UKRAINE

ACCELERATING PRIVATE INVESTMENT IN AGRICULTURE: PROGRAM FOR RESULTS (P166941)

TECHNICAL ASSESSMENT

April 26, 2019
World Bank
### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIP</td>
<td>Border Inspection Post</td>
</tr>
<tr>
<td>CMU</td>
<td>Cabinet of Ministers of Ukraine</td>
</tr>
<tr>
<td>DCFTA</td>
<td>Deep and Comprehensive Free Trade Agreement</td>
</tr>
<tr>
<td>DLI</td>
<td>Disbursement-Linked Indicator</td>
</tr>
<tr>
<td>DLR</td>
<td>Disbursement-Linked Result</td>
</tr>
<tr>
<td>EFA</td>
<td>Expenditure Framework Assessment</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EUP</td>
<td>Export Unit Price</td>
</tr>
<tr>
<td>EUR</td>
<td>Euro</td>
</tr>
<tr>
<td>EV</td>
<td>Export Volumes</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>FLAPS</td>
<td>Free Legal Aid Provision System</td>
</tr>
<tr>
<td>GCC</td>
<td>Gulf Cooperation Council</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GeoCadaster</td>
<td>The State Service of Ukraine for Geodesy, Cartography and Cadaster</td>
</tr>
<tr>
<td>GoU</td>
<td>Government of Ukraine</td>
</tr>
<tr>
<td>GSAP</td>
<td>Government Strategy and Action Plan</td>
</tr>
<tr>
<td>ha</td>
<td>Hectares</td>
</tr>
<tr>
<td>IACS</td>
<td>Integrated Administration and Control System</td>
</tr>
<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
</tr>
<tr>
<td>I&amp;D</td>
<td>Irrigation and Drainage</td>
</tr>
<tr>
<td>IRR</td>
<td>Internal Rate of Return</td>
</tr>
<tr>
<td>KPI</td>
<td>Key Performance Indicator</td>
</tr>
<tr>
<td>MAPF</td>
<td>Ministry of Agricultural Policy and Food</td>
</tr>
<tr>
<td>MENR</td>
<td>Ministry of Ecology and Natural Resources</td>
</tr>
<tr>
<td>MOF</td>
<td>Ministry of Finance</td>
</tr>
<tr>
<td>MOJ</td>
<td>Ministry of Justice</td>
</tr>
<tr>
<td>MRD</td>
<td>Ministry of Regional Development, Construction, and Housing and Communal Services</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>NBU</td>
<td>National Bank of Ukraine</td>
</tr>
<tr>
<td>NPV</td>
<td>Net Present Value</td>
</tr>
<tr>
<td>NTSU</td>
<td>National Transportation Strategy for Ukraine</td>
</tr>
<tr>
<td>OIE</td>
<td>World Organization for Animal Health’s</td>
</tr>
<tr>
<td>PforR</td>
<td>Program-for-Results</td>
</tr>
<tr>
<td>SMEs</td>
<td>Small and Medium Enterprises</td>
</tr>
<tr>
<td>SPS</td>
<td>Sanitary and Phytosanitary Standards</td>
</tr>
<tr>
<td>SSUFSCP</td>
<td>State Service of Ukraine for Food Safety and Consumer Protection</td>
</tr>
<tr>
<td>TBT</td>
<td>Technical Barriers to Trade</td>
</tr>
<tr>
<td>TRQ</td>
<td>Tariff-Rate Quota</td>
</tr>
<tr>
<td>UAH</td>
<td>Ukrainian Hryvna</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>US$</td>
<td>United States Dollar</td>
</tr>
<tr>
<td>VAT</td>
<td>Value-Added Tax</td>
</tr>
<tr>
<td>VE</td>
<td>Verifying Entity</td>
</tr>
<tr>
<td>WoP</td>
<td>Without Project</td>
</tr>
<tr>
<td>WP</td>
<td>With Project</td>
</tr>
</tbody>
</table>
Contents

I. PROGRAM INTRODUCTION ........................................................................................................... 4

II. PROGRAM STRATEGIC RELEVANCE ....................................................................................... 4
   A. Sectoral Context ......................................................................................................................... 4

III. PROGRAM TECHNICAL SOUN DNESS .................................................................................. 15
   Results Area 1: Increasing Competitiveness of Input Markets ......................................................... 21
   Results Area 2: Linking SMEs and farmers to export markets ....................................................... 30

IV. INSTITUTIONAL AND IMPLEMENTATION ARRANGEMENTS FOR THE PFORR ......... 33
   A. Institutional Arrangements ......................................................................................................... 33
   B. Stakeholder Assessment ............................................................................................................ 34
   C. Disbursement Arrangements ..................................................................................................... 36

V. DESCRIPTION AND ASSESSMENT OF PROGRAM EXPENDITURE FRAMEWORK ....... 40

VI. PROGRAM ECONOMIC EVALUATION .................................................................................... 46
   Results Area 1 - Increasing Competitiveness of Input Markets ..................................................... 47
   Results Area 2 - Linking SMEs and Farmers to Export Markets .................................................... 49
   Improving access to fertilizer and finance ..................................................................................... 53
I. PROGRAM INTRODUCTION

1. This technical assessment has been carried out as part of the preparation of the Agriculture Program-for-Results (PforR) operation in Ukraine. The objective of the proposed PforR is to alleviate select constraints to increased participation of the private sector, in particular, small and medium-sized enterprises (SMEs) in the agricultural input and output markets of Ukraine. The objective will be achieved by supporting the key areas of the Government of Ukraine’s (GoU) Strategy and Action Plan (GSAP) on Leveraging Private Investment in Agriculture and Agribusiness Sectors for 2019-2023 that sets forth a range of measures to mobilize private investment in agriculture and agribusiness sectors to boost their competitiveness and productivity, increase agri-food exports and contribute to a steady economic growth.

2. The proposed PforR will follow the World Bank’s Maximizing Finance for Development approach, focusing on unlocking the private sector investment potential in the agriculture and agribusiness sectors. The assessment was carried out based on the analysis of the up-to-date statistics, review of recent studies¹, stakeholder assessment as well as extensive consultations with the various participants² in the agribusiness sector in Ukraine. The technical assessment concluded that the Program will support the Government’s key reform areas and that these reforms will address the binding constraints to increasing agricultural investment, competitiveness and inclusive growth, particularly for agriculture and agribusiness SMEs.

II. PROGRAM STRATEGIC RELEVANCE

A. Sectoral Context

3. Given its large economic, spatial and social footprint, the agriculture sector plays a fundamental role in ensuring sustainable and inclusive growth in Ukraine. The primary sector accounts for 10 percent of GDP (2017), 18 percent of formal employment (2016) and 42 percent of total exports. In addition, agriculture has a large spatial footprint, taking up 71 percent of the land in Ukraine, and a large social footprint, because of the 4 million small farmers. The sector has become the largest single source of foreign exchange earning in recent years, accounting for 44 percent of export earnings (Table 1), and boosting the sector’s macroeconomic significance.


² Extensive consultations were conducted with the representatives of the Committee of Agrarian Policy and Land Relation, the Ministries of Agrarian Policy and Food, Finance, Infrastructure, Economic Development and Trade, and Environment, the National Investment Council, the State Service on Food Safety and Consumer Protection, as well as a number of trade associations and organizations: All-Ukrainian Agrarian Union, Ukrainian Grain Association, Association of Ukrainian Orchard Producers, Ukrainian Club of Agribusiness, European Business Association, American Chamber of Commerce in Ukraine, financial institutions: OTP Bank and Credit Agricole, as well as international organizations, including EU, EBRD and UN FAO.
Table 1: Export earnings by source, average 2005-07 and 2015-17

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural products</td>
<td>5.03</td>
<td>13%</td>
<td>15.82</td>
<td>44%</td>
</tr>
<tr>
<td>Ferrous and nonferrous metals</td>
<td>16.87</td>
<td>44%</td>
<td>9.05</td>
<td>25%</td>
</tr>
<tr>
<td>Mineral products</td>
<td>3.75</td>
<td>10%</td>
<td>2.86</td>
<td>8%</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>5.66</td>
<td>15%</td>
<td>2.98</td>
<td>8%</td>
</tr>
<tr>
<td>Chemicals</td>
<td>4.11</td>
<td>11%</td>
<td>2.11</td>
<td>6%</td>
</tr>
<tr>
<td>Timber and wood products</td>
<td>1.02</td>
<td>3%</td>
<td>1.57</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>1.22</td>
<td>3%</td>
<td>1.32</td>
<td>4%</td>
</tr>
<tr>
<td>Industrial goods</td>
<td>0.51</td>
<td>1%</td>
<td>0.51</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>38.18</td>
<td>100%</td>
<td>36.22</td>
<td>100%</td>
</tr>
</tbody>
</table>


4. **Since 2010, agriculture has been a source of growth in an otherwise stagnant economy.** Figure 1 shows three distinct periods of performance for Ukraine’s agricultural sector. From 1993-1999, the sector declined dramatically, shrinking at an annual rate of 14 percent; the overall economy declined as well, albeit at a slower rate. The period 2000-2009 saw continued overall declines, although growth resumed late in the period. From 2010-2016, the sector has been a source of growth, expanding at a robust rate of 6.6 percent per year, even as problems in the industrial sector have slowed overall economic performance.

![Figure 1: Growth rates: GDP, agriculture, and non-agricultural sectors, 1993-2016](image)


5. **Ukraine has a strong potential to make an even larger contribution to economic growth and the vitality of rural areas by further diversifying into higher-value markets and attracting more quality investment into the sector.** Close to 23 million hectares (or 54 percent) of the agricultural land in the country is comprised of highly fertile black soils, which, together with the favorable climatic conditions and abundant water resources, provides a conducive environment for agricultural production in the country. In addition, reasonably developed infrastructure and proximity to the world key markets, create a potential for Ukraine to play a dominant role in global food supply as the global demand for food increases driven by growing populations, higher incomes and changing diets. Ukraine has already established itself as one of the leading global exporters of grain, and exports are projected to continue its growth. However, its agricultural potential has yet to be fully harnessed by increasing the production and exports of higher value-added products.
6. **Due to the low degree of value addition in the sector, Ukraine lags behind the comparator countries in its agriculture productivity levels.** This point is illustrated by Figure 2, which compares current land and labor productivity in Ukraine with productivity in neighboring countries. The numbers show that both labor and land productivity will need to grow considerably if Ukraine is to close the productivity gap with countries like Poland and Macedonia.

![Figure 2: Value-added per agricultural worker and per hectare for select countries, 2012-2016 averages](image)


7. **This is largely attributable to the uniqueness of the Ukrainian farm structure.** Land ownership in Ukraine falls under three classes: household farms, private farms and commercial farms. The first group – household farms – comprises household plots, while the second two classes are formal enterprises with reporting obligations. In 2016, there were about 4 million household farms, with an average size of 3.9 ha; there were 32,032 private farms, medium-size farming operations with average land holdings of 138 ha; and 9,851 large commercial farms, operating on an average 1,600 ha. Broadly, this creates a unique structure in which about 15.7 million ha of farmland are managed by small households, another 15.7 million ha are managed by very large commercial operations, with a small balance of land (4.4 million ha) managed by medium enterprises (Figure 3).
8. While the dominant focus of the large commercial farms on the production of grains and oilseeds, it is the household farms that produce a dominant production share of high-value horticultural crops (Figure 4). Traditionally, agricultural enterprises, large commercial farms and private farms specialized in the major field crops, grains, sugar beets, and beans. That trend continues in combination with an expansion into oilseeds. However, these large farms produce less value per hectare. At the same time, high-value agriculture products, including 84 percent of fruit and berries, 94 percent of vegetables and roots and tubers, 73 percent of milk, and 99 percent of honey, are grown almost exclusively on household farms. Commercial farms produced only about 5 percent of horticultural crops in 2000, 2010 and 2017, while private farms have produced less than 1.5 percent of horticultural crops since 2000. The productivity of the SMEs is relatively low as small and medium producers remain under-invested due to the constraints that exist in the sector for increasing the farm-level investments.

Figure 4: Major field crops and horticultural crops production by farm type, 2000, 2010 and 2017

9. **Ukrainian SMEs also produce most of the livestock and milk in the country** (Figure 5). However, the productivity of the livestock production is significantly lower than in the comparator countries, as in case with the horticulture products. For example, milking cows, mostly raised on small farms in Ukraine, produce half of the milk if compared to similar cows in Netherlands (van Leeuwen et al., 2012; Ukraine Agribusiness Club, 2017).

![Figure 5: Meat production by farm type, 2000 and 2017](image)

**Source:** Ukrstat (2018)

10. **As a result of relatively low value addition in the sector, Ukraine loses an estimated eight billion US Dollars of foregone export revenue annually.** Agricultural exports are a key engine of the Ukrainian economy, yet remain well below their potential, and can grow by additional 50 percent over the current annual exports of about US$ 15 billion. While Ukraine is at the top of the world export charts for some commodities (wheat, corn, sunflower oil), it ranks only 24th in agricultural exports value, including 33rd for live animal exports and 36th for sheep and goats. This reflects the dominance of annual crops in the crop production mix and overall low value addition in agricultural production, as most of these crops are exported in unprocessed/slightly processed from, representing more than 49 percent of total agri-food exports (Figure 6). According to the International Trade Center estimates, Ukrainian higher-value added agri-food exports (in particular, vegetable oil, dairy and meat products, fresh produce/fruits and vegetables) remain below 50 percent of their potential, including 73 percent below potential for cattle and 96 percent for shear and goats. The low value addition is driven by two key factors: the relatively high return on investment in grains and oilseeds, and, simultaneously low investments in higher value-added production due to an unpredictable land policy and business climate.

---

3 Ukraine has been very successful in increasing production volumes of poultry and related products mainly driven by the increased vertical integration in the industry.

4 ITC.
11. The Deep and Comprehensive Free Trade Area (DCFTA) with the European Union (EU) that formally came into force on 1 September 2017 creates an important opportunity for Ukraine to further boost the value of its agricultural exports. However, to take advantage of this opportunity, Ukraine needs to upgrade quantity and quality of its spending on sanitary and phytosanitary standards (SPS), and quality assurance services to comply with the EU standards. Lack of capacity to adhere to the EU SPS for some categories of agricultural products slows down agricultural exports to the EU. Under the DCFTA in October 2017 Ukraine was granted 36 tariff-rate quotas (TRQs) and another set of TRQ expansions, known as Autonomous Trade Measures. By the end of 2017, the number of fully utilized quotas expanded to 10, as butter, sugar, poultry, wheat, barley meal and pellets were added to the 2014 list. However, the Ukrainian exporters could not take full advantage of some of the tariff lines. In the case of pork, African Swine Fever, a deadly swine disease present in Ukraine that is not transmittable to humans, prevents exports; and producers of other meat, eggs, and dairy products face difficulty meeting public and private food safety standards in the EU. Poultry is an exception, and several processing plants in Ukraine have been licensed to export to the EU (Movchan, Kosse and Giucci 2015).

12. Closing the value addition and export potential gaps can boost economic growth, but it would require more and higher quality investments. A 30-percent productivity increase in agriculture could result in a 4.4 percent Ukrainian GDP growth in five years, and 12.5 percent growth over ten years (World Bank, 2013). However, to unleash its productive and export potential to the fullest, agricultural sector in Ukraine needs more and higher quality investments for all types of the producers. Overall, private investment has increased over the last decade and Ukraine now has some of the largest farms in the world. Large multinational agri-food companies are also present in the country. However, the level of investments is low if compared to the significance of the agriculture sector in the Ukrainian economy.
13. **While investors are attracted by the country’s enormous agricultural potential, they continue to face significant obstacles to investment.** Agriculture accounted for only 6 percent of total capital investments on average over the last decade. Foreign Direct Investment (FDI) inflows in agriculture have also increased steadily between 2005 and 2009 but decreased since the global financial crisis (Figure 7). However, they have never been higher than 1.9 percent of total FDI inflows. Small and medium producers that constitute the backbone of value-added agriculture in the country are particularly under-invested due to the constraints that exist in the sector.

