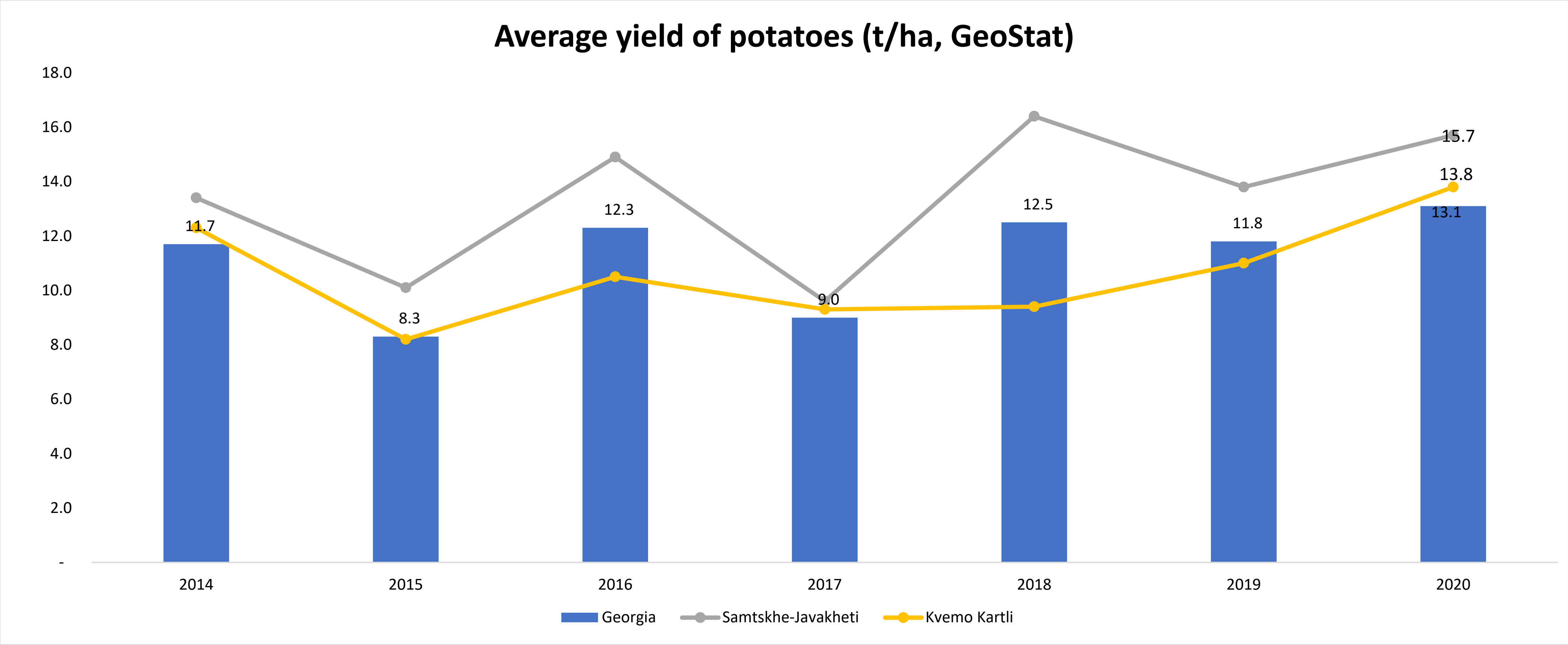


ევროკავშირი საქართველოსთვის
The European Union for Georgia

GEORGIA FinExCoop

AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

Recorded yields have also barely increased

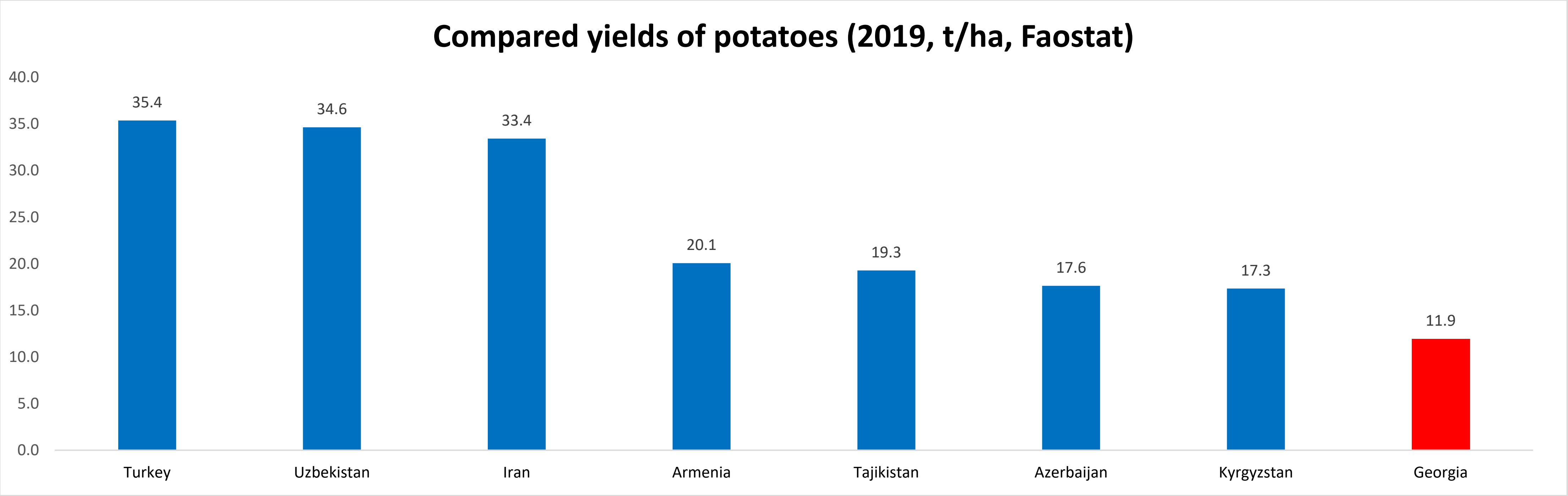


ევროკავშირი
საქართველოსთვის
The European Union for Georgia

GEORGIA FinExCoop

AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

Today, Georgian yields for potatoes registered by FaoStat are the lowest in the region despite often exceptional growing conditions. In its experimental and demonstration plots, even with tough climatic factors (drought, hail), FinExCoop has been able to achieve yields