

# BRIEFING NOTE:

## VALUE ADDED TAX (VAT) REFORM FOR SUSTAINABLE AGRICULTURE DEVELOPMENT IN THE KYRGYZ REPUBLIC

# HOW REFORMING VAT EXEMPTIONS FOR IMPORTS AND SUPPLIES OF CHEMICAL PLANT PROTECTION PRODUCTS AND MINERAL FERTILIZERS WILL SUPPORT THE TRANSITION TO SUSTAINABLE AGRICULTURE IN THE KYRGYZ REPUBLIC.

## KYRGYZSTAN - IMPORTANT FACTS:

- According to the Food and Agriculture Organization (FAO), in 2019, re-exports of mineral or chemical fertilizers containing two or three nutrients accounted for 123% of total imports of mineral or chemical fertilizers. Domestic farmers do not use usually multi-nutrient fertilizers.
- Statistics show that there is no correlation between the volume of imports and consumption of mineral fertilizers and the volume of crop production in the country.
- Annual imports of pesticides are many times higher than the use of pesticides for the treatment of crop areas: on average, in 2008-2019, the use of pesticides amounted to 28% of imports.
- Only 50% of revenue losses due to VAT exemption for imports and supplies of crop protection chemicals and mineral fertilizers for the entire period from 2008 to 2019 can be justified by the fact that the incentive is used by farmers of Kyrgyzstan. The rest is used by farmers of other countries through re-export, or no one uses it (unregistered chemicals are a potential object of unofficial re-export).
- Chemical plant protection products and mineral fertilizers are recognized by international institutions as having a negative impact on the environment. Due to nitrogen fertilizers overuse, the concentration of nitrogen oxide emissions - its greenhouse effect is 300 times stronger than that of carbon dioxide - has increased in the atmosphere by 15% per century.
- It is necessary to green the subsidies, reorienting them so that the measures of the state support correspond to the goals of sustainable development declared by Kyrgyzstan in the international arena. The most important condition is to minimize the social costs for the most vulnerable groups of farmers, and to transfer of farmers into the ranks of producers of environmentally friendly agricultural products.

Kyrgyzstan's agriculture is an important contributor to the country, employing 446,6 thousand people or 18% of the country's working population and accounting for 81.7 billion soms (USD 1.1 billion) or 13.6% of GDP (2020). However, Government expenditures and lost revenues in agriculture in Kyrgyzstan amount to an average of 13.5 billion soms (174.5 million US dollars) per year, equivalent to over 2% of GDP. A sizeable tranche of lost revenues comes from state policy which supports measures for agriculture, namely tax exemptions.

VAT exemptions for imports and supplies of chemical plant protection products and mineral fertilizers have been shown not to improve crop yields, while the potential for negative environmental impacts has increased significantly, with high costs to the government and farmers.

As the first target of the reform in the state policy of agricultural support, reforming a subsidy - **the tax benefit in the form of VAT exemption for imports and supplies of chemical plant protection products and mineral fertilizers** - is proposed.

## WHY THE VAT EXEMPTION WAS INTRODUCED<sup>1</sup>

The stated purpose of the subsidy is to support farmers and increase crop productivity, by making mineral fertilizers and plant protection products affordable to agricultural producers. Thus, pesticides and chemical fertilizers are assigned the most important role in maintaining and increasing agricultural productivity. According to the initiators, the farmers of Kyrgyzstan are not able to obtain consistently high yields of crops, experiencing financial difficulties in the purchase of plant protection products and mineral fertilizers.

### At the same time:

- The subsidy is not provided directly to farmers as reimbursement for the purchase of mineral fertilizers and pesticides; it is not targeted.
- Fertilizers are supplied by entrepreneurs - entities with the goal of maximizing profits

<sup>1</sup> The subsidy was introduced in 2008 by Article 258 of the Tax Code of the Kyrgyz Republic.