![Figure 7: Agriculture and Food Processing Sectors are Underrepresented in FDI and Capital Investment (2004 – 2017)](image)

14. **Increasing private investment requires improving the business environment and reducing risk.** There are several market failures that lead to a sub-optimal provision of goods and services and hamper private investment in the agriculture sector. These include high transaction costs and risks of doing business, disincentives due to inadequate or contrary public policies and regulations, limited provision and poor targeting of public goods and services, and concentrated market power and limited competition in agricultural input markets. Addressing these would have significant positive impacts on the provision of goods and services through the private sector:

i. **Better business regulations could help promote private investment in the agriculture sector.** Ukraine has made important progress in streamlining its business environment in recent years, with its Doing Business ranking improving from 140th in 2013 to 80th in 2017. However, structural constraints, such as weak infrastructure, a highly concentrated and anticompetitive market structure, and weak land management continue to undercut investor confidence.

ii. **Improved state support for agriculture, guided by evidence-based policy analysis and a medium-term expenditure framework, could strengthen long-run competitiveness.** The allocation of the State support funds is often administratively cumbersome and non-transparent. Furthermore, a large share of support is reaching only the largest producers while 41 percent of all small- and medium-sized agricultural enterprises, including individual farmers, are not aware of the State support program. Only 20.3 percent of small farmers applied to the state support program during 2000-2017 (FAO, 2018).

iii. **Well-functioning primary input markets could contribute to improved productivity and investment.** Along with other State-owned enterprises operating in the fertilizer markets, a
local monopoly in the nitrogen fertilizer market drives up the cost of fertilizer for producers and stymies innovation and investment. Irrigation water supply is publicly managed and often unreliable. The land reform remains incomplete, including about 25 percent of agricultural lands are under State control. Land markets do not function due to the existing moratorium on sale of land. Financial instruments, such as leasing, crop receipts, transaction finance, and other innovative instruments for improved productivity and efficiency of supply chains are almost non-existent in the financial sector. It is estimated that only about 30 percent of finance needed in the agriculture sector are met.

iv. Adherence to food safety standards along with lower-cost and more efficient transport and port logistics could boost international trade. Ukrainian exporters suffer from limited market access due to their weak capacity to comply with sanitary and phytosanitary and food safety standards. Costs of logistics also remain high, e.g. the cost to move grain from farms to ports is approximately 40 percent higher than in France or Germany. Ukraine’s high logistics costs are due to the predominant use of road and rail transport for agricultural commodities. As the old truck fleet is also fuel-inefficient, this mode of transport also results in comparatively high CO2 emissions.


15. Recognizing that private investment is essential for agriculture to fulfil its contribution to economic development, improvement in rural livelihoods and guarantee of food security, GoU prepared a GSAP (the “program”) that sets forth a range of measures to mobilize private investment in agriculture and agribusiness sectors to boost their competitiveness and productivity, to ensure national food security, increase agri-food exports and contribute to a steady economic growth. Aligned with the international best practices, the GSAP (the “program”) focuses on improving policy and regulatory coherence, transparency and non-discrimination, securing access to land and water, ensuring well-functioning input and output markets, improving the efficiency of infrastructure and logistics, and strengthening the capacity of public institutions in line with the best EU and international standards and practices. The GSAP (the “program”) is currently being finalized by the Ministry of Agrarian Policy and Food (MAPF).

16. The GSAP (the “program”) includes the following components:

i. Guaranteeing stability, predictability and transparency of the agricultural policy and state support system through:
   - Implementing mid-term budget planning for the agricultural sector;
   - Aligning medium-term expenditure framework with the strategic sector goals based on the transparent and evidence-based principles of agricultural policy design;
   - Improving monitoring of the state support allocation;
   - Enhancing analytical capacity at the MAPF to provide reliable agriculture sector information, analysis and assessments of proposed policy changes;
- Improving evaluation of the agriculture state support efficiency.

ii. Strengthening food safety system capacity in the country through:
    - Strengthening analytical capacity of the State Service of Ukraine for Food Safety and Consumer Protection (SSUFSCP) in ensuring compliance with SPS requirements of export markets;
    - Border control strengthening by establishing additional food safety border control points based on EU requirements and best world practices;
    - Improving the animal identification system and creation of transparent user-friendly state system of animal registration;
    - Implementing the pilot interactive map with information about use of plant protection products;
    - Establishing regulatory underpinning for food traceability as per international best practice and in view of implementing the Food Safety Law;
    - Establishing regulatory framework to enable compartmentalization.

iii. Encouraging and improving the efficient use of the available infrastructure for transportation of agri-food products, creating a stable climate for investments in the infrastructure and logistics through:
    - Improving the efficiency and competitiveness of the inland waterway logistics;
    - Improving Ukrainian seaport logistics performance.

iv. Improving tenure security, value and transparency of use of state agricultural land through:
    - Complete inventorization and registration of state land;
    - Registration of boundaries of administrative units in the State Land Cadaster;
    - Ensuring transparent transfer of ownership rights over public land to local communities and/or private individuals;
    - Putting in place the conditions for effective management of such land, and allow routine compliance monitoring;
    - Ensuring full registration of ownership and use rights and interoperability between registers to protect land owners’ and users’ rights;
    - Increase owners’ and users’ awareness of their land rights and their protection.

v. Improving water resource management and user-led irrigation service delivery through:
    - Establishing a modern Water Management Information and Accounting System (WIMS), which handles information on (i) water availability from multiple resources, (ii) status of irrigation and drainage systems and service delivery, and (iii) information on productive water use in agriculture, accessible via an open portal;
    - Adopting the new primary legislation to provide for the establishment of Water Users’ Organizations (WUOs) – conceived as self-regulated, non-profit bodies, managing public irrigation infrastructure and providing water management services to their members;
- Reforming water tariffs for irrigation & drainage service delivery; comprising a volumetric charge (farm-gate water price) equal to the actual costs to the WUO and a flat-rate area charge to cover the overhead costs of operating and maintaining the secondary and tertiary networks and pressure pump stations;
- Reforming the legal and regulatory framework for issuing groundwater-abstraction permits to agricultural water users, and establishing a transparent, web-based permit administration system.

vi. Creating preconditions for improved access to agricultural inputs for all types of agricultural producers through:
- Enacting amendments to legislation to improve farmers’ access to fertilizer by recognizing EU catalogues/lists for fertilizers;
- Strengthening the enabling environment for agricultural input markets and service provision;
- Enhancing technical modernization of agricultural production.

vii. Improving access to finance and risk management instruments for all the stakeholders using the best EU and international practices through:
- Improving credit support mechanisms for farmers and cooperatives;
- Development of state support for insurance of agrarian risks;
- Improving the enabling environment and practices in agriculture lending including collateralization and value chain financing;
- Expanding the use of crop receipts to include the creation of a secondary market.

17. **It is expected that the implementation of the GSAP (the “program”) would result in the following outcomes:**
   a) amplified private investment and business activity in agriculture and agribusiness sectors;
   b) increased productivity and production volumes of the gross agricultural product by all categories of economic entities;
   c) increased volumes and value of agricultural exports; and
   d) improved levels of employment and incomes in rural areas.

18. The GSAP (the “program”) is closely aligned with five other strategic documents that exist in the country:

i. *The Concept of the State Target Program for the Development of the Agrarian Sector of the Economy for the period of up to 2021*, which was approved by the Cabinet of Ministers by its Order No1437-p, dated December 30, 2015 (with changes and additions from February 14, 2018, N 102-p). The Concept identifies the Government’s priority areas for development of the sector going forward, which include a broad range of instruments for sector support, including in the areas of food safety, taxation, environmental support measures, credits and other financial instruments, and agricultural research and development, among others.

ii. *National Strategy and Action Plan for Agriculture and Rural Development in Ukraine for 2015-2020*, developed by the MAPF jointly with the donors. The Strategy focuses on the existing constraints in the sector and outlines a long-term vision for the development of
agricultural sector as well as offers a list of priority actions. While the Strategy was supported by the National Reforms Council of Ukraine, it still has not been passed into a Law.

iii. *Irrigation and Drainage (I&D) Strategy of Ukraine* (2017), which was prepared to complement the Agriculture and Rural Development Strategy for Ukraine, lays out a reform agenda in the irrigation and drainage sector during 2017-2025, focusing on facilitating the sector’s adjustment to the new market conditions, reversing the decline in the irrigation and drainage sector, and improving efficiency. The key reform areas include: (i) Improving stewardship of the national water resource; (ii) Improving the bulk delivery and removal of water; (iii) Transferring management to WUOs; (iv) Ensuring financial sustainability; and (v) Stimulating profitable investment.

iv. *The Sustainable Logistics Strategy and Action Plan for Ukraine* (2017) was prepared to complement the National Transportation Strategy for Ukraine (NTSU) until 2030. The goal of the Sustainable Logistics Strategy is to support Ukraine to: i) realize the country’s logistics potential; ii) enhance multimodality and interconnectivity among transport modes; iii) maintain, modernize, and expand efficient transport and logistics infrastructure and promote energy-efficient freight transport; iv) improve skills and services related to transport and logistics; and v) enhance trade facilitation. The recommendations address both physical and regulatory bottlenecks, but do not cover a comprehensive restructuring of the entire transport sector or its complex entities, which is discussed in the NTSU. The four priority axes of NTSU 2030 are: (i) achievement of a competitive and efficient transport system; (ii) innovative development of the transport sector and strategic investment projects; (iii) provision of socially safe, environmentally friendly and energy efficient transport; and (iv) achievement of seamless mobility and regional integration.

v. *The Export Strategy of Ukraine* (2018) was drafted by the Economic Development and Trade Ministry of Ukraine with the assistance of the business and experts based on the methodology of the International Trade Center and with the support from GIZ. The overarching goal of the Export Strategy is to support Ukraine in developing a coherent vision for sustainable trade-led growth through an inclusive process that brings together the public and private sectors, civil society and development partners. The Export Strategy project will help support export-oriented micro, small and medium-sized enterprises and other trade operators in the following priority sectors: information and communication technology; food and beverages; machinery; creative services, and; civil aircraft repair and maintenance. The Strategy will also help strengthen the export competitiveness of Ukrainian companies by boosting knowledge and skills in areas such as trade facilitation and logistics, innovation, and quality management.
III. PROGRAM TECHNICAL SOUNDNESS

19. **Within the framework of the GSAP, the proposed PforR (the “Program”) complements the GSAP in achieving key results towards the objective of encouraging private investment in agriculture and agribusiness sectors, with a focus on benefitting agriculture and agri-business SMEs.** It will focus on addressing key market failures that exist in the agriculture sector in Ukraine by strengthening the delivery of public goods and alleviating the regulatory and institutional constraints that exacerbate the abovementioned market failures and limit more optimal private sector participation in the sector. Specifically, the program will focus on the nexus of agricultural sector support policies, land, water and food safety, which are key preconditions to successful development of the agriculture sector. The private sector consultations made it evident that in particular small and medium sized farmers and agribusinesses are more prone to suffer from constraints and market failures, in particular in such areas as access to land information, access to land, access to irrigation water, access to information on export requirements, as well as access to finance and high-quality fertilizer.

20. **The proposed Program supports the Government’s efforts of creating an enabling environment for promoting private investment in the agriculture and agribusiness sectors by removing key constraints, with a specific focus on SMEs.** The Program therefore focuses on two complementary Results Areas, including:

   i. **Increasing competitiveness of the input markets.** The Program will help improve competitiveness and increase access to key agricultural inputs: policies, land and water. The key results to be achieved would include: (i) improving targeting and efficiency of state support in the agriculture sector; (ii) improving transparency in the State agricultural land lease market through inventorization and registration of all remaining State lands and improving the efficiency and returns of the mechanisms of leasing this land to private parties; and (iii) improving protection of rights in land and other property owners by establishing an advance notification system of the upcoming changes to the status of the property rights, complemented by enhancing the Free Legal Aid Provision System (FLASP) Network which provides legal assistance on land and other property rights-related issues and is of particular importance to the poorer groups of property owners; and

   ii. **Linking SMEs and farmers to export markets.** The Program will assist Ukrainian agribusinesses, in particular SMEs, operating in the space of high-value food products of animal origin and live animals to improve access export markets. The Program will support addressing information asymmetries on food safety and other export market requirements in Ukraine’s key high-value markets (EU, China, Gulf Cooperation Council countries

---

Small-and Medium Enterprises (SMEs) are defined for the purpose of the Program’s Disbursement Linked Indicator 1 (DLI 1) as agricultural enterprises that operate on less than 1,000 Ha of land with annual revenues of less than 1,300,000 EUR. The SME definition used for DLI 3 is in accordance with the Article 55 of the Civil Code of Ukraine and includes (a) small-size companies with an average number of staff not exceeding 50 people and an annual revenue not more than EUR 10 million (based on NBU exchange rate); and (b) medium-sized companies with staff of up to 250 people and annual revenue of up to EUR 50 million (based on NBU exchange rate).
(GCC), US, and Canada), and facilitating cross-border trade by upgrading the capacity of inspections and testing on the border, which will complement the introduction of risk-based import-export procedures, on which the SSUFSCP is currently working.

21. **The Government of Ukraine is also tackling key legislative constraints in two other Program areas:** (a) adoption of the amendments to the Law on Pesticides and Agrichemicals (Article 4) that would recognize the EU list for fertilizers and exempt them from mandatory state registration, which would facilitate easier access for farmers to high quality and efficient fertilizer; and (b) adoption of revisions to the Law on Crop Receipts to encourage development of a secondary market for crop receipts, which would allow for securitization and sale of pools of crop receipt assets, thus injecting additional liquidity in the financial sector.

22. **The choice of the PforR instrument provides important advantages.** First, it provides incentives to the government to enhance the efficiency (and the effectiveness) of the targeted public expenditure programs, while increasing transparency and accountability in the administration of these programs. Second, it provides incentives to strengthen institutional delivery mechanisms to ensure a sharper focus on achieving on-the-ground results (which would ultimately leverage increased private investment) and more efficient implementation of government programs. For example, while the state support system for agriculture is well established, complementary reinvigoration of land markets and better access to irrigation will increase incentives for private investment in the sector. Third, because the PforR lends support to a well-defined government program that enjoys broad ownership and employs a focus on results, the PforR instrument provides a strong platform for managing program risks as implementation progresses.

23. **The PforR instrument also increases development effectiveness through application of global best practices to the Program.** These best practices include new methodologies for land registration, private stakeholder management of irrigation and drainage services, and a state-of-the-art traceability system for food products. The PforR approach also introduces improved public-private consultation and dialogue that will increase responsiveness and enhance capacity to implement the Government Strategy and Action Plan on Leveraging Private Investment in Agriculture.

24. **Program implementation period.** The proposed Program is expected to be implemented over a period of five years, which matches the GSAP’s implementation period. Most of the activities are expected to be completed within four years, with an additional year for verifying results.

25. **In designing the Program and selecting areas for Bank support, the following elements were taken into consideration:**

   i. The Program supports a set of results towards removing obstacles to private investment in the agriculture and agribusiness sectors. Removal or minimization of these constraints and risks is expected to result in: (a) improved targeting and efficiency of the state support to the sector by achieving a better alignment between the agriculture sector’s strategic development priorities and the state support program; and (b) increased private sector investments, including domestic and FDI.
ii. The Program would prioritize interventions that allow for the opportunities for building the capacity of the government to engage and communicate with the private sector. The DLIs (and their critical implementation paths) focus on working closely with the government counterparts to remove constraints identified as priorities by the private sector. It is expected that this process would facilitate the dialogue between the public and private sectors regarding the needs and priorities of the private sector.

iii. The Program would selectively support interventions that have the potential to accelerate the broader transformation of the agriculture sector towards greater value addition and inclusion of the agriculture SMEs into the value chains and export markets.