over 40 t/ha in in 2020 and 2021, nearly four times higher than those recorded for the country by GeoStat. To double or even triple yields in the decade is feasible



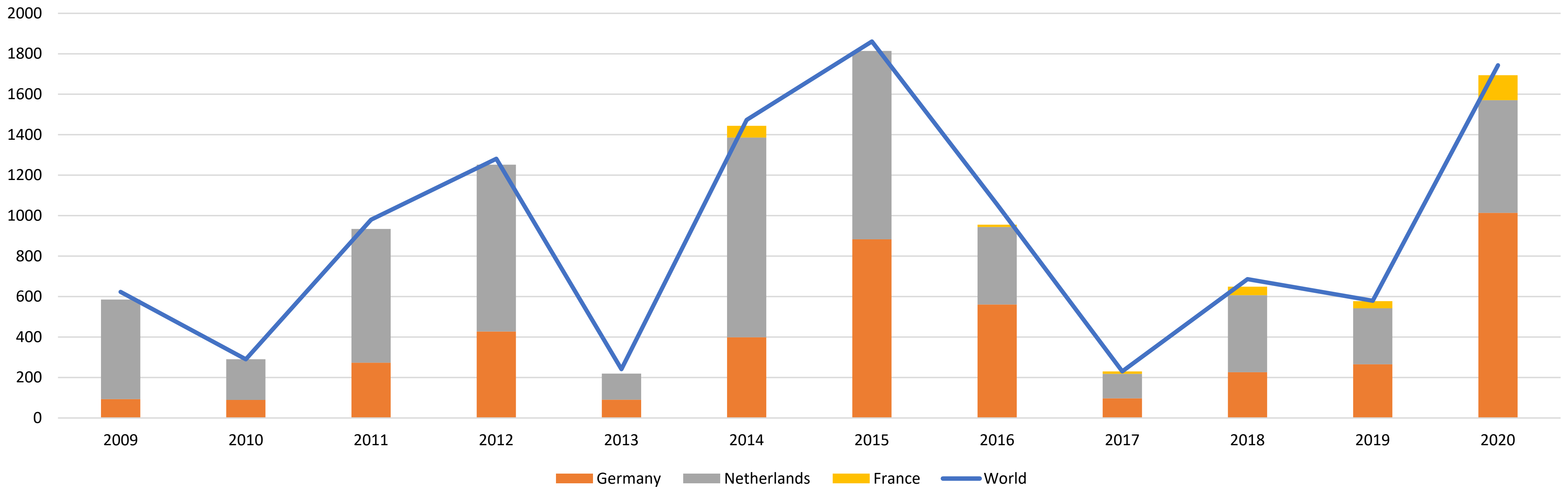
ევროკავშირი საქართველოსთვის
The European Union for Georgia

GEORGIA FinExCoop

AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

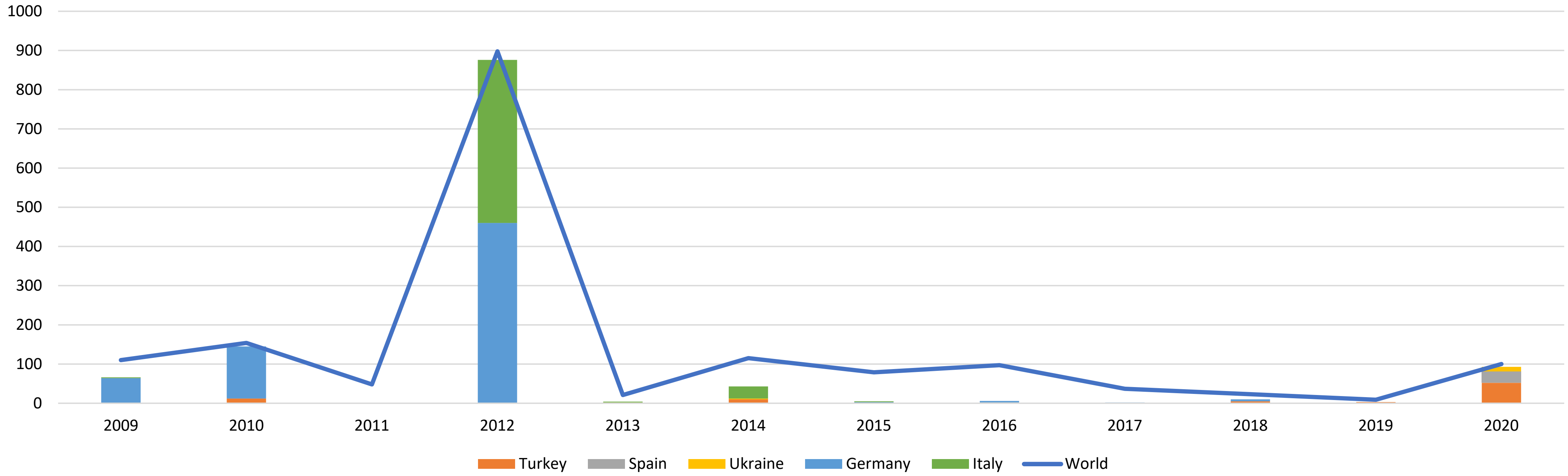
The major constraint for achieving higher yields is the lack of quality seeds. Imports of seeds have been very volatile (324 t in 2017, 2,192 t in 2020). But even in 2020, one of the best years, total imports of certified seeds accounted for only 5% of total national requirements

