

**PROJECT INFORMATION DOCUMENT (PID)
CONCEPT STAGE**

Report No.: AB5913

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Project Name	Agricultural Productivity Assistance Project
Region	Europe and Central Asia
Country	Kyrgyz Republic
Sector	ECSS1
Lending Instrument	SIL
Project ID	P118838
Borrower(s)	Kyrgyz Republic
Implementing Agency	Credit Line Management Unit; Agribusiness Competitiveness Center
Environmental Screening Category	[]A [X]B []C []FI []TBD (to be determined)
Date PID Prepared	February 11, 2011
Estimated Date of Appraisal Completion	04/22/2011
Estimated Date of Board Approval	05/31/2011
Concept Review Decision	Following the review of the concept, the decision was taken to proceed with the preparation of the operation.
Other Decision	The operation will be processed under Track 1.

I. Introduction and Context

1. The proposed project, in the amount of US\$6.85 million, is being prepared for financing under the Russia Food Price Crisis Rapid Response Trust Fund made available to the Kyrgyz Republic under the framework of the Global Food Crisis Response Program. Of the four dimensions of food security¹, the project will focus on *improving food availability*, by supporting activities aimed at improving agricultural productivity in the Kyrgyz Republic.

Country Context

2. The Kyrgyz Republic, located in the Central Asia Region, has a population of about 5.2 million. The country experienced a relatively high GDP growth rate of around 8.5% in 2007 and 2008, which slowed to 2.3% in 2009. The country's GDP began to recover in the first quarter of 2010, growing by 16.4% in real terms compared to the same period in 2009², however, the subsequent political instability of spring and summer of 2010 led to a negative GDP growth rate of 0.5% by the end of September 2010. The political events in 2010 and tightening of trade conditions with Kyrgyzstan's trading partners further contributed to the sharp decline in exports. The fall of the Kyrgyz Som against the US Dollar continued in 2010.

¹ The four dimensions include: availability, access, utilization, and stability.

² Mostly due to increased mining activity.

3. *The incidence of poverty remains quite high in the country.* In the second half of 2009, 50% of households were living in poverty, including 15% in extreme poverty. The poverty situation has worsened over the years, in large part due to the dramatic decrease³ in the inflow of remittances as a result of the economic slow-down in Russia and Kazakhstan, the two main destinations for Kyrgyzstan’s labor migrants. According to the World Food Program (WFP) of the United Nations, poverty rates are consistently higher in rural areas than in urban areas: 60% of households in rural areas live in poverty, including 19% in extreme poverty, vs. 32% of households in urban areas, including 7% in extreme poverty. Food-related expenditures represent about 60% of total household expenditures, including up to 74% among the severely food insecure households. Poverty and vulnerabilities to food insecurity have been compounded by political instability experienced early in 2010, followed by ethnic violence in the South of the Country. These events disrupted economic activity and transport, and resulted in lengthy closures of the important border crossings with Kazakhstan.

Sectoral and Institutional Context

4. *Agricultural Sector.* The agriculture sector plays a significant role in the overall economy of the Kyrgyz Republic. Over the past ten years, the sector has consistently contributed between 30% and 40% to the national GDP and provided employment for over 50% of the country’s working population. It remains critical for employment, food security and consumer price stability, and is also an important contributor to the country’s exports. Following an agricultural sector growth rate of 7% in 2008, and 4.9% in 2009, the agricultural output fell by 2.8% by the end of 2010. Crop production fell by 7.1%, in big part due to adverse weather events affecting various parts of the country.

5. Crop production and livestock are the two main sub-sectors of agriculture, and represent 53% and 44% of the agricultural GDP, respectively. Agricultural productivity continues to remain low, and there is considerable room to further increase productivity performance. Table 1 below provides comparative information on yields for selected crops in the Kyrgyz Republic vs. its neighbours – other Central Asia countries, Russia and China. Kyrgyz Republic is lagging behind in yields for most crops: they have the lowest yields for rice, sugar beet, oilseeds and vegetables. The potato yields in the Kyrgyz Republic are 30% lower than in Tajikistan and Uzbekistan, and the country has the third-lowest wheat yields, which are less than 50% of those achieved in China and Uzbekistan.