26. As a result, the Program encompasses a mix of following interconnected activities (Table 2):

<table>
<thead>
<tr>
<th>Parameter</th>
<th>GSAP</th>
<th>PforR Program Boundary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Development Objective</td>
<td>To mobilize private investment in the agriculture and agribusiness sectors to boost competitiveness, ensure national food security, increase agri-food exports and contribute to economic growth.</td>
<td>To alleviate select constraints to increased participation of the private sector, in particular, small and medium-sized enterprises (SMEs) in the agricultural input and output markets of Ukraine.</td>
</tr>
</tbody>
</table>
| Key Performance Indicators    | - Increased private investment and business activity in the agriculture and agribusiness sectors;  
                                | - Increased production volumes of the gross agricultural product by all categories of economic entities;  
                                | - Increased value of agricultural exports;  
                                | - Improved levels of employment and incomes in rural areas;  
                                | - Strengthened transparency and governance of the agricultural state support system and agricultural policy making;  
                                | - Completed registration of the State-owned lands towards advancing the land reform;  
                                | - Increased percentage of land with secure water tenure;  
                                | - Improved access to better quality agricultural inputs, resulting in increased agricultural productivity;  
                                | - Improved financing of the agricultural sector;  
                                | - Reduced cost of transporting agricultural goods. | - At least 60 percent of state support funding have been transferred to small and medium agricultural producers;  
                                | - At least 95 percent of free legal aid cases have been responded to in writing within 10 days of the receipt of inquiry;  
                                | - At least 60 percent of food businesses newly registered as exporters of food or animal origins are SMEs. |
| Program Activities by Component | Ensures broad-based institutional strengthening, improvement of legislative and regulatory framework, and public investment support. | Supports achievement of agreed outcomes in the areas of: (i) increasing efficiency and targeting of state support in the agriculture sector; (ii) improving functioning of the land market; and (iii) improving agribusiness SME’ access to export markets. |
| Guaranteeing stability, predictability and transparency of the agricultural policy and state support system | - Implementing mid-term budget planning for the agricultural sector;  
                                | - Aligning medium-term expenditure framework with the strategic sector goals based on the transparent and evidence-based principles of agricultural policy design;  
                                | - Improving monitoring of the state support allocation;  
                                | - Enhancing analytical capacity at the MAFP to provide reliable agriculture sector information, | Under the Framework of DLI 1:  
                                | - Operationalization of the State Agrarian Registry;  
                                | - Adoption by MAPF of medium-term strategic priorities of the state support agriculture sector;  
                                | - Approval of the Medium-Term Expenditure Framework for calendar years 2020-2022, including Key Performance Indicators designed in accordance with principles approved by MAPF; and  
<pre><code>                            | - Registration of at least 60 percent of agricultural SMEs in the State Agrarian Registry. |
</code></pre>
<table>
<thead>
<tr>
<th>Strengthening food safety system capacity in the country</th>
<th>Under the Framework of DLI 3:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Strengthening analytical capacity of the SSUFSCP in ensuring compliance with the SPS requirements of export markets;</td>
<td>- Installation of 10 Border Inspection Points (BIPs) with SPS and food safety capability at the State border of Ukraine;</td>
</tr>
<tr>
<td>- Border control strengthening by establishing food safety border control points based on EU requirements and best practices;</td>
<td>- Adoption of the relevant amendments to the Law No 771 “Law on Basic Principles and Requirements for Safety and Quality of Food” and supporting secondary legislation for the national traceability system;</td>
</tr>
<tr>
<td>- Improving the animal identification system and creating of transparent user-friendly state system of animal registration;</td>
<td>- Operationalize interactive information system on food safety and export market requirements;</td>
</tr>
<tr>
<td>- Implementation of the pilot interactive map with information about use of plant protection products;</td>
<td>- Operationalization of an interactive map on use of plant protection products;</td>
</tr>
<tr>
<td>- Establishing regulation for food traceability as per international best practice and in view of implementing the Food Safety Law;</td>
<td>- At least 60 percent of food businesses newly registered as exporters of food of animal origin are SMEs.</td>
</tr>
<tr>
<td>- Establishing the regulatory framework to enable compartmentalization.6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Improving tenure security, value and transparency of use of state agricultural land</th>
<th>Under the Framework of the DLI 2:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Complete inventorization and registration of State land;</td>
<td>- Adoption of transparent methodologies to carry out land inventories and verification;</td>
</tr>
<tr>
<td>- Registration of received boundaries of administrative units in the State Land Cadaster;</td>
<td>- Registration of unregistered state lands (at least 12 million ha) in the Land Cadaster and Registry of Rights using simplified, participatory and transparent procedures;</td>
</tr>
<tr>
<td>- Ensuring transparent transfer of ownership rights over public land to local communities and/or private individuals;</td>
<td>- Operationalization of the E-auction platform and E-auction of rights to at least 70,000 ha of state land;</td>
</tr>
<tr>
<td>- Ensuring full registration of ownership and use rights and interoperability between registers to protect land owners’ and users’ rights;</td>
<td>- The adoption of a methodology for development of Territorial Development Plans (TDPs);</td>
</tr>
<tr>
<td>- Increase owners’ and users’ awareness of their land rights and their protection.</td>
<td>- Development of orthophotos and topographic maps at a scale 1:10,000 for at least 17 oblasts;</td>
</tr>
<tr>
<td></td>
<td>- Ensuring public access to land governance monitoring data produced by GeoCadaster;</td>
</tr>
<tr>
<td></td>
<td>- Operationalization of an automated notification system for all parties affected by changes in the data held in the Land Cadaster;</td>
</tr>
<tr>
<td></td>
<td>- Collection on behalf of Local Governments of resources from state land leases and sales of at least up to US$150 million;</td>
</tr>
<tr>
<td></td>
<td>- Establishing the system for automated notifications to all affected parties on changes in the land cadaster records;</td>
</tr>
<tr>
<td></td>
<td>- Strengthening of the free legal aid system (FLAS);</td>
</tr>
<tr>
<td></td>
<td>- Provision of free legal aid in written form within 10 days in at least 95% of cases.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Creating preconditions for improved access to agricultural inputs for all types of agricultural producers</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Enacting amendments to legislation to improve farmers’ access to fertilizer by recognizing EU catalogues/lists for fertilizers;</td>
<td></td>
</tr>
<tr>
<td>- Strengthening the enabling environment for agricultural input markets and service provision;</td>
<td></td>
</tr>
<tr>
<td>- Enhancing technical modernization of agricultural production.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Improving access to finance and risk management instruments</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Improving credit support mechanisms for farmers and cooperatives;</td>
<td></td>
</tr>
</tbody>
</table>

6 Compartamentalization is a concept where the animal population considered for trade maintains a functional separation through management or geographic boundaries that allow a clear epidemiological differentiation from animal populations of higher risk.
for all the stakeholders using the best EU and international practices.

- Development of state support for insurance of agrarian risks;
- Improving the enabling environment and practices in agriculture lending including collateralization and value chain financing;
- Expanding the use of crop receipts to include the creation of a secondary market.

27. The Theory of Change reflects the chain of results (Figure 8) expected from the implementation of the GSAP, including the outputs and intermediate outcomes to be achieved under the proposed Program. The outcomes are expected to contribute to an improved investment climate in the agriculture and agribusiness sectors, facilitating private investment in the sector in the long term.
Figure 8: The Results Chain.

PDO: To alleviate select constraints to increased participation of the private sector, in particular small and medium-sized enterprises (SMEs), in agricultural input and output markets of Ukraine.

1. Increasing Competitiveness of Input Markets:
   - Procure and install software solution for registry of state support recipients.
   - Develop and approve key sector performance indicators (KPIs).
   - Provide relevant training to MAFF staff.
   - Engage sufficient personnel and other resources to carry out registration of the remaining state lands.
   - Create photo and topographic maps prepared for at least 17 districts.
   - Complete and install software solution for land e-auctions.
   - Establish online linkage between the fiscal and real estate databases.
   - Set up the SMS-based system for notifications on changes in cadastral records.
   - Provide training and equipment upgrades to FLAS.

2. Linking Small and Medium-sized Farmers to Export Markets:
   - Prepare and adopt a law and secondary legislation or national animal origin.
   - Procure and install software solution for food safety and export market requirements.
   - Regulate the information system database.
   - Prepare designs and access the facilities for the BIPs.

- Regulatory framework for establishment of BIPs adopted.
- Information system on food safety and export market requirements established.
- Ten BIPs established for agricultural trade purposes.
- Traceability system established in livestock and agri-food sub-sectors.
- Export of live animals maintained and increased.

- MTEF applied in planning and budgeting at the MAFF.
- At least 85 percent of state support funds allocated to agricultural SMEs.
- At least 85 percent satisfaction rate of beneficiaries from improved service provision (at least 85 percent).
- At least 80 percent of food businesses newly registered as exporters of food or animal origin are SMEs.
- At least 50 percent of the Program beneficiaries are women.
- At least 50 percent of state support funds distributed to agricultural SMEs.
- Free legal aid provided in written forms within 10 days of the request of inquiry in at least 95 percent.
Results Area 1: Increasing Competitiveness of Input Markets

28. **Results area 1** aims at supporting the GoU’s effort at improving access to land resources for agricultural production with the goal of improving their allocative efficiency, alongside the strengthening of the agricultural policy design and implementation. Access to land, and the conditions that govern it, play a fundamental role in agricultural development. Thus, in order to create an enabling agribusiness environment, enabling access to land that is also secure enough to invest in land and irrigation is crucial. The same time, to result in output and income growth, access to land resources must not only be secure, but also be accompanied by access to complementary inputs and occur in a context of favorable policy environment.

29. **The key results to be achieved under the Results area 1 would include**: (i) improving targeting and efficiency of state support in the agriculture sector; (ii) improving transparency in the State agricultural land lease market through inventorization and registration of all remaining State lands and improving the efficiency and returns of the mechanisms of leasing this land to private parties; and (iii) improving protection of rights in land and other property owners by establishing an advance notification system of the upcoming changes to the status of the property rights, complemented by enhancing the FLASP which provides legal assistance on land and other property rights-related issues and is of particular importance to the poorer.

**DLI 1: Improving efficiency and targeting of state support in the Borrower’s agriculture sector.**

30. **Ukraine’s has a well-established system for providing state support to agriculture, but sector growth and investment remain low.** During 2014-2018, public spending for agriculture averaged around US$ 400 million annually or one percent of total Government spending. In 2018, US$ 232 million, or 45 percent of total agriculture spending, was allocated to the agriculture state support program, mainly for input subsidies (Box 1.1). The system has gone through several changes over the last few years to improve the targeting and efficiency of the system, but these changes have not led to the levels of growth or increased investment expected. The medium-term goal of the government is to improve the targeting and efficiency of the system to increase growth and accelerate private investment, as well as to align the functioning of the state support system to meet EU requirements.

31. **SMEs represent the highest potential for accelerating growth and private investment in the agriculture sector, but the state support system has difficulty reaching them.** SME farms have a significant economic and social footprint of Ukraine’s agricultural sector and have the highest potential for driving future growth in the sector (World Bank, 2018). In 2014, 79 large farms that operate on over 5,000 ha of land received close to 37 percent of the entire state support budget, while accounting for only 12 percent of all farms in the country (World Bank, 2018). In 2017, the two largest poultry producers received almost 50 percent of all the State support allocated to agricultural producers. Against this, stand over 4 million SME farms that operate on about 50 percent of Ukraine’s farmland and produce predominantly higher value-added crops, including 94 percent of the horticultural output. About 41 percent of SME farms are not aware of the State support program and only 20.3 percent of SME farms applied for the State support from 2000 to 2017. Among SMEs that received state support, there remains a concern that the program does not provide the right economic incentives for modernization and investment. Concerns about the program are exacerbated by the limited analytical
capacity in MAPF and limited transparency in channeling of support payments, which makes it difficult to improve the targeting and efficiency of the programs.

### Box 1.1: State-Support to Agriculture in Ukraine

The Ukraine state agricultural support system has been evolving over the last few years. Before 2017 tax benefits made up more than 90 percent of the total agricultural support. In 2017 the tax benefit system was replaced by what is referred to as the ‘quasi accumulation VAT’ regime. Registered agricultural producers (mainly livestock and horticulture producers) received budget subsidies proportionally to the VAT transferred to the state budget. The total volume of the program was UAH 4 billion. One shortcoming of the 2017 system was that it favored primarily large agribusinesses, which led in part to further reform in 2018, where the eligibility and allocation criteria changed with around UAH 1.0 billion of UAH 6.3 billion allocated specifically for small farmers (up to 500 ha of farm size). They can receive both grants (non-repayable) and repayable funding. This funding is distributed among the farmers on a competitive basis and is envisaged to compensate for the purchase of inputs in various forms (concession credits, partial compensation of costs of seeds, etc.).

The biggest share of budget subsidies, however, was allocated for livestock support, i.e. UAH 4 billion. The third largest support program is a UAH 945 million program for the purchase of domestically produced agricultural machinery. Under this program, farmers are eligible to get a partial reimbursement of the cost (25 percent) of the domestically produced agricultural machinery. Another 300 million UAH was aimed at supporting horticulture, i.e. planting of new gardens, vineyards, berry-fields and their cultivation. This program suggests the reimbursement of up to 80 percent of the cost of planting material, as well as the governmental support for planting new gardens, building laboratory facilities, freezing facilities and purchasing machinery. In February 2018, a UAH 1.0 billion program was added to the state support program aimed at reducing the cost of credit for registered farmers, allowing a subsidy of up to 1 percent of the credit rate for the purchase of equipment, breeding seeds, and the provision of consulting services, bringing the total size of the program of state support to around UAH 7.3 billion.

32. **A recent World Bank agriculture public expenditure review (2018) identified a number of key bottlenecks that should be corrected to improve the efficiency and transparency of the agriculture state support system.** These can be grouped around the following areas and are closely in line with EU requirements under the EU-Ukraine Association Agreement (Box 1.2):

   i. **Strategic Vision:** Approach to the state support in agriculture lacks a conceptual coherence between the strategic vision for the agricultural sector and the choice of the specific policy instruments. In general, there is no single agricultural development strategy in Ukraine that defines the overall priorities for the sector’s development, including on the role of SMEs. Instead, the development goals for the sector and rationale for policy intervention in the agricultural sector are formulated in several strategies, laws and decrees – only some of these put SMEs at the forefront of agricultural development. Lack of official strategic vision for the sector or policy formulation results in an ad hoc approach to allocation of state support funds, creating uncertainty for producers and opportunities for rent-seeking behavior during each budget cycle. It also makes it difficult to evaluate policy outcomes once policies are formulated and implemented.
ii. Policy Formulation and Design:

- **Budget planning**: Budget planning of the state support allocation has been done on the annual basis\(^7\). Coupled with the lack of the strategic vision for the sector, this results in an ad hoc approach to policy making. Prevailing uncertainty in state support planning and implementation that stems from the lack of strategic planning for the sector, annual budget cycles and limited monitoring mechanisms has been identified by the private sector as one of the difficulties in planning for and implementing investment decisions.

- **Policy analysis capacity**: There is very limited evidence-based agricultural policy evaluation. There is no centralized analytical unit that exists within MAPF, and policy analysis is done in an arbitrary manner across different ministerial departments. Such lack of capacity makes it difficult to evaluate the efficiency of existing or potential policy interventions. Partially as a result of this, state support is characterized by the dominance of the market-distorting payments to producers and limited spending on growth-enhancing investments, correcting market failures and public goods’ provision, since none of the instruments are evaluated for their efficiency.

- **Instruments’ design**: Cumbersome application procedures have been among the key reasons for the SMEs not to apply for the state support (FAO, 2018), resulting in bulk of the support being channeled to the largest, well-connected producers.

iii. Budget Monitoring and Evaluation:

- **Monitoring capacity**: There is no central database that can be used to monitor the allocation of funds. The current channeling of the state support payments to the agricultural producers is non-transparent and happens predominantly through the oblast and/or rayon administrations with the limited exchange of information between them and between them and the MAPF. Ukrainian agricultural budget system has weak built-in controls for monitoring that create pre-conditions for fraud and misallocation of public resources. As such, and as statistics show, large bulk of the state support distribution is skewed towards the largest producers in the country.

- **Budget evaluation**: Current budget performance indicators that are used to evaluate the effectiveness of budget execution are process- and not results-oriented. Therefore, they do not allow for the assessment of how different programs contribute to the strategic goals and the impacts they may have on the producers of different sizes. In 2002, GoU introduced several decrees that require each line ministry to develop a set of KPIs for evaluating the effectiveness of budget execution. In 2016 the MAPF introduced 136 KPIs, however, most of them were of descriptive nature and did not allow for assessing whether each budget program is effective and/or contributes to the strategic goals of the sector. In 2017, MAPF increased the number of KPIs to 194. However, according to the analysis by the

---

\(^7\) On January 8, 2019 the President of Ukraine signed the Law “On Introducing Changes to the Budget Code Regarding the Introduction of the Medium-Term Budget Planning”
Financial and Economic Analysis Office of the Parliament of Ukraine, only 28 percent of the targets set in the KPIs were achieved in 2016.

Box 1.2: Alignment of Ukraine State Support with EU Requirements

The EU-Ukraine Association Agreement requires Ukraine accomplish a range of important steps towards the full operation of a State Support system which would be fully compatible with EU standards. The broad conclusion of EU review of State Support in Ukraine has concluded that, while the nature and use of State supports in Ukraine has been largely similar to schemes of support to be found in other countries, many of the amounts are quite small in overall terms with the exception of highly targeted supports to certain industries and generally expensive VAT exemptions. Other significant policy and operational issues cited include:

- A lack of strategic approach, transparency and predictability of the decision-making process for State support measures;
- A lack of eligibility criteria for the scope, categories of recipients of State support and accountability, both on behalf of the public grantors and beneficiaries of public resources, for the effective use of available public resources;
- A lack of information concerning existing State support measures, actual amounts in all forms being provided for particular enterprises and business activities; and,
- The absence of a streamlined institutional infrastructure for the assessment, approval and monitoring of State support measures in all sectors and regions of Ukraine.

In recognition of the need to align the state support system for agriculture with EU requirements, the GSAP includes the following components: (i) harmonizing the Ukrainian agriculture and agribusiness legislation and regulatory framework with the EU; (ii) guaranteeing stability, predictability and transparency of the agricultural policy and state support system; (iii) stimulating the diversification of the agricultural sector production and promotion of the integrated development of rural areas; (iv) Strengthening food safety system capacity in the country; (v) encouraging and improving the efficient use of the available infrastructure for storage and transportation of agri-food products, creating a stable climate for investments in the infrastructure and logistics; (vi) improving tenure security, value and transparency of use of state agricultural land; (vii) Improving water resource management and user-led irrigation service delivery; (viii) supporting improved access to agricultural inputs for all types of agricultural producers; and (ix) improving access to finance and risk management instruments for all the stakeholders using the best EU and international practices.

33. The Government has taken the first steps to align state support with EU practice, as well as developed a strategy and financing plan for further reform over the medium-term. The medium-term-strategy the government has adopted, GASP; embodies the main elements needed to meet EU requirements and international good practice in terms of state support. The first steps to achieved the targets set out in its strategy have been taken, for example: (a) the GASP has been adopted and recognizes the importance of a transparent and predictable agriculture support system and outlines an expenditure program to improve stability, predictability and transparency of the State support system; (b) prepared and submitted to Parliament the draft law on the State Target Program outlining the medium-term strategic priorities in the agriculture sector; (c) started preparation of a three-year program expenditure estimate to be attached to the annual budget and in 2019 will transition to a three-year budget planning process; (d) undertaken an information campaign on the State support program

8 On January 8, 2019 the President of Ukraine signed the Law “On Introducing Changes to the Budget Code Regarding the Introduction of the Medium-Term Budget Planning”
available to agricultural producers; and (e) initiated the institutional re-structuring that envisions the creation of a policy analysis unit in MAPF.