Georgian imports of product: 07011000000 Seed potatoes (thousand USD, ITC)



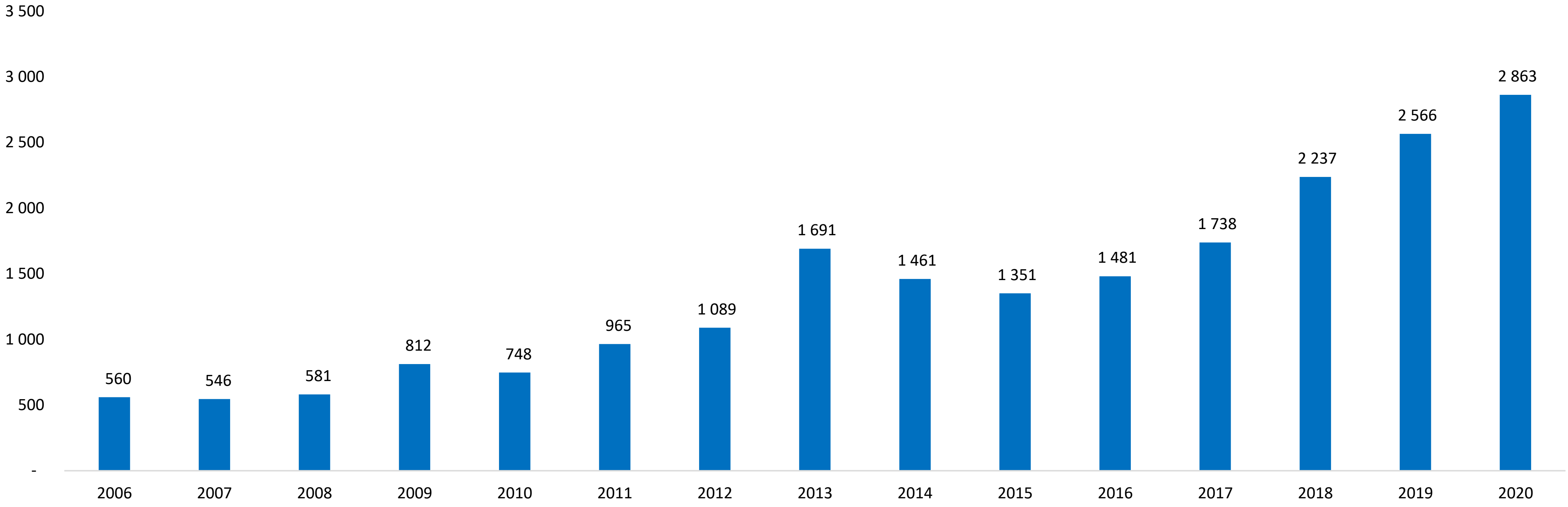
Similar time inconsistency can be found regarding the import of agricultural machinery. There are big gaps, especially in mountainous areas for which the “windows” for planting and harvesting are often quite short as evidenced this year

Georgian imports of product: 84335310000 Root or tuber harvesting machines: potato diggers and potato harvesters (thousand USD, ITC)



Sure, there has been steady growth in the use of pesticides, as for other sectors of Georgian agriculture. But many pesticides are low cost. They are used too intensively because of poor quality, of weak cropping practices (lack of proper crop rotations) and knowledge. Excessive use of pesticide goes against the EU Green deal which aims at a 50% reduction in the total use of pesticides

Total consumption of pesticides (t, GeoStat)