Table 1. Comparative yields for selected crops in Central Asia, Russia and China (tons/Ha, average over 2006-2009)

Crop	Potatoes	Rice	Wheat	Sugar beet	Oilseeds	Vegetables
Country						

³ Remittances fell by 20% in 2009 compared to all-time high of 2008, and by further 13% during the first 9 months of 2010.

Tajikistan	22.21	4.22	2.08	n/a	n/a	33.76
Uzbekistan	22.16	3.94	4.47	n/a	1.00	16.01
Kyrgyz Republic	15.77	2.99	2.16	14.53	0.57	15.60
Kazakhstan	15.35	3.39	1.15	n/a	1.21	18.80
China	14.18	6.46	4.68	41.27	n/a	17.01
Russian Federation	13.48	4.65	2.20	35.57	0.63	24.16

6. The major causes of low productivity include lack of access to and/or poor management of irrigation and pastures, low quality of agro-inputs (fertilizers, chemicals, seeds, etc.), limited use of sound agro-technical practices (such as weeding, irrigation, application of fertilizer), as well as inadequate marketing infrastructure and services (storage, marketing skills and market information), and poor access to finance.

7. Improved farmer access to extension and training services is critical to enhancing their knowledge and skills of modern, sustainable agro-technical practices, such as appropriate use of agricultural inputs, crop rotation, conservation tillage, etc. in order to increase yields and output. Increased access to risk management instruments is also very much needed as agricultural producers in the country are highly vulnerable to adverse weather risks (the weather risk is one of the highest in the region). However, the insurance sector is underdeveloped, thus limiting the risk management opportunities for farmers. Therefore, risk mitigation measures, such as timely, reliable and longer lead-time weather forecasting, which would also cover an early warning system for adverse weather events, are needed to enable farmers to do better planning and preparation for various weather conditions⁴. Access to credit is a key factor for successful agriculture sector development. However, farmers, in particular the smaller ones, continue to face difficulties in accessing financing as lending to agriculture still continues to lag. The limited access to finance has in turn limited the farmers ability to invest in agricultural inputs and, hence, their ability to improve production.

8. *Food Security.* At the aggregate – country - level, there are no food shortages. The shortages in domestic production are compensated by food imports. Kyrgyzstan is a net importer of its key staple foods, in particular, most of the wheat for human consumption (wheat accounts for 40% of calories), and a sizeable share of vegetable oil. In addition, the share of food imports seems to be on rise. Imports of wheat, for instance, in 2010 were 44% higher (in volume) compared to the same period in 2009. This increases the country’s vulnerability to unexpected food price shocks, in particular given the weakening domestic currency. For example, during the global food price crisis in 2007-2008, the price of cereal and bakery products in Kyrgyzstan rose by 109%. During the July to December 2010 six-month period, wheat prices in the Kyrgyz

Republic went up by 85%, wheat flour prices rose by 56%, the price for potatoes doubled, vegetable oil prices rose 48% , and beef prices rose 20%. The situation is further exacerbated by Kyrgyzstan's heavy dependence on one supplier for the key food commodities, Kazakhstan. Kazakhstan has provided more than 95% of wheat imports, 80%-95% of flour imports, and 45%-55% of vegetable oil imports. Its closure of borders for grain exports during April – September, 2008 had a profound effect on its neighbor. Being a net importer of key food staples, efforts to raise domestic productivity/yields of these crops would therefore not only help increase household incomes, but also help improve household and national food security and reduce the food import bill of the country.