34. The Program will further support the state support reform process and will support MAPF in implementing a set of key actions to improve the transparency, efficiency and targeting of state support. The expected benefits will be: (a) strengthened capacity of MAPF to evaluate policy instruments from the standpoint of efficiency, effectiveness, and equity (including through KPIs); (b) improved transparency of state support to agriculture; (c) improved awareness and application rates of SME farms for state support; (d) improved statistical information on agricultural producers; and (e) improved alignment of the state support system with EU requirements and practices.

35. Expected Program Results and Benefits. Expected results include: a) strengthened medium-term budget planning based on strategic plans, evidence-based policy formulation, and monitoring of policy implementation; (b) capacity building for MAPF staff on program design, management, budget planning, and policy analysis that would enable rationalization and better targeting of state support; (c) adoption of KPIs for evaluating the effectiveness of budget execution that are not only process- but results-focused and allow for transparent and equitable access of SMEs to state support; (d) a scalable computerized registry of the recipients of state support, in line with the design principles of the EU’s Integrated Administration and Control System (IACS), and the registration of the all state support recipients; (e) an information campaign on the state support programs available to SMEs. These five results represent the critical path toward DLI achievement, as reflected in the DLRs (Table 7). In achieving DLI 1, the benefits of the Program are expected to be increased growth and investment in the agricultural sector due to the lower crowding-out effect of the state support on private investment.

36. The PforR will support MAPF ongoing effort in implementing a set of key elements for strengthening the efficiency of state support allocation and creating pre-conditions for a level playing field for the agricultural producers of all sizes. Specifically, the steps along critical path towards achievement of the DLI will include:

i. Development of the scalable computerized state agrarian registry in accordance with the design principles of the EU IACS and registration of the state support recipients. Two critical elements of the Register need to include 1) its compatibility with other agricultural registers/databases in the country (i.e. animal and land), and 2) scalability to allow for registering all agricultural producers;

   Expected benefit(s):
   - Improved transparency of the state support flows, including on the application rates by the agricultural SMEs,
   - Strengthened accountability of MAPF and more efficient allocation of public funds,
   - Improved statistical information on agricultural producers in the country,
   - Improved alignment of the Ukrainian state support system to the EU requirements.

ii. An information campaign on the state support programs available to the SMEs;
Expected benefit(s): Improved knowledge among the agricultural SMEs on the policy instruments and programs implemented by MAPF.

iii. Training of the relevant MAPF staff to improve the MAPF capacity in program design, project cycle management, budget planning and agricultural policy analysis;

Expected benefit(s): Strengthened capacity of the MAPF staff to conceptually and quantitatively evaluate policy instruments from the standpoint of efficiency, effectiveness and equity.

iv. Adoption of KPIs for evaluating the effectiveness of budget execution that is not only process- but results-focused and allows for transparent and equitable access of SME to State support;

Expected benefit(s): Improved capacity to evaluate the effectiveness of the state support implementation; Improved accountability of MAPF.

v. Strengthening the medium-term budget planning for agriculture sector grounded in the strategic planning of the sector development, evidence-based policy formulation and strengthened monitoring of policy implementation;

Expected benefit(s): Improved predictability in state support planning and implementation.

37. Long-term benefits: More equitable distribution of the state support across the producers of different sizes is an immediate benefit of the DLI implementation, which will also serve as a verification of a positive progress towards the overall goal of improving efficiency of the state support. Transition to the medium-term budget planning aligned with the strategic sector goals and grounded in the evidence-based principles of agricultural policy design and transparent budget execution will reduce the existing uncertainty and opportunities for corruption in the system. As a result, it would lead to an improved efficiency and effectiveness of allocation of the scarce public resources. More transparency and analytically underpinned decision-making processes can also serve as safeguards that the scarce public resources are used efficiently.

DLI 2: Improving functioning of land markets

38. Rationale. Out of Ukraine’s total land area of about 60 million hectares, 42.5 million hectares are suitable for agriculture. About 32 million hectares are arable land and highly fertile, making the country one of the world’s potential agricultural powerhouses. The state owns about 8.5 million hectares of agricultural land, of which only 3.7 million hectares are registered in the Land Cadaster, and even less in the Registry of Rights. Most unregistered state land is used under informal arrangements with unclear rights, undermining investment incentives, encouraging unsustainable practices, and opening pathways to corruption. Of the 8.5 million hectares of state agricultural land, about 1.5 million hectares are formally leased to agricultural producers, 1.0 million hectares have been
transferred for free permanent use, and 1.4 million hectares are estimated to have been leased noncompetitively below their true economic value.

39. **The** total area of land still under state control, including agricultural land as described above, as well as forests and protected watershed areas amount to around 12 million Ha. There is ample evidence that inadequacies in land tenure are serious impediments to land improvements and land-based investments such as land levelling to reduce water run-off, establishing moisture conservation measures, introducing soil retention measures, investing in high efficiency irrigation systems, and adopting sustainable land management, all of which contribute to better management of water and soil, and improvement of factor productivity. Lack of registration of forest land is a key source of illegal logging resulting in soil erosion, water run-off, reduced ground water recharge, sedimentation of irrigation systems reducing their efficiency, reduction in the carbon sequestration base, and release of captured carbon. Additionally, informal and unrecorded land use deprives local and central governments of taxes, auction revenues, and lease fees, estimated at least US$250 million annually.

40. **The registration of private agricultural land and associated property, and of the property rights on the private land is well advanced.** About 85 percent of all private land are registered, and the remainder is being addressed satisfactorily but in a sporadic way. Private land owners, however, face various issues. A high percentage of private sector participants is at risk from so-called “raider attacks” that often occur at harvest time. The attacks allege defects in land rights, leading to disruption and reduced investor confidence. In January 2016, the Ministry of Justice (MOJ) established an anti-raider commission to provide an instant response to reported cases of such attacks. Reports indicate that the commission has addressed 1,600 cases and returned more than 16,000 hectares of land to legitimate owners or users. Key policy actions to support investor confidence include preventing infringement on registered use or ownership rights, better awareness of land law and procedural norms (for example, for contracting) among land owners and local administrations and courts, and provision of dispute resolution and grievance redress mechanisms.

41. **In addressing these issues, the government has proceeded with key reform actions, as follows:**

(i) **Making land auctions mandatory:** Procedures for auctioning lease rights to public agricultural land were established in 2013 and mandated for state and communal land in 2015. This reform led to a fourfold increase in mean annual rents (from UAH 555/ha in 2013 to UAH 2,300 in 2017) and a decrease in the duration of contracts to less than 10 years, suggesting that auctions have contributed to greater competition in the land market. Electronic and blockchain-based platforms were introduced in 2018 on a pilot basis, and draft legislation to make e-auctions mandatory has been prepared. However, despite the registration and transfer of 1.5 million hectares of state land to local governments, the number of auctions has remained limited. To expand land supply through competitive auctions, more information is needed on how auction platforms operate, along with systematic land use planning at local levels. The proposed Program would support the preparation of territorial development plans (which are essentially public land management plans) to facilitate such information provision and e-auctions and thereby decrease the size of the informal sector, increase tenure security and investment, enhance local land revenue generation from new and existing leases, and address corruption in the land sector. The Program would also support the training of
local government staff in land use planning, e-auctions, and the establishment of a centralized database to record the lease fees collected by local authorities.

(ii) **Improving protection of existing rights**: The government has implemented four key measures to strengthen existing rights and protect owners and users against abuse. First, the free legal aid system (FLAS) with its apex Coordination Center (CCFLA) provides free legal advice and free representation in court cases for poorer land and property owners in every rayon. There are around 550 such centers throughout the country. These centers currently lack capacity and knowledge on the regulatory and institutional environment for land and the ability to proactively educate local officials and land owners on their rights, ways to exercise them in a market environment, and avenues for seeking redress for violations. A training program has been developed, implemented on a pilot basis, and accredited with support from the EU and requires scale-up support. Fourth, to ensure development of amendments to the regulatory framework on technical inventory of real estate objects to fill in the Register of real estate with information about real estate assets based on their technical inventory, the Cabinet of Ministers on June 6, 2018 issued the Resolution No. 484 on “Functional issues of the State Registry of Property Rights”. According to the Resolution, the MOJ shall take actions to create the Registry of real estate objects and define the procedure for its administration.

42. **Expected program results and benefits.** The Program would build on, accelerate, expand, and qualitatively improve the ongoing government initiatives. The DLI 2 would act as a catalyst to achieve the following results: (a) complete registration of all state land, including agricultural, forests, lands around watersheds, etc. It is estimated that such lands amount to at least 12 million hectares (possibly up to 14 million hectares in total) by 2024 (sub-DLIs 2.1). The registration of the unregistered state lands is expected to start with registration of all remaining agricultural lands. Once agricultural lands have been covered, all remaining unregistered land would be covered by administrative unit. Annual works plans will be prepared by GeoCadaster for no-objection by the World Bank; (b) ensure that the registered land contributes to local government revenue through land auctions and effective collection of land-related rents and taxes (sub-DLIs 2.1 and 2.2); (c) creating a public orthophoto and topographical map to assist land use planning by public bodies as well as private sector and providing land owners and users nationwide with access to information and the means to seek redress against any violations of their land rights (sub-DLIs 2.3, and 2.4). The notifications would be offered as a cost-free service for the all cadastral transactions (estimated around 1 million transactions annually) and would include small landowners in the system. The notification system will act as an early warning system regarding changes to in the data of objects of state land cadaster to be linked to the registry of rights. Upon receipt of the notification, the system will provide a 15-day notification period during which affected parties would have an opportunity to raise objections before any changes are finalized and implemented; and (d) the free legal advice would be provided in written form within 10 days of the receipt of the inquiry, which would reduce the room for inaccurate interpretation by the clients and improve the availability of reliable and clear information vs. trying to remember advice received from the CCFLA orally. The legal empowerment activities would preventively seek out people in need for information on their land rights to ensure awareness of availability of such information. Achievement of DLI 2 would help create the basis for a transparent and competitive land market and ensure that land contributes to broad-based economic development, decentralization, and the rule of law. It would also
provide the basis for more far-reaching reforms, including opening of markets for agricultural land sales, simplification of administrative procedures, decentralization, and financial sector development.

43. Registered agricultural land with clear rights will promote investments that support better soil and water management and encourage sustainable land management and land use practices. In addition, registration of forest or protected areas as such would delegitimize illegal logging, resulting in preservation of the existing carbon stock, and avoid further degradation of forested lands. Improved security of land rights, as result of the DLI 2 activities, would lead to more efficient land and water use, decreased illegal timber logging and resultant reduced/avoided GHG emissions, and increased investment in modern climate-smart agriculture technologies. Registration of protective zones around water bodies will help ensure better protection of these areas.

44. The critical path toward achievement of DLI 2 will include actions to support achievement of the above results.

(i) Actions to ensure complete inventory and registration (sub-DLI 2.1) of state land are defined as follows: (a) a transparent and participatory process to systematically inventory and register unregistered state land is formally adopted by the relevant state institution and codified in a manual; (b) a methodology to determine the extent of unregistered state land and to verify error-free registration is established; (c) this methodology is applied nationwide by an independent third party to establish a pre-project baseline; and (d) information on the amount of state land registered and errors identified/corrected as well as maps of these areas is included in a permanent public land governance monitoring system.

(ii) Actions to increase land revenue (sub-DLIs 2.1 and 2.2) include: (a) approval of a manual for preparation of the territorial development plans, including arrangements for quality control, approval authority, and criteria to identify what land has to be brought to auction; (b) preparation of territorial development plans in 600 amalgamated communities; (c) availability of a central database on land lease revenue for public land and establishment and testing in pilot locations of interoperability between the State Fiscal Service, the registry of rights, and the cadaster; (d) establishment of the normative base for land e-auctions based on results from current pilots.

(iii) The establishment of the notification system and map database (sub-DLI 2.3) will include: (a) development of regularly updated public website for land governance monitoring with data produced by Geocadaster and other institutions; (b) development of ortho photos and topographic maps at a scale of 1:10,000 for 17 oblasts that, together with relevant technical documentation, would be available publicly without restrictions; and (c) development of the specifications and design of the automated notification system for provision of notifications to all parties affected by changes in the data of objects of state land cadaster (estimated at 1 million transactions a year).

(iv) Actions to support the FLAS (sub-DLI 2.4) include: (a) training for FLAS staff, in accordance with the curriculum already developed by MOJ, to improve the capacity in the system; (b) development of methodology to identify gaps and measure the impact on communities’ legal empowerment, including simplified land use planning, inventory, state land registration, land use violations, e-auctions and raider

---

9 FLAS trainings for lawyers “Land Education” includes the following modules: Land as the object of civil rights; Protection of rights to the land plot in pre-trial and judicial proceedings; Protection of rights to the land plot in court. The training will be provided by the Coordination Center of the FLAS. The duration of the training is one day per module.
attacks; and (c) refinement of the existing case management system to provide information not only on client profiles and the number and type of requests, but also on speed, customer satisfaction, and effectiveness of case disposal for land-related cases.

45. **Verification protocols.** The VE would ascertain completion of the DLRs towards the achievement of the DLIs and submit a verification report to the MOF. The verification report for state land inventory and registration (sub-DLI 2.1) will be based on automated verification using the methodology agreed upon prior to the start of Program-related state land registration activities, complemented by field visits to a random set of locations where land was registered and customer satisfaction surveys of land owners/users who might have been affected by such activities. Verification for increased land lease fees (sub-DLI 2.2) would be based on territorial development plans generated and the increased local government land revenue generated as a result of having such plans through more effective land use, more effective and complete collection of land related taxes and fees and auctioning of public land as indicated in a centralized database for land lease revenue maintained by the Treasury. The Treasury would also make available disaggregated raw data at village level for analysis purposes. Verification of improved functioning of land and mortgage markets and protection of land rights (sub-DLIs 2.2 and 2.3) will be based on the operation of a comprehensive land governance monitoring system as mandated in the Cabinet of Ministers resolution No 639 adopted in August 2017, creation and use of topographical maps, and error correction on private parcels. Verification of increased legal empowerment and stronger FLAS (sub-DLI 2.4) will be based on the number of individuals, especially women, who gained better awareness of their land rights and the analysis of the achievement of the provision of the free legal aid in writing, as well as random customer satisfaction survey(s) applied routinely to beneficiaries of free legal aid, complemented by other measures, as needed.

**Results Area 2: Linking SMEs and farmers to export markets**

46. **Under the Results Area 2, the Program would focus on assisting Ukrainian agribusinesses, in particular agribusiness SMEs, operating in the space of high-value food products of animal origin to access export markets.** The Program would focus on addressing information asymmetry on food safety and export market requirements in Ukraine’s key high-value markets (EU, China, GCC countries, US, and Canada), and facilitating cross-border trade by upgrading the capacity of inspections and testing on the border, complemented by introduction of risk-based import-export procedures. As SPS measures have become the most significant non-tariff barriers to accessing markets, compliance with international food safety standards has become a precondition for producers and processors to enter the major export markets. The Program would target the supply-side (agri-food producers and processors compliance with food safety requirements) while also strengthening the capacity of the SSUFSCP.

**D LI 3: Improving agribusiness SME access to export markets**

47. **Ukraine is a leading world exporter of grains and oilseeds yet lags behind in exports of higher value-added products, in particular of animal origin, which results in foregone revenues for the SMEs – the major producers of value-added products in the country.** In 2017 Ukraine produced some 60.7 million tons of cereals, exporting 84 percent of output and generating export revenues of
US$ 7.9 billion. EU, East Asia Pacific, and Europe Central Asia accounted for more of 60 percent of this trade. The cereal value chain is dominated by large producers and enterprises who have established marketing chains as well as a high level of sophistication relative to other national value chains. Moreover, cereal grains are one of the least affected commodity group by SPS regulations and non-tariff barriers (IICA, 2017). By contrast, the production of high-value products such as vegetable products, meat and dairy, honey and other edible foods, is mostly carried out by SMEs. However, the exports of these products remain small relative to their output levels. For example, if we consider Chapter 02 of the harmonized trade system (or HS02), which refers to meat and edible meat offal’s and includes trade flows of poultry and all other meats, export volumes are marginal, yet have a high potential for growth.

48. The majority of the higher-value agri-food exports, especially products of animal origin, remain below 50 percent of their export potential, as SMEs find it difficult to understand the requirements of export markets and lack access to key information which would allow them to comply with food safety and traceability requirements. Based on feedback from the Ukrainian Food Export Board, the lack of an efficient food traceability system in Ukraine is one of the reasons hindering the country from increasing its trade volumes of food products with added value. The tightening animal welfare requirements in Ukraine, particularly for transportation and export of live animals will make exports of live animals almost impossible in the nearest future. Export of live animals where Ukraine currently has significant headroom, is almost all done by SMEs. The current annual revenues from export of live animals are at the level of US$ 48 million, which is under threat to be stopped without appropriate infrastructure – border inspection points. Therefore, increased exports would significantly benefit the sector and increase incomes of producers and processors. Better access to export markets would enable Ukraine to develop its international food trade, reverse the stagnation in the food industry, and provide SMEs with opportunities for development and growth.