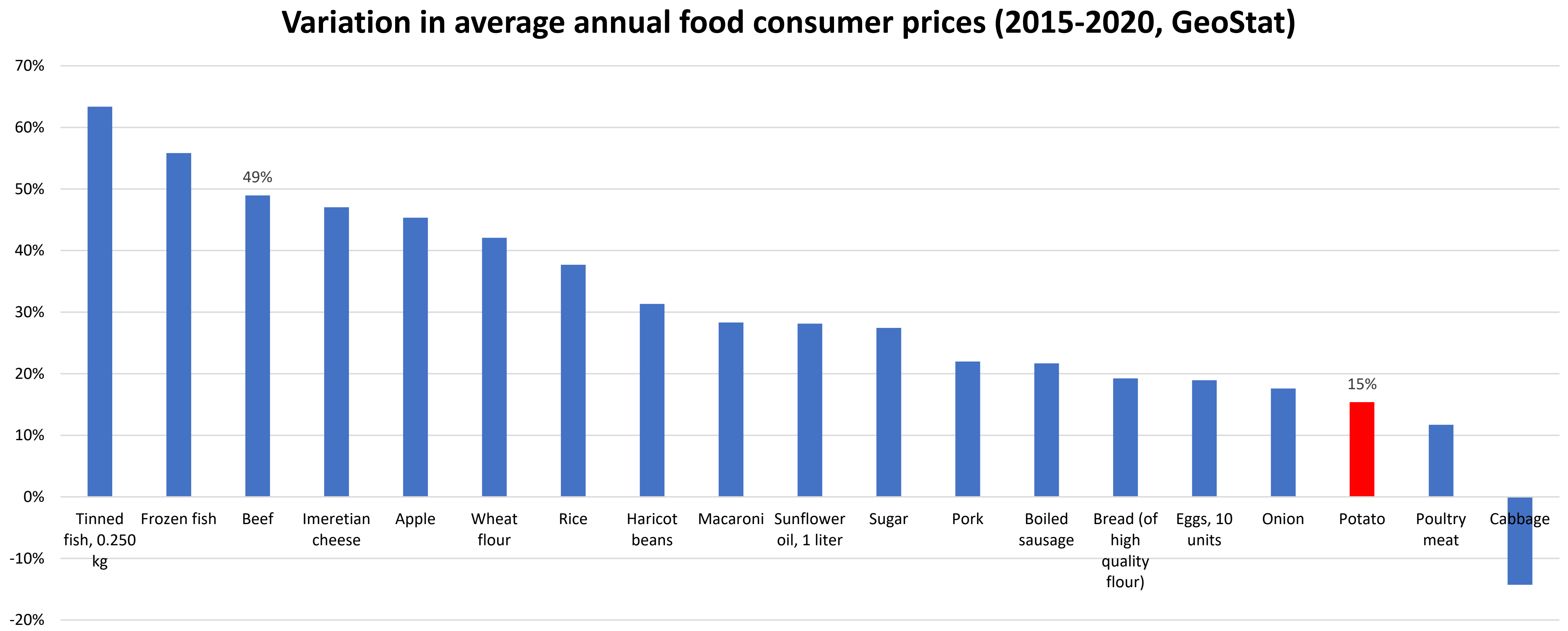


ევროკავშირი საქართველოსთვის
The European Union for Georgia

GEORGIA FinExCoop

AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

A critical factor to explain the low level of investment in potatoes has been the rather unattractive evolution of their consumer prices vis-à-vis most other food items

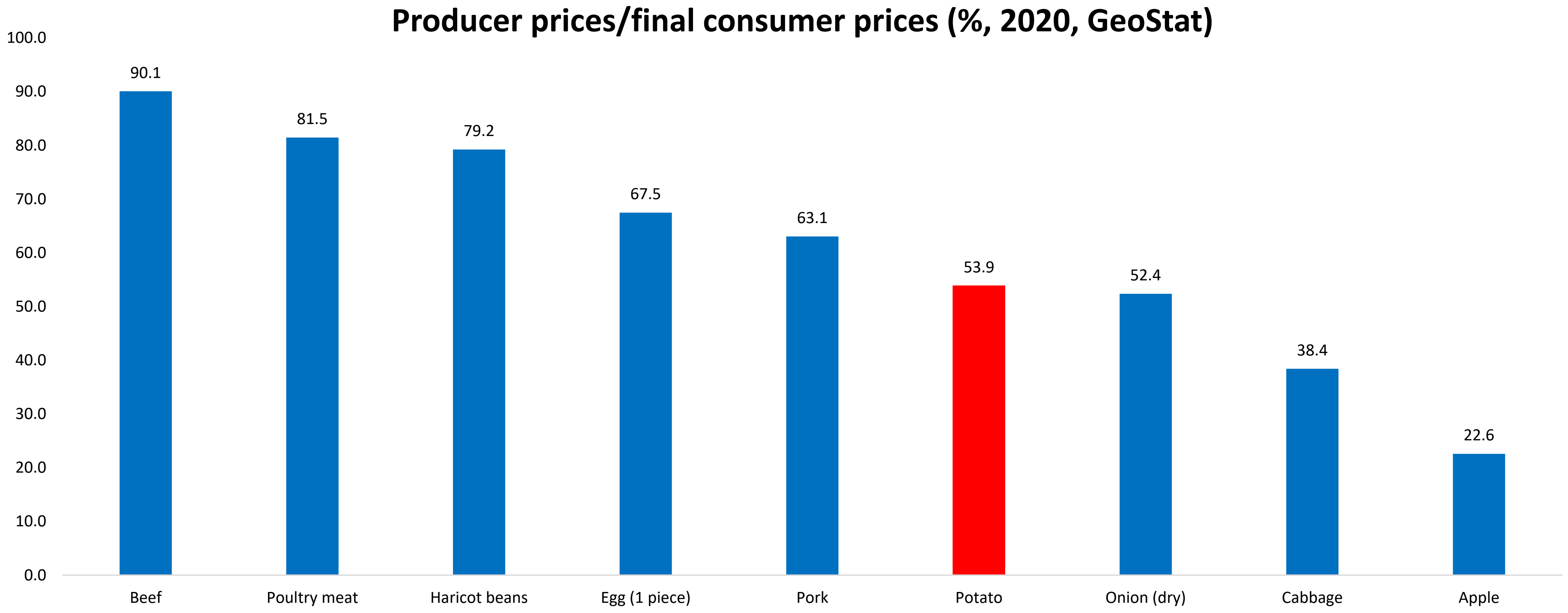


ევროკავშირი საქართველოსთვის
The European Union for Georgia

GEORGIA FinExCoop

AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

In addition, producers of potatoes receive only half of the final retail value of their products, partly because the post harvest value-chain is weak