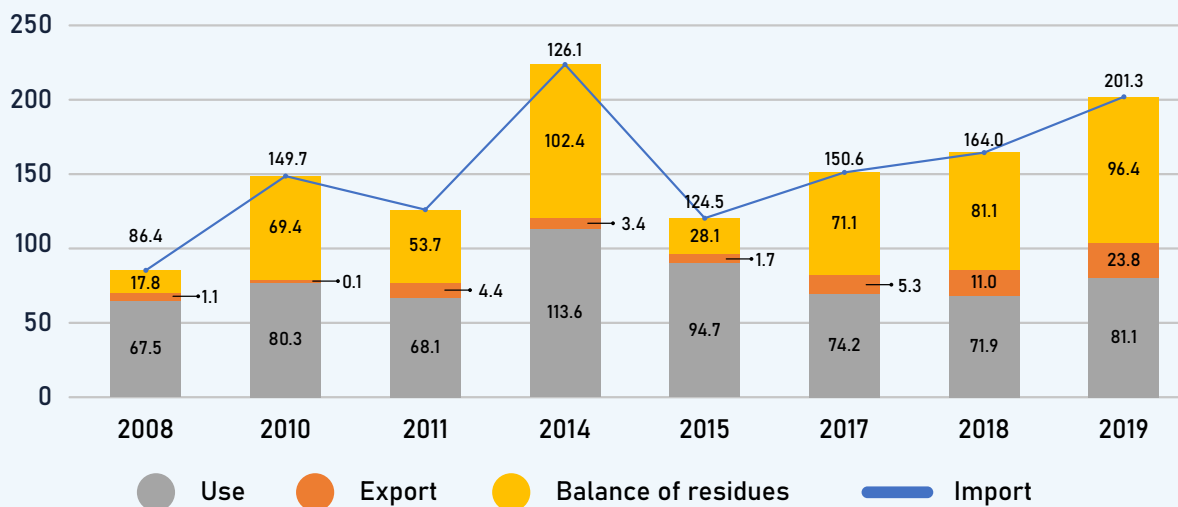
## THE PRACTICE OF MINERAL FERTILIZERS AND PESTICIDES, THE RELATIONSHIP OF CHEMICAL USE AND CROP PRODUCTION GROWTH

Mineral fertilizer imports have increased significantly during the period 2008 and 2019 with an increase of at least 140% of the 2008 level since 2011, sometimes increasing by more than 2.3 and 2.5 times (see Figure 1). At the same time, fertilizer use did not grow as fast and as remain relatively stable during the same period. This means Kyrgyz farmers do not use the entire volume of imported fertilizers. The rest is re-exported and used in an uncertain way - such fertilizers can be conditionally marked as a **"balance of fertilizer residues"**<sup>2</sup>. Fertilizer exports, on the other hand, increased by more than 20 times in 2019 relative to 2008, and the balance of residuals

increased by more than five times.

The total balance of fertilizer residues between 2008 and 2019 was an impressive 665,000 tons and 38% of the imported volume (technically, it's fertilizer not used anywhere), while in recent years the share of residues has been noticeably higher than average: in 2019 it was 48% of the imported volume, or 96,400 tons. Figure 2 shows that the volume of imports in some years is more than 2 times higher than the volume of consumption, and the resulting balance of residues accounts for almost half of the imported volume of mineral fertilizers.