49. Actions taken by the GoU to date in support of GSAP. In addition to measures included in the GSAP, an agriculture export promotion program has been started recently under the framework of Ukraine’s Export Strategy. The strategy is expected to be approved in 2019 through the adoption of the CMU Resolution “On approval the Strategy for export of agriculture products, food and processing industry of Ukraine until 2026”. An open-access information platform would provide export-relevant information and trading partners to SME food exporters and simplify permit and registration procedures. The creation of this platform is included in the annual Action Plan of the Government Priorities up to 2020, adopted by the Resolution of the CMU No 275-p of 03.2017 and part of the Export Strategy, adopted by Resolution of the Cabinet of Ministers of Ukraine of 27.12.2017 No 1017-p “On approval of Export Strategy of Ukraine during 2017-2021”. The resolution of the CMU No 649-p of 20.09.2017 “On approval of the e-government development concept” provides the legal base for establishing the e-documentation system within the platform. SSUFSCP has already developed the list of amendments to the draft Law “On Basic Principles to Food Safety and Quality” that is planned to be submitted to Parliament in 2019. Based on an analysis of the regulatory framework by SSUFSCP, a list of by-laws has been developed that needs to be adopted to complete the establishment of the food traceability system and ensure its full operationality. These and other food traceability related activities are conducted under the framework of the Sanitary and Phyto-sanitary (SPS) harmonization strategy adopted by the CMU Resolution No 228-p of 24.02.2016. To help ensure a high level of consumer
protection and prevent the spread of animal diseases, the SSUFSCP has developed an action plan for the construction of 10 BIPs that are expected to be completed by 2023. The list of BIPs is expected to be adopted by the CMU Resolution “On approval of the list of designated border points and designated BIPs on the state border of Ukraine” in 2019. To start the construction process of 10 BIPs, an intergovernmental working group has been established by the Protocol of the Special Anti-epizootic Commission under the CMU Resolution No 3 of 28.12.2018. The SSUFSCP has also developed the Regulations for risk-based import-export control implemented at the border control points, which will complement the installation of the BIPs, and initiated the training of the relevant staff.

50. The Program supports the overall work and expenditure program of the SSUFSCP. In view of the importance of increasing exports of high-value food products, in particular by SMEs, the Program focuses on a set of activities towards eliminating information asymmetries and facilitating access to information and services for SMEs aiming to export food products of animal origin, specifically in the livestock and honey sub-sectors. While these activities would provide access to information and services to all exporters and some importers of food products, the Program aims - through the DLI 3 - to focus on: (a) facilitating access to markets for SME exporters of foods of animal origin under DLI 3.1; and (b) reducing the time and easing border crossing requirements for food exporters under the DLI 3.2.

51. Critical path towards the achievement of the DLI. To achieve the Program objectives under the DLI 3, the following set of measures would need to be implemented:

i. Strengthening of Ukraine’s food traceability system: (i) establishing the regulatory framework for animal identification and food traceability, including the relevant amendments to the Law “On Basic Principles to Food Safety and Quality,” development and adoption of a number of secondary legal acts on the traceability of food of animal origin and related procedures, and establishment of a balanced system of state controls based on best global practices that would provide an adequate level of protection of life and health of food consumers, together with an effective system of self-control implemented by the food business; (ii) upgrading the platform for state animal registration and identification to ensure its full operationality; and (iii) creating an interactive database on the use of plant protection products of crucial importance for the safety of food of any origin (honey).

ii. Establishment of a public (open access) interactive platform on SPS/Technical Barriers to Trade (TBT) and other food export requirements of international markets would include: (i) establishing a public (open access) interactive database platform on food export-related requirements of at least five trading partners, including EU, China, US, GCC countries, and Canada; (ii) establishing an electronic system for the provision of administrative services by SSUFSCP (e-documentation); and (iii) establishing an interactive dialogue system to provide online consultations with SMEs on export market requirements, administrative services, and other food-related issues.
iii. Installation of 10 BIPs will include: (a) selection of the location based on located on Ukraine’s border with the EU and trade volume; (b) preparation of the site designs and implementation of the necessary assessments (such as environmental); (c) construction; and (d) process of acceptance into operation and launch of the operations using the risk-based controls.

52. **Expected results would include:** (a) adoption of the relevant legal and regulatory amendments to ensure the traceability of products of animal origin; (b) establishment and operationalization of an interactive information system on food safety and export market requirements; (c) ensuring that at least 60 percent of food businesses that have newly registered as exporters of food of animal origin are SMEs; (d) installation of 10 BIPs; and (e) achieving at least US$58 million worth of exports of live animals.

IV. INSTITUTIONAL AND IMPLEMENTATION ARRANGEMENTS FOR THE PFORR

A. Institutional Arrangements

53. The Program’s institutional architecture relies on several participating Ministries and Government Agencies with clear roles and accountability. Given the several areas of engagement, the Program will have a two-tier implementation structure and will include the following stakeholders with the following responsibilities:

54. **The Overall Implementing Agency will be Ministry of Finance (MOF).** The MOF will house the Coordinating Unit with the key responsibilities of: (i) monitoring the implementation of the agreed actions based on detailed implementation schedules agreed during the negotiations; (ii) ensuring that verification of the achieved results takes place, including engaging independent verifiers (Verification Entity); (iii) transferring the necessary funds for activities towards achievement of the DLIs to the Participating Ministry and Agency in accordance with their budget funding requirements; (iv) overall financial management of the Program; and (v) ensuring audits of the Program, with the audit expenditures covered as part of the Program.

55. **The following Line Ministries and Government Agencies will have the technical responsibility for achievement of the DLIs,** and presentation of the evidence of DLI achievement to the Ministry of Finance:

i. **Ministry of Agrarian Policy and Food (MAPF)** will be responsible for the implementation of DLI 1. MAPF will carry out all functions related to the technical implementation of this DLI, as well as any related procurement, financial management, and safeguards functions.

ii. **The State Service of Ukraine for Geodesy, Cartography and Cadastre (GeoCadaster)** will be responsible for implementation of DLI 2, sub-DLIs 2.1 and 2.3. GeoCadaster will carry out all functions related to the technical implementation of this sub-DLI, as well as any related procurement, financial management, and safeguards functions.
iii. Ministry of Justice will be responsible for implementation of the sub-DLI 2.4. The MOJ will carry out all functions related to the technical implementation of the DLIs, and coordination with other relevant Government authorities, as well as Procurement, Financial Management, and any Safeguards function related to the implementation of the DLIs.

iv. Ministry of Regional Development, Building, and Housing and Communal Services (MRD) will be responsible for implementation of sub-DLI 2.2. MRD will carry out all functions related to the technical implementation of these three sub-DLIs, as well as any related procurement, financial management, and safeguards functions.

v. State Service of Ukraine for Food Safety and Consumer Protection will be responsible for implementation of DLI 3. The SSUFSCP will carry out all functions related to the technical implementation of this DLI, as well as any related procurement, financial management, and safeguards functions.

56. An independent verifier (Verifying Entity (VE)) will be hired by MOF to assist in verifying results with regard to achievement of DLIs and the component DLRs. It is expected that several individuals or companies would be hired as VEs, depending on the technical area of the Program’s engagement. The VE(s) will have specialized technical expertise and qualified personnel, satisfactory to MOF and World Bank, and the TOR for the VE(s) will be subject to review and no objection by the World Bank.

57. Program Steering Committee. Given the multi-sectoral nature of the State Program, it has been proposed to set up a Strategic Working Group for support of the Agriculture and Agribusiness Sector Development, to ensure coordinated approach to the sector development. The membership of the Strategic Working Group would consist of the Ministries and Government Agencies involved in the implementation of the State Program, complemented by private sector representatives. This Strategic Working Group would serve as the Program Steering Committee in the future, providing the overall guidance to the Program implementation, among other things.

58. Procedure for becoming a Participating Ministry or Agency. All Ministries and Government Agencies have undergone the necessary assessments: Financial Management, Procurement, Environmental and Social, as applicable. Other Ministries and Agencies, if required by their mandate, can join the PforR Program implementation upon undergoing the necessary Fiduciary and/or Safeguard assessments, with satisfactory results.

B. Stakeholder Assessment

59. MAPF (and the agencies linked to the Ministry) have been champions of developing and advancing GASP. It is a central executive authority of Ukraine in charge of the agricultural and rural development. It is comprised of MAPF administrative body, State Food Safety and Consumer Protection Service of Ukraine, State Geodesy, Cartography and Cadaster Service of Ukraine, State Agency of Fisheries of Ukraine, and State Agency of Forestry Resource of Ukraine. Ministry is the main authority in the system of central government responsible for national agricultural policy.
supervising and implementation including policy on agriculture and food security, public policy in the fields of fishery and fishery protection, use and reproduction of aquatic resources, regulation of fishery and maritime security, veterinary medicine, species protection, land and some water related questions, mapping and surveying, forestry and hunting, surveillance (monitoring) in agriculture. The EU has been successfully working with MAPF to gradually harmonize its structure with the EU and international requirements and clearly define the scope of competencies of the Ministry and the related agencies, and establish an effective management and monitoring framework.

60. **State Food Safety and Consumer Protection Service of Ukraine** is responsible for food safety, compliance with consumer protection, sanitary legislation, plant, veterinary and agricultural certification, as well as market supervision. It was established in September 2015\(^\text{10}\), pursuant to the reforms that started in the fall of 2014\(^\text{11}\), and absorbed all the functions previously fulfilled by State Veterinary and Phytosanitary Service of Ukraine and will encompasses the State Sanitary Service, Agricultural Inspection, and Agency for Consumer Rights. The EU has been successfully working with SSUFSCP to gradually harmonize its structure with the EU and international requirements.

61. **State Geodesy, Cartography and Cadaster Service of Ukraine** is the central executive body that is coordinated by the Cabinet of Ministers of Ukraine and is responsible for implementation of the state policy in the matter of topography, geodesy, cartography, land relations and state land cadaster. The EU and other donors have been successfully working with GeoCadaster to gradually harmonize its structure with the EU and international requirements.

62. **Ministry of Regional Development, Building and Housing of Ukraine** is the central organ of executive power, created on December 9, 2010 by reorganizing the Ministry of Regional Development and Construction of Ukraine and Ministry of Housing and Communal Services of Ukraine, which provides: a) state regional policy and politics in the construction, architecture and urban planning, preparation and submission of proposals for improving the efficiency of assistance in coordination of activity of central and local executive authorities, local self-government in this area; b) effective use of economic, scientific and labor potential, natural and other resources as well as peculiarities of regions, to achieve higher living standards of people, the optimal specialization of regions in the production of goods and providing services; c) implementation of legal, economic and organizational alignment mechanism and promoting sustainable development of regions in their cooperation, taking measures according to the legislation for overcoming depression in specific areas, providing functioning of special economic zones and priority development areas; technical regulations in construction, urban planning, construction materials, preservation of historical areas, protection of traditional nature of settlements, monuments of architecture and urban planning. The Ministry, jointly with the EU and OECD, has been a champion in moving forward the decentralization reform in Ukraine and building scale and capacity among local governments to meet the demands of a decentralized administrative and service structure.

63. **Coordination Center for Free Legal Aid**: By adopting the Law “On Free Legal Aid” in June 2011, Ukraine made the commitment to ensure legal protection of vulnerable population groups and improve

---

\(^{10}\) Cabinet of Ministers Decree “On State Service on Safety of Foodstuffs and Consumer Protection”, September 5, 2015

\(^{11}\) Resolution #442 of the Cabinet of Ministers “On Optimization of Central Executive Authorities”, September 4, 2014
access to justice by offering free legal aid. The Law was implemented in stages. Starting from its
effective date of 8 July, 2011, all persons under Ukraine’s jurisdictions, including foreigners and
stateless persons, were able to exercise their right to free primary legal aid. Starting January 1, 2013,
free secondary legal aid became available to persons detained, arrested, suspected, or convicted, and
since October 2014, it has been made available to certain categories of persons sentenced to restriction
or deprivation of liberty. Since 1 July, 2015, FLASP has been available to all eligible persons specified
by the Law in administrative and civil cases. The institutional structure of the legal aid system was
designed taking into account the geographical area of Ukraine, its administrative/territorial division,
and size and density of its population. It is comprised of the Coordination Center for Legal Aid
Provision and the territorial offices (total of 551)\textsuperscript{12}. The system is still in its initial stage of development,
and while it has been developing dynamically and making considerable progress and is recognized by
both international organizations and Ukrainian NGOs, a number of challenges remain. Specifically,
these centers currently lack capacity and knowledge on the regulatory and institutional environment for
land and the ability to proactively educate local officials and the population at large on their rights,
ways to exercise them in a market environment, and avenues to seek redress for violations.

64. \textbf{The main technical risks associated with the implementation of the Program include:} (a) weak
collaboration among the institutions involved in the Program implementation; and (b) potential staffing
and capacity constraints that may slow down the Program implementation. While all Participating
Ministries and Agencies have experience with implementing large donor-funded programs, most of
them with a focus on technical assistance, the proposed Program will be the first World Bank
engagement with MAPF and the related agencies in over 15 years. Given the multi-sectoral nature of
the GSAP, a multi-sector Strategic Working Group is expected to be established will support the GSAP
implementation and ensure coordinated approach among the involved institutions. The Strategic
Working Group would include representation from the Ministries and Government Agencies involved
in the implementation of the State Program and from the private sector. This Strategic Working Group
would serve as the Program Steering Committee for the proposed Program and provide overall
implementation guidance.

C. Disbursement Arrangements

65. \textbf{Disbursement of the Project Funds} (Table 3). Program funds will be disbursed upon verification of
the achievement of the specific DLRs indicated under each DLI. MOF will submit to the World Bank
the relevant evidence on total or partial achievement of DLRs. The World Bank will review the
provided evidence and inform MOF of its conclusions regarding the fulfillment of the DLRs and the
corresponding level of disbursement for each DLR. On that basis, disbursement requests will be
submitted to the World Bank by the MOF. A copy of the World Bank’s communications confirming
DLR achievements should be attached to the disbursement requests. The quality of outputs—including
draft laws prepared for submission to the Verkhovna Rada, ministerial regulations, other documents, and
outputs within the competence of the government prepared toward the achievement of the DLIs—will
be subject to the World Bank’s review and no objection. The participating ministries and agencies will
implement the activities as defined in the critical paths toward achievement of the DLIs. Upon

\textsuperscript{12} Legal Aid Ukraine (2018). Legal Aid System in Ukraine: An Overview.
achievement of agreed DLR (or the entire DLI), the ministries and agencies will collect the relevant documentation and submit to the VE and MOF. The VE will send its conclusion on the basis of the evidence submitted by the ministries and agencies regarding the achievement of the DLIs, or an action under it, to the MOF and the World Bank. The World Bank will review the VE report. If the evidence presented on the achievement of the DLI/DLR is found satisfactory, the World Bank will invite the MOF to submit a disbursement request.

### Table 3. Program Disbursement-linked Indicators and disbursement amounts

<table>
<thead>
<tr>
<th>Results Area</th>
<th>Disbursement-Linked Indicators (DLIs)</th>
<th>DLI (US$ million)</th>
<th>% of total</th>
<th>Responsible Government Counterpart</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Results Area 1: Increasing Competitiveness of Input Markets</strong></td>
<td>DLI 1: Improving efficiency and targeting of state support in the Borrower’s agriculture sector</td>
<td>27.5</td>
<td>13.8</td>
<td>MAPF</td>
</tr>
<tr>
<td></td>
<td>DLI 2: Improving functioning of land markets</td>
<td>132.0</td>
<td>66.0</td>
<td>GeoCadaster under MAPF</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-DLI 2.1:</strong> Increasing inventory and registration of state land</td>
<td>43.0</td>
<td>-</td>
<td>GeoCadaster under MAPF</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-DLI 2.2:</strong> Improving transparency and competitiveness of state land lease system</td>
<td>33.0</td>
<td>-</td>
<td>MRD</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-DLI 2.3:</strong> Improving protection of rights in land and mortgage market</td>
<td>45.0</td>
<td>-</td>
<td>GeoCadaster under MAPF</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-DLI 2.4:</strong> Strengthening of the Free Legal Aid System</td>
<td>11.0</td>
<td>-</td>
<td>MoJ</td>
</tr>
<tr>
<td><strong>Results Area 2: Linking SMEs and Farmers to Export Markets</strong></td>
<td>DLI 3: Improving agribusiness SME access to export markets</td>
<td>40.0</td>
<td>20.0</td>
<td>SSUFSCP under MAPF</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-DLI 3.1:</strong> Promoting SME access to export markets</td>
<td>22.0</td>
<td>-</td>
<td>SSUFSCP</td>
</tr>
<tr>
<td></td>
<td><strong>Sub-DLI 3.2:</strong> Facilitating cross-border trade</td>
<td>18.0</td>
<td>-</td>
<td>SSUFSCP</td>
</tr>
</tbody>
</table>

66. **Budget appropriation and execution would be managed to allow for proper availability of budget resources to each participating ministry and government agency.** Budget lines will cover an amount equal to or higher than the amount of Bank-financed resources assigned to cover the DLIs for each year. The final reconciliation of these amounts will take place at the end of the Program implementation period. At the same time, progress toward achievement of the DLRs will be reviewed by the World Bank and the MOF in collaboration with participating ministries and agencies on a regular basis. In case of delays in achieving a specific DLR, a joint decision will be made regarding the redistribution of funds. With the introduction of the medium-term (three-year) budget planning cycle, based on a law adopted in January 2019, information on upcoming budget programs for 2019–2021 should be submitted to the MOF in early 2019, provided that the necessary underlying financing has been identified.
67. **Verification Process.** Implementation of the DLRs will be monitored by MOF and verified by the VE (see Table 4 for verification protocols). The VEs will be hired by the MOF at the outset of the Program implementation, and subject to a mutual agreement, will be retained for the entire Program implementation period. Awareness of the overall Program implementation, indicative timelines, specific steps to be taken, etc., will facilitate and speed up the verification process. The MOF will submit to the World Bank the relevant evidence of the total or partial achievement of DLRs. The World Bank will review the provided evidence and inform MOF of the conclusions regarding the fulfillment of the DLRs and the corresponding level of disbursement for each DLR. On that basis, disbursement requests will be submitted to the World Bank by the MOF. A copy of the World Bank’s communications confirming DLR achievements should be attached to the disbursement requests.