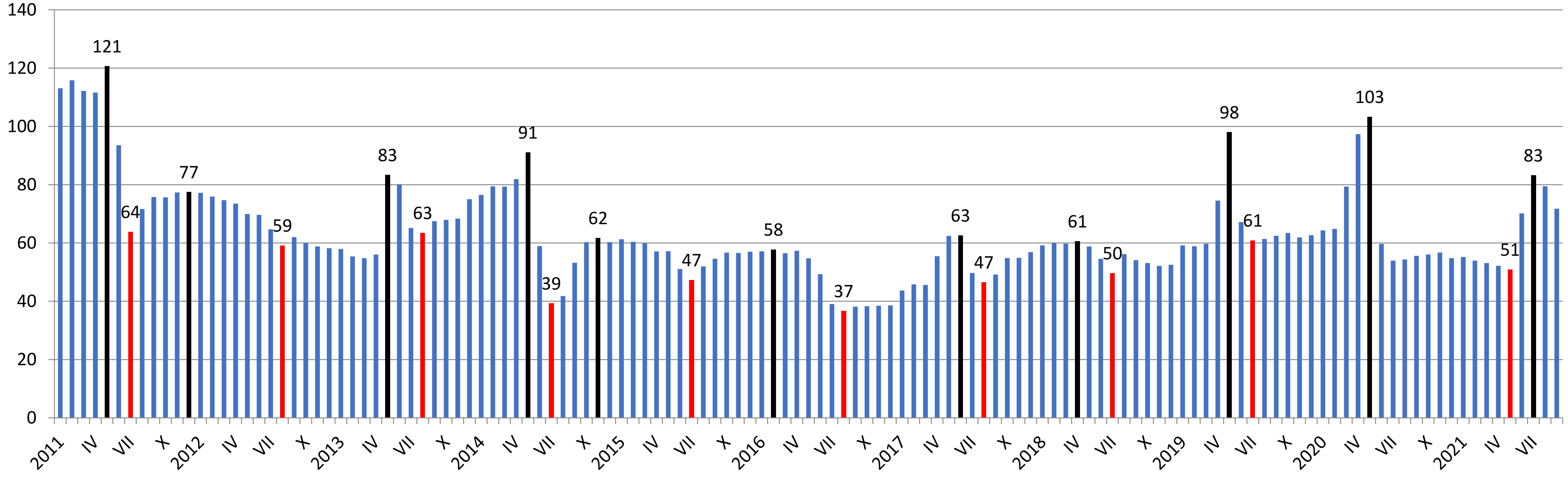
ევროკავშირი საქართველოსთვის
The European Union for Georgia

GEORGIA FinExCoop

AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

Contrary to fruit for which RDA and donors support led to substantial investment, there is virtually no modern cold storage available for potatoes in Georgia. According to a recent GeoStat survey, 49.6% of total Georgian cold storage capacity is in Shida Kartli, 7.9% in Kvemo Kartli. Samtskhe-Javakheti, the land of potato, is not even mentioned. For lack of adequate storage and warehouse finance mechanisms, too many farmers just sell their output after harvest. It leads to huge seasonal variation of prices

Consumer price potatoes (1st January 2011=100)



What can be done to improve the situation?

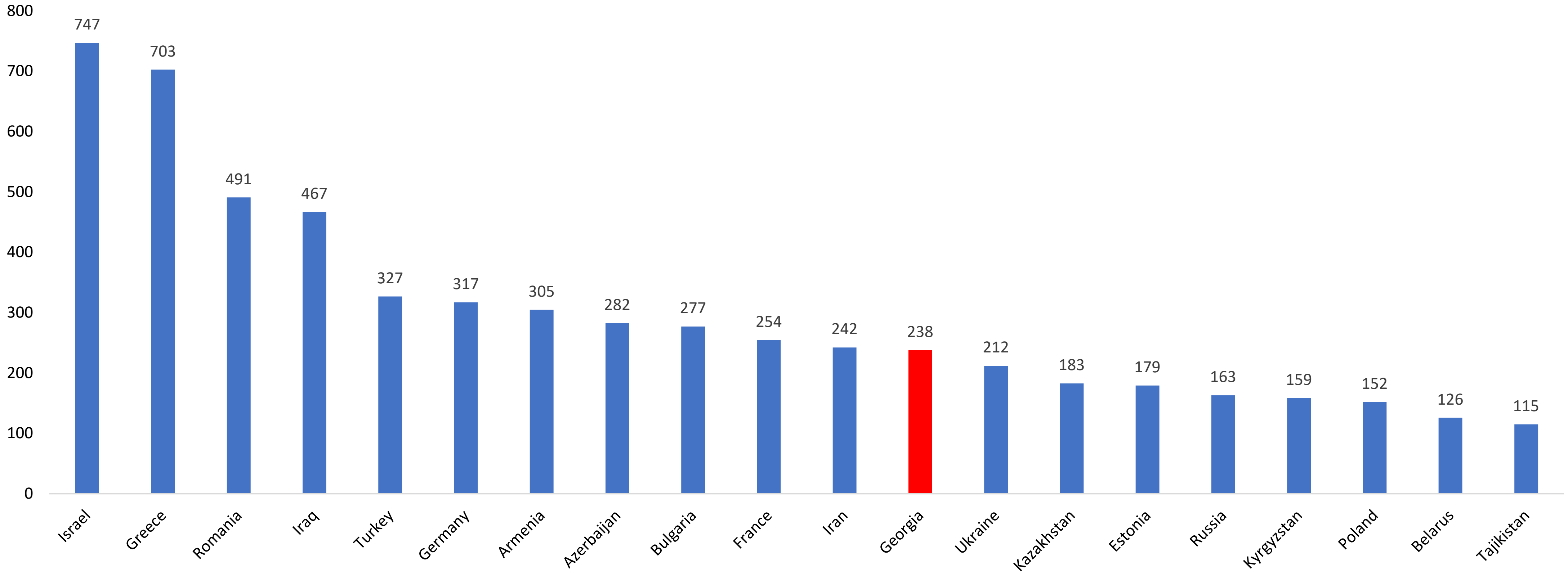
ევროკავშირი საქართველოსთვის
The European Union for Georgia