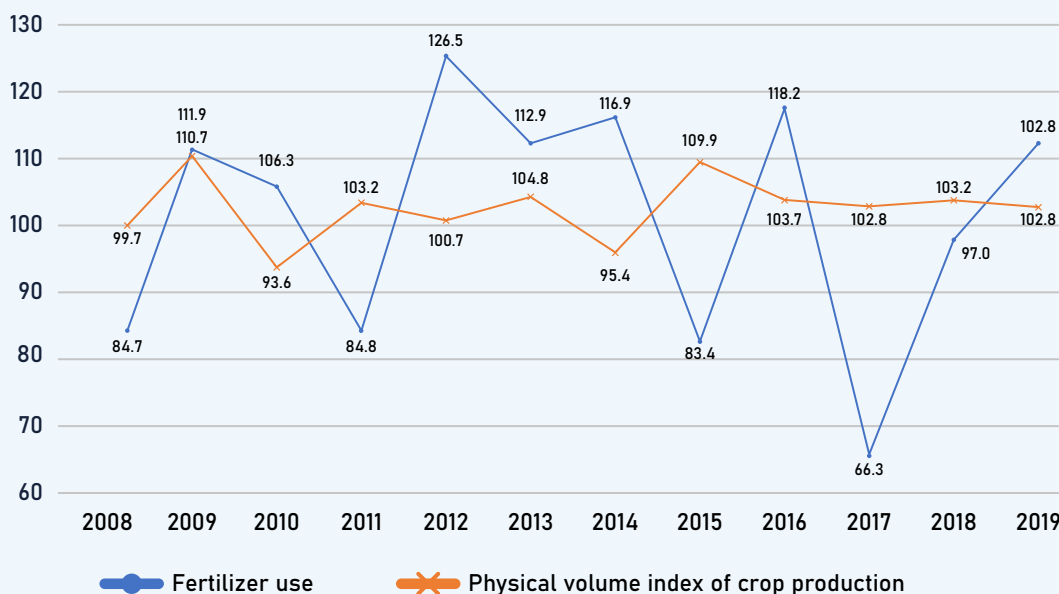
Figure 1: Volume of domestic use, export and residue of mineral fertilizers in 2008-2019, thousand tons



Source: hereinafter - own calculations based on FAO and NSC data

The effectiveness of the subsidy should also be assessed in terms of the impact of mineral fertilizers on agricultural productivity. Statistics show that there is no connection between the volume of consumption of mineral fertilizers and the volume of crop production in the country: the volume of fertilizer use fluctuates greatly from year to year, while the dynamics of crop production is constant (see Figure 2). The sharp increase in fertilizer use by 26.5% in 2012, as well as the decline in fertilizer use by more than a third in 2017, did not affect the volume of production in crop production.

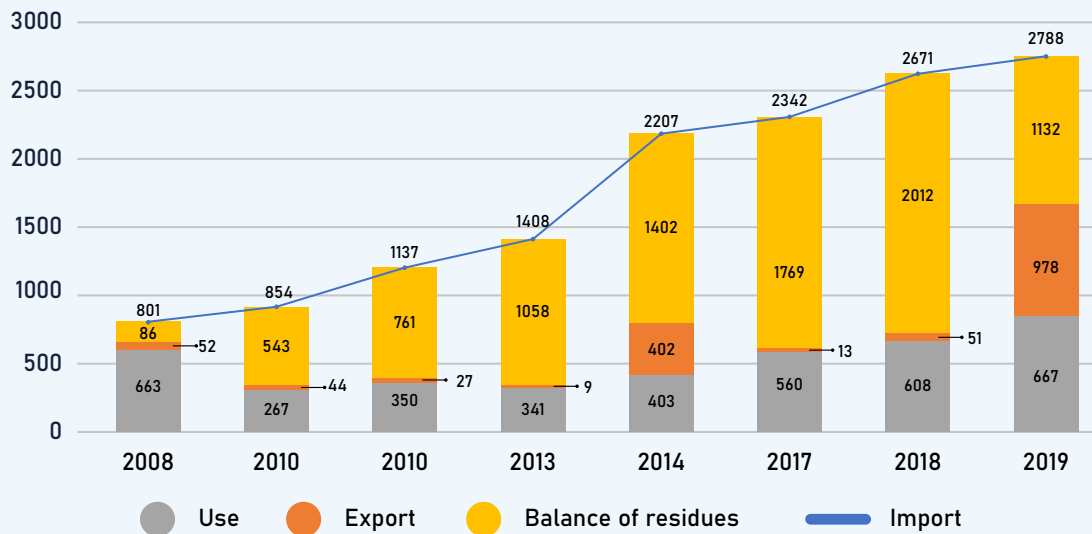
Figure 2: Comparison of the dynamics of physical volume of crop production and the dynamics of mineral fertilizer use in 2008-2019, % to the previous year



2 The balance of fertilizer residues is the difference between imported fertilizers and fertilizers used and re-exported according to the official statistics. That is, this is the volume of fertilizers, the use of which is unknown. The balance of pesticide residues is determined similarly

**Pesticides.** The abolition of VAT was also implemented for the import of plant protection products - pesticides that are approved for use in Kyrgyzstan and do not contain persistent organic pollutants. They are imported by private commercial entities.