**Table 4. Summary of verification protocols**

<table>
<thead>
<tr>
<th>Results Area</th>
<th>Disbursement-Linked Indicators (DLIs)</th>
<th>Verification Protocols</th>
</tr>
</thead>
</table>
| Results Area 1: Increasing Competitiveness of Input Markets | DLI 1: Improving efficiency and targeting of state support in the Borrower’s agriculture sector | An independent auditor would ascertain completion of the DLRs towards the achievement of the DLI and submit a verification report to MOF. Subject to verification is the following:  
- The state agrarian registry: (a) is compatible with the other agricultural registries in the country, for example registries for animal and land, to be verified based on the existence of a unique ID number used across various register; (b) contains a minimum number of mandatory information, including beneficiary name and type, unique identifier, address of the farm, bank account details, contact information, other farm plots managed by the same beneficiary; (c) is scalable to allow for registering all agricultural producers and there are no restrictions that may prevent different farm types from registering, and (d) accessibility is deemed easy or rather easy by registry users on the basis of a built-in assessment tool with the capability to provide a management report upon request  
- The KPIs: (a) are quantifiable and measurable and explicitly linked to the legally established strategic sector objectives; and (b) measure the effectiveness of the program implementation.  
- Quantifiable results include: (a) achievement of each KPI of at least 90 percent against the targets agreed during the development of the strategy-based KPIs and targets; (b) at least 60 percent of the annual State support program allocation is received by agricultural producers not exceeding 500 ha of land and annual revenue of less than UAH 20 million. |
| DLI 2: Improving functioning of land markets | An independent verifier would ascertain completion of the sub-DLIs and submit the verification report to the MOF. |
| Sub-DLI 2.1: Increasing inventory and registration of state land | • The verification report for state land registration (DLI 2.1) will be based on automated verification using the methodology agreed upon prior to the start of project-related state land registration activities, possibly complemented by field visits to a random set of locations where land rights were registered and customer satisfaction surveys (possibly conducted via mobile phone) of land owners/users who might have been affected by such activities. |
### Sub-DLI 2.2: Improving transparency and competitiveness of state land lease system

- Verification related to the TDPs will ensure: (a) submission of the final methodology for development of TDPs approved by the MRD; (b) review and assessment of the TDPs. The verification will ensure that the 600 TDPs have been prepared and on random selection basis will select and review 20% of TDPs to ensure that they have been prepared following the due process and in a participatory manner.

- Verification for increased land lease fees (DLI 2.2) shall be based on the revenue generated from auctions of public land as provided by a centralized database for land lease revenue.

### Sub-DLI 2.3: Improving protection of rights in land and mortgage market

- Verification will ensure: (i) the availability of the maps and photos; (ii) the ability to access the governance monitoring data; and (iii) carrying out test issuance of notifications to intended beneficiaries followed by spot-checks that the notifications have indeed been received.

### Sub-DLI 2.4: Strengthening of the Free Legal Aid System

- Verification of the achievement of the results will be based on the analysis of the achievement of the provision of the free legal aid in writing, as well as random customer satisfaction survey(s) applied routinely to beneficiaries of free legal aid, complemented by other measures, as needed.

### Results Area 2: Linking SMEs and Farmers to Export Markets

#### DLI 3: Improving agribusiness SME access to export markets

An independent verifier would ascertain completion of the DLRs towards the achievement of the DLI and submit a verification report to MOF.

#### Sub-DLI 3.1: Promoting SME access to export markets

- **Strengthening of Ukraine’s food traceability system:**
  - Adoption and registration of the amendments to the Law on Basic Principles and Requirements for Safety and Quality of Food and related secondary (based on the list provided by the SSUFSCP) in the official MOJ registry. As with all SPS-related regulations in Ukraine, the VE should ascertain and confirm that the provisions of the amended law are based on the World Trade Organization (WTO) SPS Agreement and approximated to relevant EU requirements; Assessment report by independent verifier that proves full operationality of the platform and correspondence of novelties to Terms of References developed to upgrade the platform;
  - A VE assessment report that proves full operationality of the platform and correspondence to the agreed TORs and specifications for the platform upgrade;
  - The list of documents developed and adopted by the SSUFSCP (with hard copies of the documents) on the establishment of the database, along with an assessment report of the VE, confirming full operationality of the database.

  *Establishment of a public (open access) interactive platform on SPS/TBT and other food export requirements of international markets:*
  - VE assessment report confirming full operationality of the interactive platform, including availability of and access to food export requirements in the EU, China, US, GCC, and Canada;
  - The legal and regulatory framework for an electronic system to provide SSUFSCP administrative services (e-documentation) has been established and, based on a VE assessment report, is deemed fully operational.

#### Sub-DLI 3.2: Facilitating cross-border trade

- A VE report will be prepared on the full installment of ten BIPs, including a physical on-site inspection to observe the BIPs in full
68. Monitoring and Evaluation (M&E). Progress on achievement of the long-term outcomes will be monitored and reported on by the respective Government Agencies in charge of the subject-matter. The corresponding agencies will be responsible for the following tasks: (i) compiling and consolidating data and verification documents; (ii) ensuring data quality, and (iii) preparing and submitting the Program’s monitoring and evaluation reports to the MOF and the Bank on a timely basis.

69. Data collection, records and administration. Most of the data will be gathered on an ongoing basis during implementation, as part of the workflow of each of the implementing agencies. Data collected in the real-time following formal processes will be administered in the existing official records, from which different extracts will serve a basis to verify achievement of results and DLIs.

70. Risks related to M&E. The assessment of the M&E arrangements revealed that M&E capacity is uneven across the implementing agencies, ranging from those that have limited experience in M&E to agencies with solid expertise in collecting, consolidating and processing data.

71. Enhancing M&E capacity. The M&E systems will be strengthened, and achievement of the results and outcomes will be monitored at two levels:

i. The M&E systems will be strengthened in all Participating Ministries and Agencies (MAPF, MRD, MOJ Geocadaster and SSUFSCP), as well as at the FLAS/CCFLA, to ensure the capacity for monitoring and evaluation of the achieved results, as well as that the progress towards the achievement of the DLIs and DLRs is appropriately tracked for verification purposes. The adequacy of the established M&E systems at the Participating Ministries and Agencies will be assessed by the independent VE.

ii. Progress of implementation of the direct Program results and outcomes will be reported on by the line Ministries and Government Agencies to the MOF. The MOF will ensure the consolidated reporting on the achievement of the DLIs and Program outcomes.

72. Engagement of civil society and other stakeholders in M&E. To ensure transparency and strengthen citizen engagement, MAPF will conduct at least one public consultation per year of the Program. The schedule and detailed content of the consultation will be defined in accordance with the Program implementation schedule for each activity.

V. DESCRIPTION AND ASSESSMENT OF PROGRAM EXPENDITURE FRAMEWORK

73. The Expenditure Framework Assessment (EFA) was conducted based on (i) budget analysis for the “program”; (ii) World Bank Public Expenditure Review on agricultural sector (2018); (iii) reports of the Financial and Economic Analysis Office in the Verkhovna Rada of Ukraine. For all agencies implementing the Program, assessment is conducted at central level.
74. The total GSAP cost are expected at around US$ 1.192 billion over a seven-year program period, covering the components described in the table above. World Bank financing represents 31.8 percent of Program financing. The Government of Ukraine will contribute 68.2 percent (Table 4).

Table 4: Program Financing

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount (US$ millions)</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counterpart Funding</td>
<td>446.91</td>
<td>69.0</td>
</tr>
<tr>
<td>Borrower</td>
<td>446.91</td>
<td>69.0</td>
</tr>
<tr>
<td>International Bank for Reconstruction and Development (IBRD)</td>
<td>200.00</td>
<td>31.0</td>
</tr>
<tr>
<td>Total Program Financing</td>
<td>646.91</td>
<td>100.00</td>
</tr>
</tbody>
</table>

75. The Program financing support is calculated based on the average annual budget line allocations during 2016-2019\(^{13}\) (Table 6). The Program financing support is calculated based on the average annual budget line allocations during 2016-2019. The share of Program financing attributed to the budget code at the SAWR is based on the size the annual maintenance program (staff and recurrent costs) of the irrigation and drainage canal network agreed with Ministry of Agrarian Policy and Food (MAPF).

Table 6. Summary of PforR Financing

<table>
<thead>
<tr>
<th>Government Ministry/Agency</th>
<th>DLI</th>
<th>Budget codes</th>
<th>Estimated GSAP financing(^{14}) (US$ ‘000)</th>
<th>Program Share ( % )</th>
<th>Program Boundary, (US$ ‘000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td>2801010, 2801130</td>
<td>24,830, 3,527</td>
<td>100</td>
<td>24,830, 3,527</td>
</tr>
<tr>
<td>MAPF</td>
<td>DLI 1: Improving efficiency and targeting of state support in the Borrower’s agriculture sector</td>
<td>2803010, 2803020</td>
<td>202,195, 38,027</td>
<td>50(^{15})</td>
<td>101,098, 38,027</td>
</tr>
<tr>
<td>Geocadaster</td>
<td>DLI 2: Improving functioning of land markets 2.1: Increasing inventory and registration of state land 2.3: Improving transparency and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^{13}\) Neither the GSAP nor the Program include the amounts allocated under the state support programs, which range between around US$250- US$400 million annually, or around 1 percent of the GDP.

\(^{14}\) The estimated share of GSAP financing is calculated as the average allocation in the relevant budget codes for the Program period.

\(^{15}\) Estimates the share of the budget code attributable to the Program.
<table>
<thead>
<tr>
<th>Ministry of Regional Development</th>
<th>DLI 2: Improving functioning of land markets 2.2: Improving protection of rights in land and mortgage market</th>
<th>2751010</th>
<th>22,075</th>
<th>100</th>
<th>22,075</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Justice</td>
<td>DLI 2: Improving functioning of land markets 2.4: Strengthening of the Free Legal Aid System</td>
<td>3603020</td>
<td>73,648</td>
<td>100</td>
<td>73,648</td>
</tr>
<tr>
<td>SSUFSCP</td>
<td>DLI 3: Improving agribusiness SME access to export markets</td>
<td>2809010</td>
<td>268,039</td>
<td>54(^\S)</td>
<td>144,472</td>
</tr>
</tbody>
</table>

76. **The analysis of the Government’s expenditure framework concluded that the Government has adequate budget and expenditure management systems and practices in place that can support the Program in reaching its expected results.** Budget allocations appear adequate, and budget implementation is generally efficient with an average budget absorption rate of 94 percent during 2016-2018. The budget lines are generally characterized by high personnel and recurrent costs, with the capital expenditure allocations often not exceeding 10 percent, except for Geocadaster’s budget lines where capital expenditure is higher. Based on the analysis of ex-post budget allocations and the assessment of budget projections and the commitment from the Government during the Program preparation, the Bank concluded that MOF would be in a position to advance funds to the implementing ministries and agencies in the amount needed to achieve the results of the Program. This conclusion was support by the projected budget allocations for 2019 where the budget funds allocated under the budget lines relevant for Program implementation, are scheduled to increase, signaling the Government’s commitment to the Program.

77. **Nevertheless, several macroeconomic risks remain in place.** While Ukraine has achieved considerable fiscal consolidation since the 2014 crisis, fiscal pressures and public debt remain high. The overall fiscal deficit, including Naftogaz, narrowed from 10 percent of GDP in 2014 to under 2.5 percent during 2015-2018, four years in a row. At the same time, fiscal pressures remained significant in 2016-2018 due to several key structural sources, including a cut in the payroll tax rate, weakly targeted social assistance, large public-sector employment including the civil service, health, and education workers, and weak tax administration. In 2017, expenditures grew by 11.7 percent in real terms due to the doubling of the minimum wage and over 40 percent increase in wages of teachers and doctors, as well as higher spending on social programs. However, the fiscal deficit was within target at 2.3 percent of GDP in 2017 due to strong revenues. In 2018, education and health sector wages were increased further. Given limited progress in right-sizing staffing, the public-sector wage bill is projected to reach 11.3 percent of GDP in 2018, up from 9.3 percent in 2016. In addition, general government revenues were 5 percent below the target in the first half of 2018, mainly due to weaker proceeds from excise tax, import VAT, payroll tax, and postponed Naftogaz dividend payments. Public and publicly

\(^{16}\) The share of annual budget related to supporting cross-border food safety activities.
guaranteed debt has declined from a peak of 80.9 percent of GDP in 2016 but remained high at 71.9 percent in 2017.

78. **Ukraine faces major financing needs in 2019 and 2020, which will require mobilizing sizable international financing to maintain macroeconomic stability.** The fiscal framework targets a general government deficit of 2.3 percent of GDP in 2019. Furthermore, debt repayments (to the IMF, Eurobonds, and domestic bonds in foreign exchange and local currency) amount to a total of 5.6 percent of GDP in 2019. Financing the fiscal deficit and repaying debt will thus require new borrowing equivalent to US$11 billion in 2019 (8 percent of GDP), including about US$4.2 billion planned from external sources, with the rest raised domestically. In order to raise the necessary external financing on affordable terms, it is critical to stay on track with the new IMF Stand-By Arrangement approved at end-2018.

79. **Meeting the fiscal deficit targets for 2019-2021 will require reforms to strengthen public finances, including the reforms supported by the Bank and other development partners.** Not exceeding the fiscal deficit target of 2.3 percent of GDP in 2019-2021 is critical to manage macroeconomic vulnerabilities and reduce public debt to under 60 percent of GDP by 2021. To this end, the implementation of the approved budget for 2019 in line with the deficit target is essential. Careful implementation of the pension, health, and housing utility subsidy reforms, as well as the education and public administration reforms, would contribute to addressing the spending pressures in these areas, while also improving the effectiveness of these public services and social benefits. The pension reform helps stabilize pension spending at up to 10.5 percent of GDP. Improved targeting of housing utility subsidies helps consolidate a program that has grown to cover a sizable portion of the population. This contributes to a consolidation of social assistance spending from 5.1 percent of GDP in 2018 to 3.4 percent in 2021. The health, education, and public administration reforms are expected to consolidate the oversized hospital and school network and public-sector footprint over time. In implementing these reforms, it will be particularly important to make further wage increases contingent on concrete measures to optimize the school and hospital network and public-sector staffing. This would contribute to keeping the public-sector wage bill at current levels. In addition, it will be important to avoid measures that would undermine revenues, including proposals to replace the corporate income tax with a capital exit tax (which would result in the loss of a major revenue source in a challenging fiscal environment).