GEORGIA FinExCoop

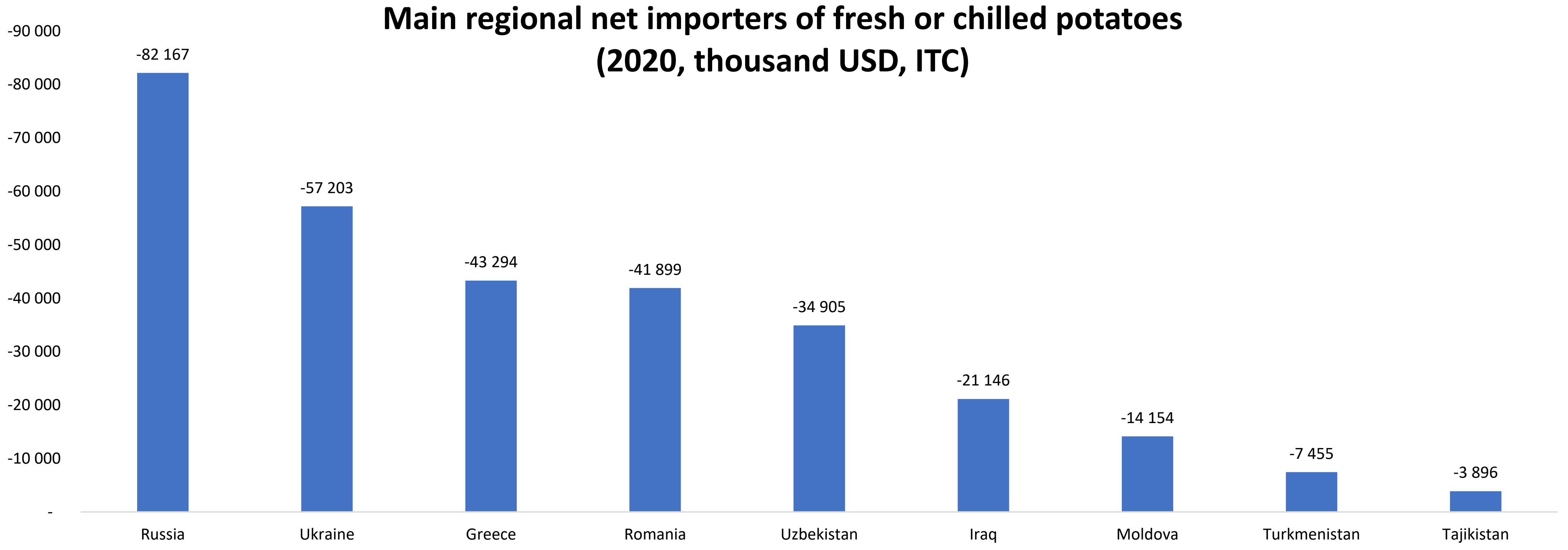
AFD
AGENCE FRANÇAISE DE DÉVELOPPEMENT

Despite poor yields, Georgian producer prices for potatoes are already lower than among many of its neighbours. Georgia could therefore potentially become much more competitive and a net exporter

Producer Price Potatoes (USD/tonne, 2019, FaoStat)



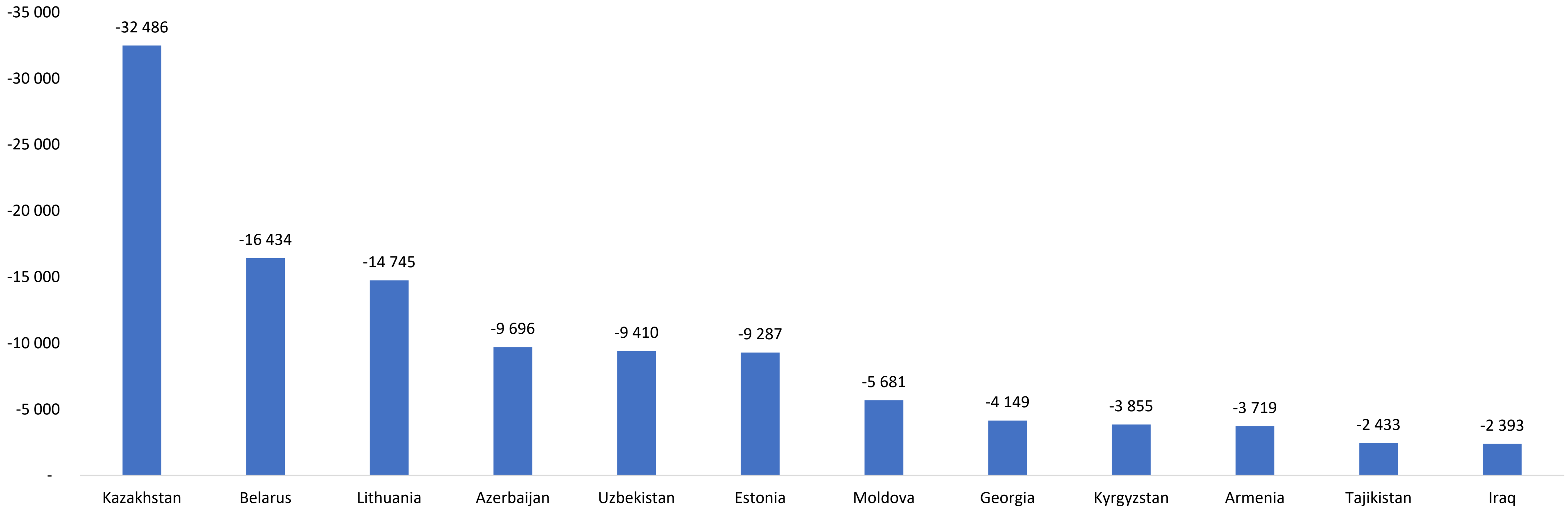
The small size of the domestic market should not be seen as a major bottleneck for a substantial increase in output. Georgia could generate much larger exports of early spring potatoes to Russia and Ukraine, partly substituting their large imports from Egypt, Azerbaijan and Pakistan. In the south, markets like Iraq could be targeted for late potatoes