9. *Susceptibility to Food Price Increases.* Given the high incidence of poverty, low rural incomes and the high dependence on imports of staple foods, the Kyrgyz Republic is at an increased risk to food price increases, which makes the country's food security a continuing concern. The food price increase of 2007-2008 brought increased priority to food security in the government, leading to the adoption of the Law on Food Security⁵. However, the country remains vulnerable to expected food price increases in the future. The Food and Agriculture Organization (FAO) and Organization for Economic Cooperation and Development (OECD) estimate that the average prices for the key agricultural commodities over the next ten years will be above the levels of the decade prior to the 2007/08 peaks, in both nominal and real terms.⁶

10. The continued food security vulnerabilities of the Kyrgyz Republic underscore the urgent need to improve the performance of the agricultural sector. To help improve food availability in the country, it would be important to capitalize on the country's agricultural potential. This would necessitate assisting farmers to increase agricultural productivity and reduce on-farm losses through improved access to, and efficient use of, inputs, agricultural equipment and machinery, and information on improved and sustainable farming practices.

11. *Institutional Context.* The Ministry of Agriculture (MOA) is the line ministry for the agricultural sector, and a key counterpart for this project, while the Ministry of Economic Regulation (MOER) is in charge of the agro-processing sector. The MOA is responsible for designing targeted support for addressing key development challenges in the sector. Post food price spike of 2007 – 2008, a program for cooperative development, a program for support of wheat growing, as well as recent ideas for development of cluster approach in the sector are some of the initiatives to encourage agricultural production and prevent food price increases in the future. The staff of Kyrgyz Agency on Hydrometeorology (Kyrgyz Hydromet) has received proper education, but has since had limited opportunities to upgrade their skills. Except for occasional upgrades of selected pieces of equipment, most of the equipment is outdated and requires upgrade⁷. At this time, the agency provides free weather forecast for general public use only for "tomorrow". Daily 3-day weather forecasts are available to the Government, and, for a

⁵ In August 2008, the Parliament adopted a Law on Food Security, providing a basic legal framework for such emergency situations. The Law, however, also envisages a broader role of the government in input and output markets, which interferes with the purely private nature of such markets.

⁶ The average wheat and coarse grain prices are projected to be nearly 15-40% higher in real terms relative to 1997-2006, while for vegetable oils real prices are expected to be more than 40% higher.

⁷ The upcoming Central Asia Hydromet Modernization Project (CAHMP) will strengthen Hydromet's overall capacities in forecasting. The expected Board date for the CAHMP is May 26, 2011. The activities of CAHMP and APAP are complementary and will not overlap.

fee, to other entities and individuals. A publicly available 3-day forecast should be buttressed by new skills to raise its accuracy before it is provided for wide use.

12. The Joint Country Support Strategy (JCSS) approved on May 23, 2007, identifies agriculture as one of the key drivers of economic growth and poverty reduction in the Kyrgyz Republic. The JCSS Goal 1.4 states that increasing agricultural productivity and improving market mechanisms in production and processing are essential building blocks contributing to economic growth and poverty reduction. The project is also in line with the Joint Economic Assessment (JEA) of July 2010, which identifies improving agricultural productivity as a key investment priority. The project will observe the Principles for Investment set forth by the JEA – equitably distributed, private sector-led investments.

II. Proposed Project Development Objectives

A. Proposed PDO

13. The objective of the Project is to increase the productivity of the beneficiary farmers supported by the project.

B. Key Results

14. The key outcome indicators are:

- Increase (in %) in gross margins per ha in the participating farms for selected key crops.
- Increase (in %) in yields per ha in the participating farms for selected key crops.

15. In line with the project outcomes indicators, key agreed output indicators are as follows:

Component One:

- Volume of investments/co-financing made by farmers under the project, US\$ equivalent
- Cumulative disbursement from the Credit Line⁸
- Number of borrowers under the Credit Line, including women⁸
- Total outstanding active loan portfolio in the PFIs⁸
- Number of active loan accounts in the PFIs⁸
- Total outstanding micro-finance portfolio, including to women⁸
- Number of active loan accounts, including to women⁸
- Portfolio at risk (PAR) above 30 days⁸
- ROE of the PFIs⁸
- Volume of seeds timely distributed through the CSFs
- Number of farmers receiving timely inputs through the CSFs
- Number of direct and indirect project beneficiaries, including women⁸

Component Two:

- Number of farmers receiving daily 3-day weather alerts (through cell phone or other means)
- Number of farmers trained in measures against adverse weather events
- Number of farmers trained in improved agro-technical practices and quality management

⁸ A core indicator.