80. **In addition, the GoU is transitioning to the medium-term budget planning that would allow for more predictable and transparent budget planning and allocation.** Up until 2019, the Ukrainian GoU operated under an annual budget planning cycle, which limited ability of the line ministries to project the actual budgetary allocations over the medium-term. However, on January 8, 2019 the President of Ukraine signed the Law “On Introducing Changes to the Budget Code Regarding the Introduction of the Medium-Term Budget Planning” that required the transition of all the ministries to the medium-term budget planning, something that is also foreseen by the Medium-Term Action Plan of the Government up to 2020, Strategy for Reforming the Public Finance Management System over 2017-2020. The proposed PforR project would support the transition of the MAPF to the medium-term budget planning through strengthening current, medium-term and strategic planning in the agricultural sector, and increasing staff’s capacity for the evidence-based policy design and transparent budget execution. This should reduce the existing uncertainty in the sector and bolster the investment climate in the sector and would result in an improved efficiency and effectiveness of allocation of the scarce public resources.
Table 7: Description of the relevant budget programs

<table>
<thead>
<tr>
<th>Implementing agency</th>
<th>DLI(s)</th>
<th>Budget code</th>
<th>Description of the budget program</th>
<th>Budget Allocation, 2016-2018 average, thousand US$</th>
<th>Budget Allocation, 2019 projection, thousand US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAPF</td>
<td>DLI 1</td>
<td>2801010</td>
<td>General governance and management in the agro-industrial sector; Implementation of the MAPF institutional reform</td>
<td>4,980.99</td>
<td>6,485.02</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2801130</td>
<td>Strengthening of staff qualifications, trainings; Procurement of computer/IT-related equipment</td>
<td>710.75</td>
<td>883.85</td>
</tr>
<tr>
<td>Geocadaster</td>
<td>DLI 2</td>
<td>2803010</td>
<td>Governance and management in the field of the geodesy, cartography and cadaster</td>
<td>38,182.11</td>
<td>53,615.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2803020</td>
<td>Estimating nominal monetary value of agricultural land; Inventorization of state agriculture land within the boundaries of the territorial communities; Digitizing records.</td>
<td>6,096.75</td>
<td>8,954.21</td>
</tr>
<tr>
<td>Ministry for Regional Development</td>
<td>DLI 2</td>
<td>2751010</td>
<td>General governance and management in regional development, construction, housing and utilities</td>
<td>4,039.70</td>
<td>4,790.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2751270</td>
<td>Regional policy support</td>
<td>550,908.32*</td>
<td>1,000.00</td>
</tr>
<tr>
<td>Ministry of Justice</td>
<td>DLI 2</td>
<td>3603020</td>
<td>Provision of free legal aid</td>
<td>341,848.34*</td>
<td>390,554.10</td>
</tr>
<tr>
<td>SSUFSCP</td>
<td>DLI 3</td>
<td>2809010</td>
<td>Governance and management in the field of the food safety and consumer protection</td>
<td>24,465.40</td>
<td>59,345.40</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>971,232.36</strong></td>
<td><strong>525,627.64</strong></td>
</tr>
</tbody>
</table>

*2017-2018 average
Source: Treasury of Ukraine.

81. **The proposed PforR project aims to support government in creating pre-conditions for the increased capital outlays in the sector that have been limited in the recent years.** While the program will commence in 2019, budget execution can be retroactively accessed based on the related activities GoU has been implementing in recent years. In terms of the historic program expenditure composition in accordance with the economic classification, across all the relevant budget programs, 60.7 percent were allocated to wages, 37.2 percent to non-personnel recurrent expenditures and 10.9 percent to capital expenditure - except for Geocadaster’s budget lines, where capital expenditure is higher (Table 8).

Table 8: Program Expenditure Composition, by economic category, 2016-2018\(^7\) average

<table>
<thead>
<tr>
<th>Implementing agency</th>
<th>DLI(s)</th>
<th>Budget code</th>
<th>Total allocation, 1000 US$</th>
<th>Personnel</th>
<th>Non-personnel recurrent</th>
<th>Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percent (%) of total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAPF</td>
<td>DLI 1</td>
<td>2801010</td>
<td>4,980.99</td>
<td>52.7</td>
<td>47.0</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2801130</td>
<td>710.75</td>
<td>65.4</td>
<td>34.0</td>
<td>0.6</td>
</tr>
<tr>
<td>Geocadaster</td>
<td>DLI 2</td>
<td>2803010</td>
<td>38,182.11</td>
<td>82.3</td>
<td>17.6</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2803020</td>
<td>6,096.75</td>
<td>0.0</td>
<td>70.9</td>
<td>29.1</td>
</tr>
<tr>
<td>Ministry of Regional Development</td>
<td>DLI 2</td>
<td>2751010</td>
<td>4,039.70</td>
<td>79.2</td>
<td>19.4</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2751270*</td>
<td>550,908.32</td>
<td>-</td>
<td>50.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Ministry of Justice</td>
<td>DLI 2</td>
<td>3603020*</td>
<td>341,848.34</td>
<td>72.9</td>
<td>31.6</td>
<td>4.5</td>
</tr>
<tr>
<td>SSUFSCP</td>
<td>DLI 3</td>
<td>2809010</td>
<td>24,465.40</td>
<td>72.2</td>
<td>26.8</td>
<td>1.0</td>
</tr>
</tbody>
</table>

\(^7\) For 2018, the estimate is for the first 9 months of the year
<table>
<thead>
<tr>
<th>Implementing agency</th>
<th>DLI(s)</th>
<th>Budget code</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAPF</td>
<td>DLI 1</td>
<td>2801010</td>
<td>98.9</td>
<td>93.7</td>
<td>88.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2801130</td>
<td>76.9</td>
<td>91.5</td>
<td>92.3</td>
</tr>
<tr>
<td>Geocadaster</td>
<td>DLI 2</td>
<td>2803010</td>
<td>99.2</td>
<td>99.5</td>
<td>99.96</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2803020</td>
<td>98.5</td>
<td>99.9</td>
<td>88.8</td>
</tr>
<tr>
<td>Ministry of Regional</td>
<td>DLI 2</td>
<td>2751010</td>
<td>97.1</td>
<td>88.6</td>
<td>82.8</td>
</tr>
<tr>
<td>Development</td>
<td></td>
<td>-</td>
<td>99.1</td>
<td></td>
<td>99.03</td>
</tr>
<tr>
<td>Ministry of Justice</td>
<td>DLI 2</td>
<td>3603020</td>
<td>-</td>
<td>99.1</td>
<td>99.03</td>
</tr>
<tr>
<td>SSUFSCP</td>
<td>DLI 3</td>
<td>2809010</td>
<td>96.9</td>
<td>96.6</td>
<td>96.3</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td>94.6</td>
<td>95.6</td>
<td>92.5</td>
</tr>
</tbody>
</table>

*2017-2018 average

Data source: Treasury of Ukraine.

82. Within the capital outlays, capital construction accounted for less than 6 percent. Based on 2017 budget data (the latest available), across the relevant budget lines, underpinning the program, only 5.8 percent of total funds were allocated to capital assets construction/acquisition, 16.6 percent were allocated to acquisition of land and durable equipment, while the remainder of capital outlays were used for overhauls and rehabilitation purposes (Figure 9). Within these categories, capital assets construction/acquisition and land acquisition had the highest budget execution rate – 89 and 100 percent, respectively.

![Figure 9: Composition of capital outlays, 2017](source: Treasury of Ukraine)

83. **The budget execution has been consistently efficient in the country.** The budget execution rate, measured as actual expenditure at the end of the year vs. allocated budget, was on average 94.5 percent between 2016 and 2018 (Table 9).

Table 9: Budget Execution Rate for the key relevant budget programs, percent

<table>
<thead>
<tr>
<th>Implementing agency</th>
<th>DLI(s)</th>
<th>Budget code</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td>94.6</td>
<td>95.6</td>
<td>92.5</td>
</tr>
</tbody>
</table>

Source: Treasury of Ukraine.
VI. PROGRAM ECONOMIC EVALUATION

84. The proposed Program is aimed at supporting the GoU’s effort to improve the quantity and quality of investments in the agriculture and agribusiness sectors by addressing the binding constraints in the agriculture input and output markets that disproportionally affect SMEs’ ability to increase the level of their investments. Acknowledging the role that agriculture SMEs’ play in strengthening agricultural productivity and delivering more inclusive growth in the country, the GoU recognized the existing constraints in a number of recently issued policy and legal documents, including the GSAP. As such, the proposed Program is a continuation of an ongoing GoU program to leverage private investment in agriculture sector.

85. Rationale for Public Sector Provision and/or Financing. The Program aims to strengthen the provision of key public goods in the agri-food sector, including food safety management capacity, improving access to public information on land resources, bolstering enabling environment for investments by reducing policy uncertainty, and aligning policy and regulatory practices to the best international practices. It will also address market failures in the agriculture sector, which lead to misallocation of the resources and the underinvestment in the sector. These include high transaction costs and risks associated with the access to markets and financing, and underdeveloped organizational structures that prevent farmers from achieving economies of scale and limit their incentives for investing, particularly in irrigation. As a result, the Program is expected to be instrumental in accelerating private sector investment in agriculture sector in Ukraine, particularly by the SMEs.

86. World Bank value added. The World Bank’s support is expected to improve the efficiency and targeting of the various Government measures, increase their economic benefits, and strengthen inclusion. The World Bank brings its global knowledge and experience from supporting similar activities in the agriculture sector elsewhere, as well as expertise in aiding the Government in the advancement of reforms and actions to address key constrains for mobilizing private investment in the agriculture sector.

87. The economic evaluation of the individual interventions in the Program was underpinned by: (a) a financial analysis of the main physical investments expected under the Program; and (b) an international benchmarking – done by analyzing similar activities accomplished in the countries that represent strong similarities with Ukraine in terms of agriculture and agribusiness sectors. The analysis confirmed the economic soundness of the interventions supported by the program.

88. Several interventions supported by the Program focus on 1) strengthening regulatory framework along the agriculture value chain, and 2) improving access to public information. For both types of interventions, quantification of direct economic benefits is out of reach due to the complexity of the systems they take place in. Nevertheless, each one of them is critical for the correction of market failures that exist in the agriculture/agribusiness sectors.

89. Improved access to public information. Access to public information can be considered a public good that requires government intervention for its provision. Its primary contribution is the ability to reduce information asymmetries that may exist in the sector and risks associated with them. For example, improved information on land plots and their prices (DLI 2) may lead to the improved bargaining power
for various actors along the value chain. In addition, more transparent information on land plots contributes to security of property rights and reduces investment risks associated with the lack thereof. Similarly, operationalization of the public information system on food safety and export market requirements, or improvements to the national traceability system (DLI 3), by reducing information asymmetries, boosts the bargaining power and competitiveness of the Ukrainian agricultural exporters in the world markets.

90. **Enabling regulatory environment.** Consistent and transparent regulatory framework serves as a key condition for enabling private investment climate in a country, under the condition that the right balance is achieved between the extent to which regulations correct market failures and the costs they impose on economic agents. The interventions under the proposed Program aim at both introducing regulations that have potential to correct existing market failures and improving regulations that may be too burdensome for the agricultural sector stakeholders in Ukraine. Overall, the literature is rich when it comes to highlighting a significant relationship between government regulations and economic growth, competition, trade and investment (see examples from Djankov, Freund and Pham, 2010; Ciccone and Papaioannou, 2007; Ardagna and Lusardi, 2009; Haidar, 2009; USAID, 2015; Hoekman and Nicita, 2011).

**Results Area 1 - Increasing Competitiveness of Input Markets**

91. **Improving targeting and efficiency of the agricultural state support programs (DLI 1).** Activities under DLI 1 have a goal of supporting the MAPF in improving agriculture policy design and analysis, impact monitoring and budget management – all measures that would improve the effectiveness of public expenditure and equity in state support allocations.

92. While a quantitative analysis identifying the increase on returns from improved policy and budgetary planning, and institutional capacity strengthening, is not possible, it can be expected that improved analysis, planning and programming of the agricultural state support will considerably increase the effectiveness of the state support program and its impact on agricultural growth. Research shows that the structure or composition of public agriculture expenditure can have an important positive impact on agricultural per capita income\(^{18}\). By improving policy formulation and implementation in MAPF, activities along the DLI 1 critical path can improve the return on public agricultural expenditures by making them more productive. These improvements will also be felt by the economy as a whole through the increased productivity and competitiveness of the agriculture sector.

93. Moreover, MAPF will benefit significantly from improved compliance of the state support management with that of the EU, including the development of the register of the state support recipients in accordance with the IACS principles.

94. **Improving functioning of land markets (DLI 2).** The analysis focuses on evaluating, both quantitatively and qualitatively, the potential impacts of the DLI-related activities targeted at improving transparency and strengthening the enforcement of land tenure and property rights in Ukraine.

---

\(^{18}\) *Agriculture and EU Accession: Achieving FYR Macedonia’s Agricultural Potential.* World Bank, 2006.
Clear and enforced land tenure and property rights are crucial in incentivizing agricultural investment and increasing agricultural productivity. If achieved, tenure security provides a basis for low-cost functioning of land markets, facilitating access to land for various players in the economy. There are two major ways through which secure property rights for land can increase agricultural productivity. The first one is that secure land tenure would result in long-term land investment and adoption of new technologies (Besley, 1995; Deininger and Jin 2006). The studies have shown that both investments have doubled, and values of land were reported to be up to 80 percent higher for the plots with higher levels of tenure security as opposed to the plots there was a higher probability of losing them; transferability of land further increases these positive effects (Deininger, 2003). Second, secure property rights for land also encourage factor intensity, or in other words, efficient resource use (Deininger et al., 2009). Overall, positive relationship between secure land rights and increase in agricultural investment has been demonstrated across the world, including Latin America (Deininger and Chamorro, 2004; Bandiera, 2007), Eastern Europe (Rozelle and Swinnen, 2004), and Africa (Deininger and Jin, 2006).

Currently, only about 3.6 million ha of state agricultural land is registered out of total of about 10 million ha (for comparison, the registration of private land is above 85 percent), resulting in high levels of tenure insecurity and related productivity losses. The reports of State Geocadastre indicate that only about 1.4 million ha are formally leased out. Another 1 million ha are in the permanent use (not necessarily registered). The remainder of state land remains in the ‘shadow economy’ with three main effects, namely (i) losses to Government budgets as any payments remain informal; (ii) high levels of tenure insecurity and associated incentives to mine the soil and plant short term crops rather than move into crops and value chains with higher value added and employment potential; and (iii) productivity losses as lack of transparency makes it unlikely that land will be cultivated by those best able to exploit it. Registering such land will address all these issues as (i) lease income will accrues to local communities, providing fiscal benefits and contributing to decentralization; (ii) allocative efficiency will increase as land can be transferred transparently (via e-auctions to the highest bidder) in line with land management plans; and (iii) higher incentives for land-related investment and sustainable land use due to higher levels of tenure security.

Registration of state agricultural land will result in significant additional inflows to the state budget. While research to quantify the potential benefits from state land registration using satellite imagery and compare them to the costs of doing so is ongoing, some economic impacts can, nevertheless, be quantified. As almost all agricultural land is cultivated, registration of additional 4 million ha of state agricultural land will direct at least 3 percent of normative value of this land to the state budget. Thus, the immediate effect is expected to be US$ 120 million per year (an average normative value of arable land is about US$ 1,000 /ha). In addition, auctioning of 80,000 ha will bring the lease payment to at least 12 percent (currently observed rate is up to 18 percent) adding at least US$ 7.2 million per year. Using 5 percent discount factor, the net present value of the revenue flow to the budget is about US$ 2.5 billion compared to the cost of inventory for agricultural land of about US$ 20 million. This effect will be distributed between the state and local budget in proportion to the land transferred to communal ownership. Currently, the project envisages to transfer only 200,000 out of 4
million ha of agricultural land to communal ownership but this number can increase significantly if there is demand from local authorities.

98. Additionally, registering all agriculture state land would reduce the cost and time for preparation of state land for land auctions\(^\text{19}\) and will eliminate the current conflict of interest in selection and preparation of land for auctions. Currently, an auctioneer prepares land parcels using his own budget and then is reimbursed from the auction proceeds. Thus, the auctioneer has an incentive to select and prepare land parcels only in cases when the interested parties are already identified. This change will lead to a higher price of land lease and sale at the land auctions. Registered land can be transferred to local governments faster and at no additional cost. Moving agricultural production to formal sector for about 4 million ha with at least US$ 250/ha of value added per year will statistically add US$ 1 billion to GDP per year. Formalizing the use of state land will increase the cost of land use for affected producers, eliminate a rent on use of state land as a factor of distortion, and, thus, will stimulate a competition and a productivity growth in agricultural sector.

Results Area 2 - Linking SMEs and Farmers to Export Markets

99. Improving compliance with export market requirements (DLI 3). The analysis focuses on evaluating, both quantitatively and qualitatively, the potential impacts of the DLI-related activities in three key areas, including (i) border infrastructure; (ii) improvements to SPS information systems for monitoring and implementation of relevant controls; and (iii) advancing regulatory reform to meet SPS compliance requirements of key trading partners and improve the overall operations of the SSUFSCP.

100. The analysis of the economic outcomes associated with the Program activities focuses on the evaluation of incremental revenues and costs of project interventions to derive the incremental profits of the project. Incremental revenues are the difference in revenue with and without the project activities. A similar definition applies to incremental costs. The analysis focuses on the overall economic benefit of the total investments and not on the individual activities within each component. The economic analysis relies on shadow prices and not market prices to incorporate the projects return to society and not just its return as an investment-- see Gittinger (1982) and World Bank (2013) for a full discussion. By using shadow prices, we aim to take into account the returns to family labour, the cost of doing business, the opportunity cost of capital, and other economic costs that are not fully measured by market prices. We use an economic analysis factor of 10 percent to deflate market prices and obtain their shadow price.