**Figure 3: Volume of domestic use, export and residue of pesticides in 2008-2019, tons**



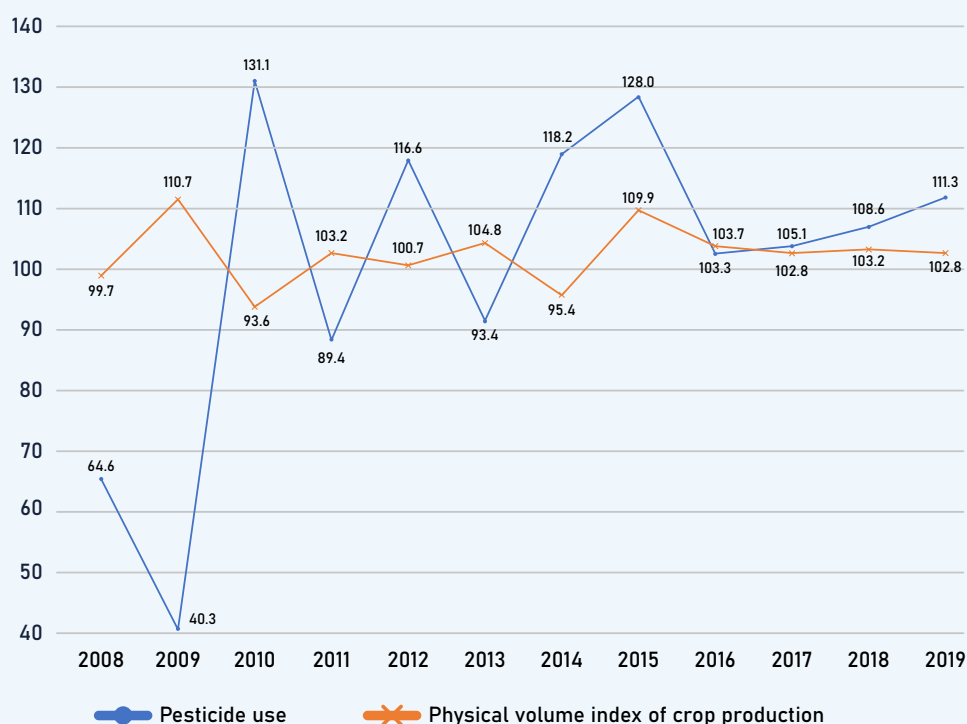
The physical volume of pesticide imports increased significantly: in 2019 they were almost 3.5 times higher than in 2008 (see Figure 3). At the same time, their use did not grow. That is, Kyrgyz farmers do not use the entire volume of concessionally imported pesticides. The rest is re-exported and used in an uncertain manner (the volume of such pesticides is classified as pesticide residue balance). Fertilizer exports have grown significantly, with more than 20- and 23-times growth in 2017 and 2018, respectively.

The rate of growth in pesticide use lagged noticeably behind the rate of growth in pesticide imports: pesticide use averaged 28% of total imports for the period 2008-2019. In 2019, the proportion of pesticides used was well below the average, accounting for 24% of imports.

A different dynamics is shown by the volume of official re-exports and the balance of residues. Official pesticide re-exports from 2008 to 2019 averaged 10% of total imports, with 2019 re-exports as a share of imports 3.5 times the average. The balance of pesticide residues is very large: its average over 11 years is 62% (!) of imports; in 2019, its share was also not small - 41%.

Statistics show that there is no correlation between the volume of pesticide use and the volume of crop production in the country: the volume of plant protection products use fluctuates very much from year to year (see Figure 4), while the dynamics of crop production is constant.

**Figure 4: Comparison of the dynamics of physical volume of crop production and the dynamics of pesticide use in 2008-2019, % to the previous year**



The foregoing allows us to **conclude that the effectiveness of the subsidy is low - it does not reach its goal to support agriculture production, while reducing government revenue.** The subsidy did not stimulate the internal use of subsidized fertilizers and pesticides, their availability remained at the same level. The **main beneficiaries of the subsidy are importers and suppliers of subsidized mineral fertilizers and pesticides.** Twenty-fold growth of exports and multiple growth of the balance of residues (23 times for pesticides and 5 times for fertilizers) proves it.