- Number of direct and indirect beneficiaries, including women⁸.

III. Preliminary Description

16. The proposed project activities are expected to contribute to increased productivity in the agricultural sector, by improving access to finance to support investments in farm inputs, agricultural machinery and some marketing infrastructure, timely and reliable weather forecasts, and complementary capacity building activities for farmers.

Component 1: Investment Support for Improved Farm-level Productivity (US\$5.94 million, of which RFPCR⁹ US\$5.16 million)

Sub-component A: Credit Line for farmers and farmer associations (US\$4.74 million, of which RFPCR US\$3.96 million)

17. The Credit Line will increase farmers' access to financing in order to facilitate the supply response. The Credit Line will be in line with the provisions of OP8.30. The Credit Line will consist of two products:

- i. Working capital loans, providing access to much needed short-term financing for spring and winter planting (agricultural inputs, such as seeds, fertilizers and fuel) and harvesting activities for small farmers and farmer cooperatives.
- ii. Investment loans and leases, to enable farmers and farmer cooperatives to purchase farm machinery, invest in warehouses and other productive assets in the heavily under-invested farming sector. Long-term investment loans and leases will be provided under the sub-component. The Credit Line will also complement the grant funds for cooperatives made available for investment purposes under the on-going Agribusiness and Marketing Project (ABMP).

18. The Credit Line will target farmers with a greater potential to sell their agricultural produce, who are able to borrow from commercial sources. The average working capital loan size is expected to be around US\$2,000, while the average investment loans is expected to be in the range of US\$15,000 equivalent. The Credit Line beneficiaries will receive sub-loans/leases in accordance with agreed eligibility criteria. The financial and commercial viability of the sub-projects and beneficiaries under this facility will be assessed by the PFIs (participating financial institutions - selected qualified commercial banks and microfinance institutions). It is estimated that around 2,000 farmers will have access to sub-loans under this program.

Sub-component B: Support to Community Seed Funds (US\$1.2 million, all RFPCR)

19. The sub-component will support the existing nascent system of Community Seed Funds (CSF). Previous World Bank-financed projects have supported the development of CSFs, which has proven to be a sustainable institutional arrangement to ensure community-driven access to quality seeds for farmers. Each farmer participating in a CSF receives seed and/or fertilizer. Each year the equivalent of 120 percent of the seed and fertilizer value received must be returned to the CSF for subsequent distribution to new members. Under the most recent Additional

⁹ Russia Food Price Crisis Rapid Response Trust Fund for Kyrgyz Republic and Tajikistan

Financing to the Agricultural Investment and Services Project (AISP), 63 CSFs were mobilized with a membership of 2,271 farmers. They received 790 tons of grain seeds (wheat and barley), 1,254 tons of fertilizers. Additionally, 300 tons of potato seeds were distributed to 5,502 families; 51 groups of 301 women received vegetable seeds. All seeds were from certified sources. Due to better quality seeds and fertilizer application, the yields in winter and spring cereals have increased, on average, 1.6 to 2.3 times compared to previous years, even after accounting for better weather conditions.

20. The project will finance the agricultural inputs (mostly expected to be seeds and fertilizer) which will be distributed to the members of newly created CSFs. It is estimated that the project will support the creation of 65 or so CSFs with a total membership of around 3,000 farmers. Given the modus operandi of the CSFs, it is expected that by the end of the project, around 5,500 farmers would have benefitted from the sub-component activities. Similar to the on-going support to the CSF system, most of the demand is expected to be for wheat seed; however, other types of seeds will also be provided, based on demand.