101. The analysis focuses on the nine chapters of the Harmonized Tariff Schedule that capture the high-value agricultural commodities that are mainly produced by SMEs\(^\text{20}\) and concludes that strengthening SSUFSCP capacity and SPS regulatory framework has a high potential to increase the exports of high value-added exports, including live animals (Table 12). Meat (HS02) and dairy

\(^{19}\) Note: The main cost for preparing lots for the auction is associated with inventory of the land parcels

\(^{20}\) The following commodities are included in the analysis – HS01 (live animals), HS02 (meat and edible meat offal), HS03 (fish and crustaceans, mollusks and other aquatic invertebrates), HS04 (dairy produce; birds’ eggs; natural honey; edible products of animal origin, not elsewhere specified or included), HS05 (products of animal origin, not elsewhere specified or included), HS07 (edible vegetables and certain roots and tubers), HS08 (edible fruit and nuts; peel of citrus fruit or melons), HS20 (preparations of vegetables, fruit, nuts or other parts of plants), HS21 (miscellaneous edible preparations)
(HS04) generate the highest export value of the nine commodity chapters. In export revenue terms, horticultural products in chapters HS08, HS20, and HS07 ranked immediately below. The low export levels of live animals (HS01) suggest that there is a high potential for export growth in these commodities for which SMEs dominate production. Exports of meat, live animals and dairy products to the EU experienced the highest growth during this period. The rapid growth of exports to the EU mainly reflects Ukraine’s efforts at strengthening its SPS regulatory systems in response to trade negotiations with this economic bloc, which the Program aims to support.

Table 12. Value of Ukrainian exports by harmonized system chapter

<table>
<thead>
<tr>
<th>HS Code</th>
<th>Product Description</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS02</td>
<td>Meat and edible meat offal</td>
<td>342</td>
<td>426</td>
<td>433</td>
<td>434</td>
<td>646</td>
</tr>
<tr>
<td>HS04</td>
<td>Dairy produce; birds’ eggs; natural honey; edible products of animal origin, not elsewhere specified or included</td>
<td>722</td>
<td>629</td>
<td>460</td>
<td>415</td>
<td>602</td>
</tr>
<tr>
<td>HS08</td>
<td>Edible fruit and nuts; peel of citrus fruit or melons</td>
<td>221</td>
<td>237</td>
<td>241</td>
<td>233</td>
<td>334</td>
</tr>
<tr>
<td>HS20</td>
<td>Preparations of vegetables, fruit, nuts or other parts of plants</td>
<td>565</td>
<td>455</td>
<td>298</td>
<td>218</td>
<td>285</td>
</tr>
<tr>
<td>HS07</td>
<td>Edible vegetables and certain roots and tubers</td>
<td>131</td>
<td>149</td>
<td>103</td>
<td>158</td>
<td>256</td>
</tr>
<tr>
<td>HS21</td>
<td>Miscellaneous edible preparations</td>
<td>271</td>
<td>232</td>
<td>137</td>
<td>126</td>
<td>155</td>
</tr>
<tr>
<td>HS03</td>
<td>Fish and crustaceans, molluscs and other aquatic invertebrates</td>
<td>28</td>
<td>19</td>
<td>20</td>
<td>26</td>
<td>47</td>
</tr>
<tr>
<td>HS01</td>
<td>Live animals; animal products</td>
<td>13</td>
<td>15</td>
<td>26</td>
<td>31</td>
<td>46</td>
</tr>
<tr>
<td>HS05</td>
<td>Products of animal origin, not elsewhere specified or included</td>
<td>15</td>
<td>21</td>
<td>25</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>63,356</td>
<td>54,027</td>
<td>38,269</td>
<td>36,505</td>
<td>43,673</td>
</tr>
</tbody>
</table>

The main anticipated benefit of further strengthening the capacity of Ukraine’s SSUFSCP and the investments in the food safety system is an increase in market access for the Ukrainian agricultural exports, particularly of animal origin, by the SMEs. Increased market access should lead to a growth in export volumes as demand increases resulting in greater price increases down the value chain. Since SMEs undertake most of the output of high valued products, they would potentially greatly benefit from such increases in market access. However, the extent of capturing such benefits would largely depend on several factors, including:

i. **Market structure**: the share of any price increase received by SMEs will depend on how much of the export price is captured by the farmgate price. This will partly depend on the share of direct export sales captured SMEs. Under the project, this share is anticipated to increase as information asymmetries are reduced with the deployment of market information systems, simplification of regulatory requirements and improved SSUFSCP capacity.

ii. **Ability of the SMEs to comply with the quality requirements**: responding to the new market demands, particularly to premium markets, will require the exporters’ ability to comply with the importers’ SPS and quality requirements, and further investments, which will be conditioned to the SMEs access to financing. The extent to which SMEs can comply with such requirements will be critical in the ability of taking advantage of new export opportunities.
iii. **Compliance costs:** if the cost of compliance relative to the value of production is high, SMEs may choose not to participate in the new export opportunities. This effect can be mitigated by promoting SMEs to participate in exporter associations.

103. **Two additional benefits may also be anticipated from greater SPS compliance enforcement of the Ukrainian exporters and producers.** The first is improved public health to consumers and greater protection to animal and plant health by preventing the importation of unsafe food and preventing animal disease. This is mainly a result of increased border inspections of food and animal products, as more border posts become established and regulations are implemented. The second is greater value added to national production, as local producers improve product quality and increase value locally in response to the demand in foreign markets.

104. **While it is impossible to precisely quantity the socio-economic impacts of either of these ancillary benefits for Ukraine, the benefits of improving public health and animal and plant health may be substantial.** According to World Organization for Animal Health’s (OIE) data, Salmonellosis (S. enteritidis and S. typhimurium) is the most commonly reported foodborne diseases in Ukraine with 7,315 cases in 2017. Human cases of Brucellosis are rare with only 3 cases reported in 2017 whereas Leptospirosis and Campylobacteriosis are more significant with 330 and 156 cases reported, respectively. None of these diseases resulted in loss of lives accept for the two incidences of Rabies in 2017. OIE also takes stock of the reporting of present animal diseases in Ukraine. Accordingly, African swine fever (limited to one or more zones), enzootic bovine leucosis (present) and rabies (present) are the ones that stand out in Ukraine’s animal disease profile. Strengthening food inspection and traceability systems in Ukraine may lead to up to three-fold decrease in occurrence of the abovementioned diseases and would result in reduced working days lost to thickness and reduced disruptions to trade. Decreasing of Salmonellosis occurrence only, could result in up to EUR 1 million in saved medical costs annually.

105. **Economic benefits of moving to the risk-based import/export controls are grounded in the efficiency gain associated with the more efficient use of public resources, stemming from the categorization of goods by risk levels and focusing the controls solely on risky products.** When combined with web-based applications, such efficiency gains can be significant. As an example, Turkey has been implementing a Risk-Based Trade Control System called TAREKS since 2010. By moving to TAREKS the need for physical inspection was reduced to only 59 percent of the total products, which are deemed riskier. This resulted in a 41 percent decrease in the costs of importer companies along with a decrease in the number of inspectors deployed. As a result, the average time of completion of procedures was decreased to 19 hours for imports and 7 hours for exports, which used to take significantly more in the earlier system. Similar benefits can be expected in Ukraine.

106. **The main project costs are the costs of investments and additional operational cost in three areas:** (i) increasing border inspection points; (ii) improving SPS and market information systems for monitoring and implementation of relevant controls as well as facilitating market access; and (iii) advancing regulatory reform to meet SPS compliance requirements of key trading partners and improvements of the overall operations of the SSUFSCP.

107. **According to the World Bank (2005) there are three indirect cost that we do not directly account for in our analysis,** these are: (i) additional laboratory cost for collection and analysis of product
samples by producers and exporters; (ii) additional procurement costs for buying compliant raw materials or commodities by producers and exporters, this is particular relevant to the procurement of inputs such as pesticides and fertilizers; (iii) additional overhead costs, such as additional record keeping to insure traceability, training costs of personnel at the farm level, and possible infrastructure improvements—like refurbishment of storage systems.

108. **To determine whether we are better off with the project’s intervention the EFA compares the returns of project activities with project (WP) to local practices and technology without project (WoP).** Specifically, the marginal incremental benefit of adopting project activities WP. To estimate the marginal incremental benefit ($\Delta$Benefit), the difference between changes in cost and revenue with (WP) and without project (WoP) is calculated. $Benefit_{WP}$ is estimated as the difference between $\Delta$Revenue and $\Delta$Cost of the project investments. The difference between $Benefit_{WP}$ and $Benefit_{WoP}$ is the marginal incremental $\Delta$Benefit.

$$\Delta$Benefit = $\Delta(Benefit_{WP} - Benefit_{WoP}) = \Delta$Revenue $- \Delta$Cost

$$= \Delta(Revenue_{WP} - Revenue_{WoP}) - \Delta(Cost_{WP} - Cost_{WoP})$$

109. The main economic benefit is the growth in export volumes (EV) and export unit price (EUP). For the EFA an assumption is that under WoP, the rate of growth of EV and EUP remains the same as in the period 2013-2017. For WP interventions an assumption is that the impact of the investments will be reflected as an increase in the rate of growth of both EV and EUP. The sensitivity analysis is applied to estimate the rate of additional growth in the WP growth rate for EV and EUP that are needed to obtain a positive return for project.

110. **The results of the Monte Carlo simulations find that with a minimum additional 5 percent of growth, over ten years and with the observed rates of growth of EV and EUP, the project achieves a positive return for the investment with the least amount of risk** (Table 13). The project under this scenario generates a NPV of about US 42 million and a return of almost 6 percent. Moreover, every dollar invested generates on average almost 2 dollars in benefit. The probability of obtaining a negative NPV and IRR under a rate of growth premium of 5 percent is 36 and 25 percent respectively.

111. **Most the value of the project is generated by increases in revenue of 5 commodity groups for which SMEs serve as main exporters:** Live animals and animal products (HS01); Meat and edible meat offal (HS02); Fish and crustaceans, mollusks and other aquatic invertebrates (HS03); Products of animal origin, not elsewhere specified or included (HS05); and Edible vegetables and certain roots and tubers (HS07). The revenue for all other groups is anticipated to continue a downward trend, reflecting the observed declining trend in prices and or demand for these commodities during the period 2013 to 2017.

<p>| Table 13. Economic returns under three increases of the observed growth rates for export volumes and export unit price |
|---|---|---|---|
| Element | 1.25 | 2.50 | 5.00 |
| NPV (US$ 1000) | (1,609) | 15,542 | 41,921 |
| IRR (%) | -16.7 | -7.6 | 5.8 |</p>
<table>
<thead>
<tr>
<th>Benefit/Cost Ratio</th>
<th>-0.1</th>
<th>0.76</th>
<th>2.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPV costs (US$ 1000)</td>
<td>20,330</td>
<td>20,330</td>
<td>20,330</td>
</tr>
<tr>
<td>Prob. (%) of negative NPV</td>
<td>80</td>
<td>58</td>
<td>36</td>
</tr>
<tr>
<td>Prob. (%) of negative IRR</td>
<td>60</td>
<td>39</td>
<td>25</td>
</tr>
</tbody>
</table>

Source: Simulation results. a: Increase growth rates refers to the additional growth in export volume growth and export unit price as a result of project investments

112. The results for the financial analysis, which does not deflate observed export unit prices by 10 percent to account for returns for unforeseen costs, also confirms the previous results (Table 14). As the minimum rate of additional growth, for the observed trends in EV and EUP growth rates, at which the project generates a positive return is also 5 percent. Like the economic analysis the same commodity groups generate most of the value for project.

Table 14. Financial returns under three increases of the observed growth rates for export volumes and export unit price

<table>
<thead>
<tr>
<th>Element</th>
<th>1.25</th>
<th>2.50</th>
<th>5.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPV (US$ 1000)</td>
<td>(605)</td>
<td>25,311</td>
<td>50,827</td>
</tr>
<tr>
<td>IRR (%)</td>
<td>-15.4</td>
<td>-2.4</td>
<td>7</td>
</tr>
<tr>
<td>Benefit/Cost Ratio</td>
<td>-0.03</td>
<td>1.2</td>
<td>3</td>
</tr>
<tr>
<td>NPV costs</td>
<td>20,330</td>
<td>20,330</td>
<td>20,330</td>
</tr>
<tr>
<td>Prob.(%) of negative NPV</td>
<td>78</td>
<td>51</td>
<td>34</td>
</tr>
<tr>
<td>Prob.(%) of negative IRR</td>
<td>56</td>
<td>34</td>
<td>25</td>
</tr>
</tbody>
</table>

Source: Simulation results. a: Increase growth rates refers to the additional growth in export volume growth and export unit price as a result of project investments

Improving access to fertilizer and finance

113. Presently only inputs listed in the national catalogue of Ukraine can be sold on domestic markets, while new inputs are subject to lengthy and costly domestic testing and registration procedures. As a result, Ukrainian farmers can access only a small fraction of fertilizers and pesticides as compared to EU farmers and use less fertilizers overall. For example, in 2016 the usage of nitrogen and fertilizers in Ukraine was only 36.5 kg/ha of arable land, compared to 79.1 kg/ha in the US and 96.3 kg/ha in Poland. Comparable situation is with the usage of phosphate fertilizers - 8.8 kg/ha in Ukraine versus 28 kg/ha in the US and in Poland. Consequently, this contributes to a significant agricultural productivity gap in Ukraine. Empirical evidence on Ukraine demonstrates that increasing fertilizers usage in crop farming by 10 percent could increase agricultural productivity by about 1 percent. By closing the gap in fertilizers’ application (2-3 times), Ukraine could boost its agricultural output by 10-20 percent.

114. The Program supports GoU’s efforts in improving access to fertilizers for agricultural producers through the adoption of the legislation recognizing the list of the EU fertilizers. An immediate expected impact of recognizing the EU fertilizer list in Ukraine would be a wider choice and an increase
in the number of imported (innovative) types of fertilizers. In turn, this would contribute to increased productivity in the sector. Harmonization of the list of fertilizers could also potentially result in significant time and cost savings associated with introducing new fertilizer products in the market. Overall, potential economic benefits from the above legislative change can be approximated from the past experience of deregulating the fertilizers market in Ukraine. Back in 2015, Ukraine canceled the state registration for a limited list of nitrogen and phosphate fertilizers. This resulted in the increased usage of fertilizers by an average of 25 percent in 2016 compared to 2015. Since the Annex 1 of the EC Regulation 2003/2003 includes a way longer list of fertilizers than was deregulated in 2015, one can expect a 25-percent increase in fertilizer use as a low boundary of what could be expected once full harmonization takes place. A 25-percent increase in high quality fertilizers’ use could potentially lead to about 2.5-percent increase in agricultural output, or an equivalent of US$ 450 million of crop output.

115. As an example, Moldovan experience with the adoption of new types of EU fertilizers has been quite positive. A survey of fertilizer importers showed that 44 new EC fertilizer types in total amount of over 1000 tons have been imported in 2018, right after the start of the reform. According to the farmers, most of the new fertilizer is this highly efficient that allows for using fertilizer in very small quantities on farm (per unit of land), also resulting in a positive impact on GHG emissions. The survey also shows that the new types of fertilizers have been sold in small lots through various distribution channels to all types of farmers, larger and smaller. Opinions of importers are that this reform will totally change the market of fertilizers in Moldova over the next 3-4 years leading to new (and more) players and products.

116. Enabling crop receipts as a tradeable security has the goal of correct an existing market failure – lack of access to finance. While such market failure is often inherent to agriculture, in Ukraine it is further exacerbated by the moratorium on agricultural land sales that prevents land to be used as a collateral. As a result, small and medium producers in Ukraine are significantly under-financed. According to the recent IFC estimates, an agri-finance gap for small and medium producers accounts for US$ 3.1 billion. Crop receipts could facilitate up to US$ 520 million US for Ukraine’s agricultural sector over the next two years.

117. Enabling crop receipts as a tradeable security aims to overcome the current lack of acceptable collateral in Ukraine, which imposes a major constraint on financing SME farmers. Overcoming this constraint would allow for attracting additional private investment into the Ukrainian agriculture and agribusiness sectors. Access to finance in the country remains limited, especially for small and medium enterprises. A study on agricultural finance published in 2012 estimated that only about 30 percent of the needs for agricultural finance in the sector are met. The share of agricultural loans in the total volume of loans relative to the agriculture’s contribution to the GDP is by far lower in Ukraine than in the EU. In the 2013-14 Global Competitiveness Report, 16.7 percent of respondents identified access to finance as the primary obstacle to doing business in Ukraine. As the banking sector represents 95 percent of the assets of the financial sector (OECD, 2015), large input suppliers, producers and exporters most often use bank loans to access finance, though high and volatile interest rates and lack of information about the borrowers still hinders access to the loans. In contrast, most small-scale enterprises cannot access these various instruments due to the lack of collateral. One solution to the problem is the development of non-traditional financial instruments, as well as instruments focusing away from asset-based lending.
The International Finance Corporation has been working on introducing and promoting the use of crop receipts as pre-season finance to address working capital finance requirements based on the pledge of the future crop. The Ukraine Crop Receipts Project has, to date, facilitated approximately US$ 180 million in financing under this instrument and aims to reach US$ 500 million by 2020. However, the demand of the market for access to finance in agriculture is much larger, and a much larger scale-up is required. Creating a security based on the pledge of the future crop (as in Brazil), would open up possibilities to advance a functioning futures market. Many of the constraints require action on the part of the private sector operators, but the public sector has a key role to play in providing an enabling policy and regulatory framework. The GSAP outlines the expenditure program for GoU’s effort in improving access to finance and risk management instruments for all the stakeholders using best EU and international practices.
REFERENCES


Deininger, K. and J.S. Chamorro, Investment and Income Effects of Land Regularization: The Case of Nicaragua, Agricultural Economics, 30(2): 101-16