### IMPLICATIONS OF THE INTRODUCTION OF THE EXEMPTION FOR THE STATE BUDGET<sup>3</sup>

**In Kyrgyzstan, the transition to sustainable agriculture is an important state priority. This is recognized in state strategic documents. However, the lack of education and experience of farmers leads to irrational use of fertilizers and pesticides. This increases the risk of water and soil contamination and negative impacts on other components of the environment.**

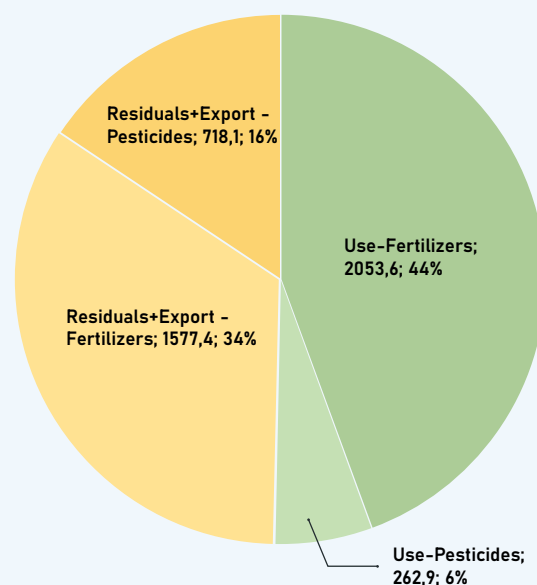
All this undermines efforts to transition to sustainable, green agriculture. Existing subsidies in agriculture do not encourage farmers to adopt "green" or organic farming methods.

Zero-rate VAT means that suppliers-importers of fertilizers and pesticides do not pay this tax to the state budget. Total amount of VAT not received by the budget for the period 2009 to 2019 was 4.4 billion soms.

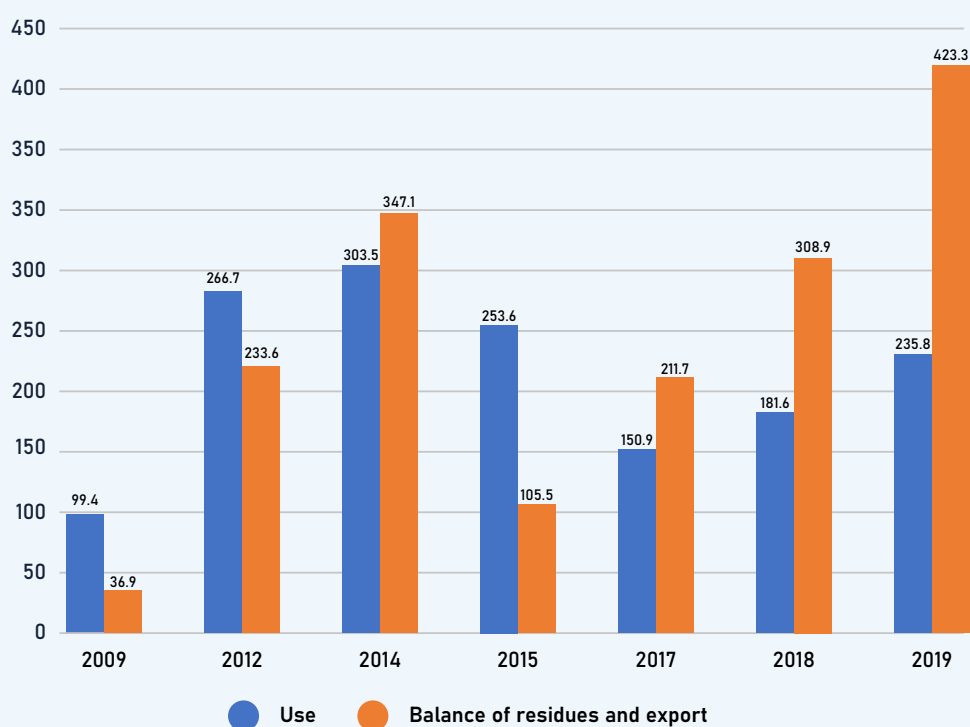
Only 49.8% of the revenue losses over the entire period from 2008 to 2019 are justified by the fact that the benefit is used by Kyrgyz farmers (see Figure 5). The rest is used by farmers of other countries, or no one uses it (but it should be noted that the balance of the residue is a potential source of unofficial re-export of mineral fertilizers and pesticides).