As for most other agricultural products, exports of Georgian potatoes should focus on quality, diversity of varieties, and geographic indications with emergence of well-established brands. A pre-condition will be to consolidate high quality supply with traceability through the development of modern storage, grading and smart packaging and marketing based on best EU practices. Similar support from the State and donors as for fruit is needed to build such capacity

Most countries of the region are also large net importers of processed potatoes for which Georgia has already a well-recognized local brand, Frixx. Likewise, these products face high transport costs as they are quite voluminous (much air transported). Ideally, their transportation can be combined with heavy products exported from Georgia like wine or lemonade to optimize truck or wagon transportation to regional countries

Main net regional importers Product: 200520 Potatoes, prepared or preserved otherwise than by vinegar or acetic acid (excluding frozen) (2020, thousand USD, ITC)

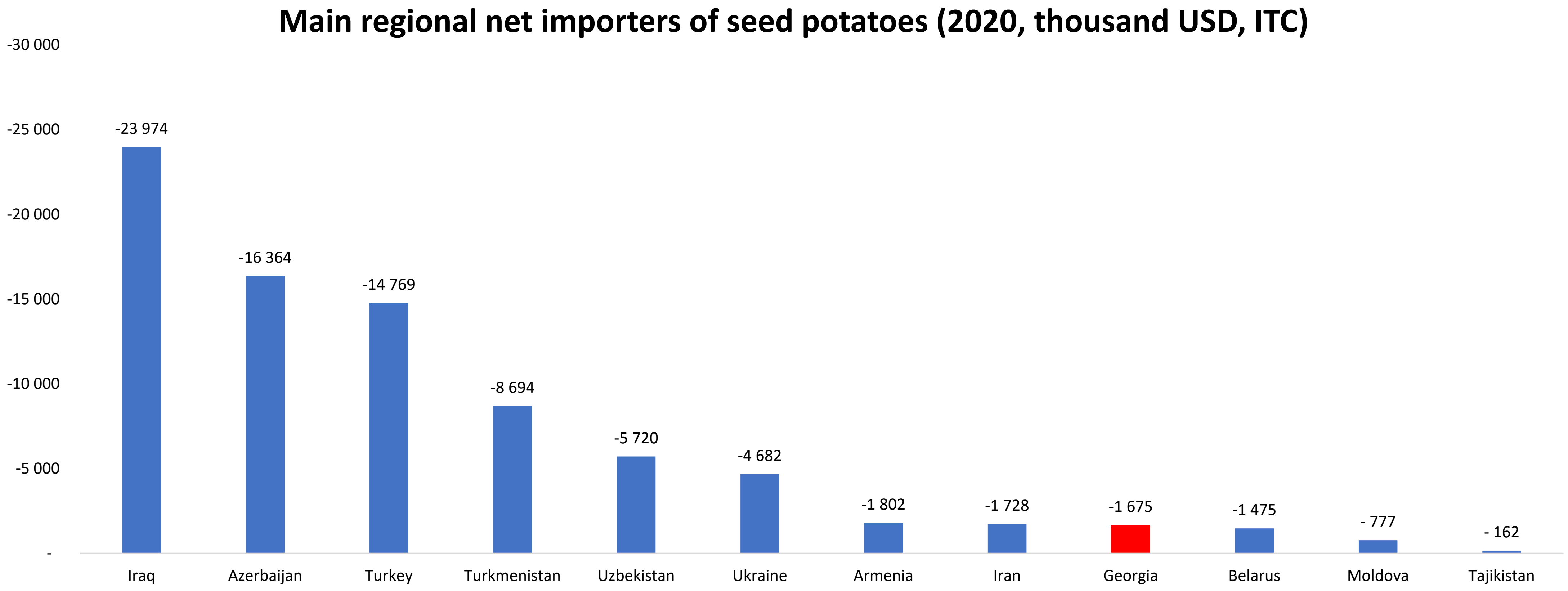


ევროკავშირი საქართველოსთვის
The European Union for Georgia

GEORGIA FinExCoop

AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

Finally, most of Georgian neighbors are large net importers of seed potatoes for which transport costs play a critical role as seed potatoes account for 10% of the weight of final output, against 3% for wheat. For that reason, a full cycle of production of seeds close to the producers makes huge economic sense