For the period 2008 to 2019 the estimated total value of foregone revenue for VAT exemption on the balance of residue and exports was 2.3 billion soms. This state resources are used not by those for whom this subsidy was introduced, but by a small group of suppliers. In some years the benefit was used mainly by foreign farmers (see Fig. 6)).

**Figure 5. Distribution of revenue foregone due VAT exemption for import of chemicals, in 2008-2019, mio soms, %**



**Figure 6. Distribution of revenue foregone due VAT exemption for import of on mineral fertilizers and pesticides by category of usage, by years, million soms**



## REFORM OF THE TAX EXEMPTION IN THE FORM OF VAT EXEMPTION FOR IMPORTS AND SUPPLIES OF CROP PROTECTION CHEMICALS AND MINERAL FERTILIZERS: SCENARIOS

The previous section proves that the privilege in the form of VAT exemption for imports and supplies of chemical crop protection products and mineral fertilizers is not effective.

**The image of the Kyrgyz Republic and the authorities of the country suffer from inefficient and environmentally harmful subsidies, as the President and government members declare their commitment to the transition to a green economy and sustainable agricultural practices in the international arena. At the same time, the authorities support environmentally harmful practices with subsidies, in our case, the use of mineral fertilizers and pesticides.**

Given that the requirements of foreign consumers for green and organic agricultural products are increasing, **it is necessary, to improve the competitiveness of Kyrgyz agricultural producers, to reduce the number of pesticides and mineral fertilizers used, to accelerate the transition to alternatives with low toxicity and to develop organic production.**

At a minimum, we need to limit government involvement in unsustainable practices - subsidy reform is needed. Three scenarios<sup>4</sup> are proposed:

- 1. VAT exemption abolished for all (VAT rate -12%) gives potential budget revenues 353,6 million KGS per year.**
- 2. VAT exemption abolished for private sector consumers, zero VAT rate retained for government purposes (VAT rate -12%) gives potential budget revenues 350,0 million KGS per year.**
- 3. Applying a reduced VAT rate of 6% gives potential budget revenues 176,8 million KGS per year.**

It can be seen that even under the minimum scenario the potential growth of state budget revenues is significant. As a result of the proposed reforms, the state can direct the proceeds to «greening» agriculture.

While recognizing the perniciousness of agricultural pesticide subsidies, international institutions do not refuse to support agricultural producers, but call for greening these subsidies with minimal social costs to the most vulnerable populations. This means that support for farmers is not canceled, but refocused. Thus, because of the reform, the state will have the resources of 177 to 354 million KGS to finance the most important areas of state policy. For example, it is required to create the agricultural infrastructure of Kyrgyzstan to ensure the preservation of agricultural land and the land fund of Kyrgyzstan as a whole. It is necessary to restore and develop the mechanism for assessing soil quality and determining the need for fertilizer application. It is necessary to ensure the complete literacy of farmers in farming, including the norms for applying fertilizers and using plant protection products.

These funds can also be used to support farms practicing organic agriculture by introducing specific effective mechanisms for subsidizing soft loans, leasing of agricultural machinery, supplying organic seeds, biopreparations, entomophages, as well as any other types of state support. At the same time, the objective should be to increase the share of organic farming and reduce the share of traditional agriculture.

<sup>4</sup> Potential income calculations under scenario 2 are presented on the assumption that state consumption in 2019 is 29,972.2 thousand KGS. Data processed based on data from the public procurement portal [www.http://zakupki.gov.kg/popp/](http://zakupki.gov.kg/popp/). Source: Own estimation based on data from SCS Custom Service KR.