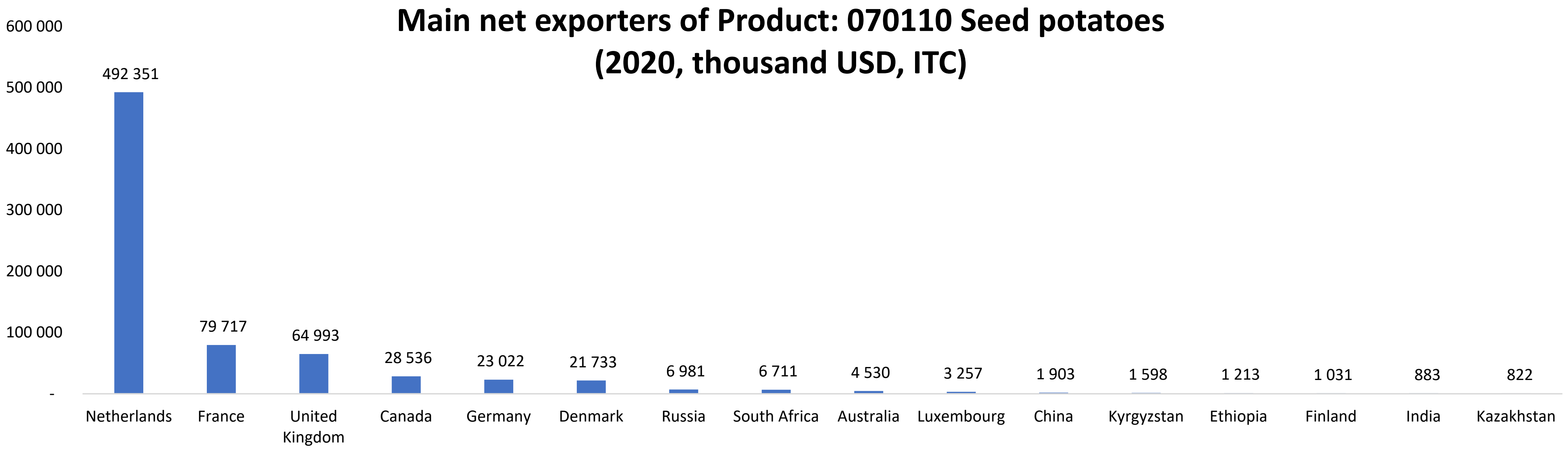
Georgia has ideal climatic (high mountainous areas with naturally lower prevalence of viruses) and agronomic conditions to develop a solid base for high quality potato seeds. In some areas like for instance Tabaskuri lake, it would be possible to develop a pilot large-scale internationally certified base for seed potatoes. It would require modern storage both on-site and close to the final buyers. Such storage may include storage for seeds and storage for table potatoes which needs different processes but may be organized on a single site for cost and logistics efficiency

ევროკავშირი საქართველოსთვის
The European Union for Georgia

GEORGIA FinExCoop

AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

The development of a national seed capacity should combine that from in vitro technologies promoted by CIP USAID and from replication of imported Class A, then Elite, then Superelite seeds tested in particular by FinExCoop Georgia with three global leaders from the Netherlands, Germany and France. To crowd them in, the State and donors should consider setting up specific incentives within a PPP framework. Green finance should also be mobilized as the reduction in transport costs linked to local reproduction of seeds will generate huge decrease in CO2 emissions



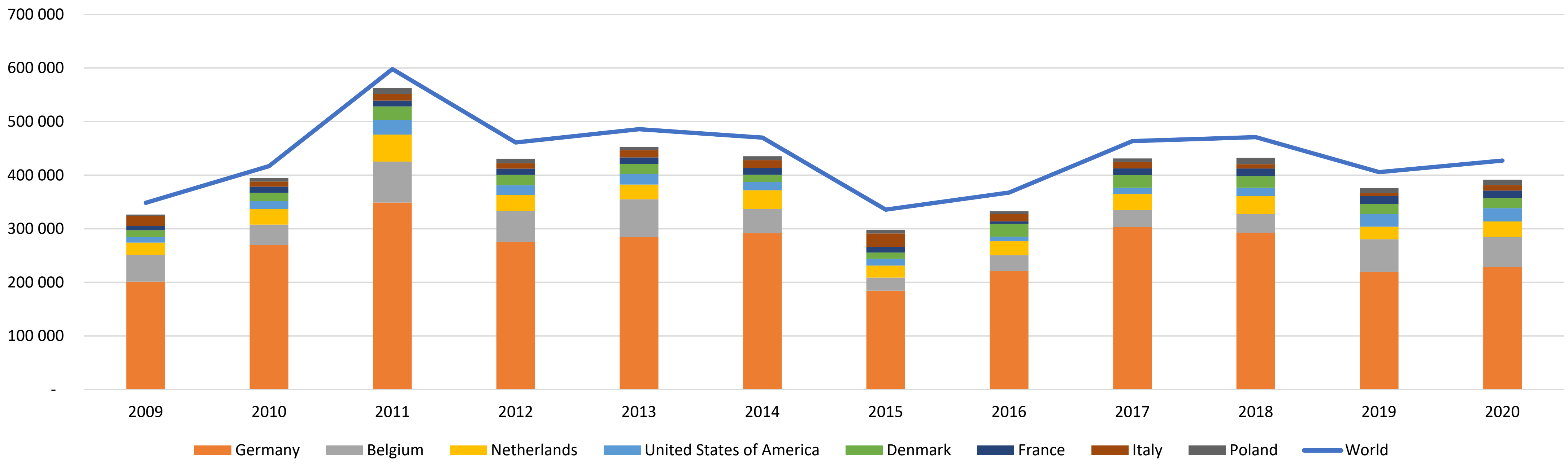
ევროკავშირი საქართველოსთვის
The European Union for Georgia

GEORGIA FinExCoop

AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT

In the field of machinery for potatoes and other sectors, Georgian could also become a leading regional hub because of its ideal geographic location. Today, Georgia is exporting more than USD 800 million of refurbished second-hand cars to its Silk Road hinterland, mainly from its Rustavi cluster. With adequate State policies, it could play a similar role for second-hand agricultural machinery. With a strong focus on sub-sectors like potato equipment for which nearly all global exports come from the EU without any real competition from new equipment from low-cost countries like China or Turkey as it is the case for instance for tractors under 100 HP

Main exporters of product: 843353 root or tuber harvesting machines (thousand USD, ITC)



Thanks a lot for your attention!

Cordonnier@int.fs.de