Component 2: Technical Support for Improved Farm-level Productivity (US\$1.09 million, all RFPCR)

Sub-component A: Weather Information for Farmers (US\$0.50 million, all RFPCR)

21. Agriculture is a heavily climate and weather dependent activity. This sub-component will pilot delivery of weather information to farmers, including early warnings for adverse weather events, to reduce crop losses due to such weather events. It will contribute to informed decision-making by farmers, which will result in increased production through savings from prevented losses or gains due to improved productivity. The experience of other countries (e.g. Turkey) has shown that timely provision of weather information can help to protect against weather events, such as frost, and improve the planning of agricultural activities, such as pest control measures, cutting of grass, shearing of sheep, movement of flocks, or harvesting of grain. In Turkey, for instance, as a result of the improved weather information, the farmers were able to reduce the need for pesticide application to apple orchards, achieving a 30% reduction in pesticide costs. A very small-scale pilot¹⁰ of providing agro-meteorological posts to selected farmers was implemented on two sites in the Kyrgyz Republic in Chui and Jalal-abad regions in early 2010 with positive results. The spring 2010 in Jalal-abad, for instance, was rainy and cold, and many farmers had difficulty identifying when to plant, or they did not succeed planting at all. However, all farmers who participated in the weather information pilot were successful in planting their crops.

22. The subcomponent comprises two related parts: a) strengthening of the source of forecast information for farmers, and b) delivery of the weather forecasts to farmers. It is expected that Kyrgyz Hydromet will be the provider of the agricultural meteorological information. For the benefit of farmers, the project aims to support Hydromet to expand its current publicly available one-day forecast span to three-day forecasts. For this purpose, the project will provide Hydromet with selected equipment (computers and a server) in order to reduce the lead times for agricultural meteorological information forecasting, as well as strengthen skills of selected staff,

¹⁰ This pilot was implemented as part of an ECA Innovation Grant exercise on New Uses of Global Forecasts.

responsible for developing of the three-day forecasts, in local area modeling. In addition, the project will finance installation of a few small agro-meteorological posts on selected farms in two rayons of the country. This small-scale (the cost per unit will be US\$300 – 400) weather equipment will measure basic weather variables: temperature, wind speed and direction, barometric pressure, relative humidity, and accumulated precipitation. These will help pinpoint development of weather patterns such as frost, monitor agrometeorological variables such as cumulative heating-degree-days and precipitation, and in the long run will calibrate the difference between local weather and model forecasts, allowing the farmers to take the necessary measures to protect their crops and animals.

23. The distribution of the agro-meteorological forecasts is planned by Short Message Service (SMS) directly to subscribed farmers' cell phones. Two main cell phone operators have country-wide coverage, which makes SMS distribution technically feasible and efficient. Other means of distribution will not be excluded albeit some of them have their limitations. For example, radios have fragmented coverage and newspapers are limited in circulation and delivered to rural areas with significant delays making the forecasts a history. A limited pilot of forecasts distribution by SMS has shown that some farmers are willing to pay nominal fees (US\$0.5 per month) for subscription to this service. At the project's start a few models of operation will be tested in limited areas to determine and scale up the most optimal model for sustainability of the services.

Sub-component B: Training and Extension Services (US\$0.59 million, all RFPCR)

24. This sub-component will support training and extension services to farmers and farmer cooperatives on modern, sustainable agricultural practices (including pest management) to increase agricultural productivity and reduce on-farm losses, and quality management systems at the farm level. The services will be provided to a broad range of beneficiaries, including those cooperatives and farmers who will borrow under the project's Credit Line in order to improve the effectiveness of fund use, those participating in value chains and those working with agribusinesses on contract farming basis. The sub-component will also finance outreach and training by a team of extension specialists in the weather information pilot areas (see paragraph 21) to teach farmers how to interpret/use modern weather forecasts to address selected agricultural issues.

25. Farmer information seminars will be held to disseminate the information on measures to be taken against adverse weather events. It is estimated that at least 2,000 farmers will benefit from the information seminars. After the initial technical assistance provided by an international consultant, the project will mobilize services of existing local consulting networks and companies. The project will also support small-scale capacity building activities for the public sector towards contributing of improved agricultural productivity, including training on public and private partnerships in the agricultural sector, optimization of functioning of value chains, and support to the Ministry of Agriculture (MOA) to improve its capacity in market analysis and forecasting. The project will also provide support for a review of the existing emergency food distribution activities.

Component 3: Project Management and Monitoring and Evaluation (US\$0.6 million)

26. The management of activities under Sub-component 1B and Component 2 will be carried out by the Agribusiness Competitiveness Center (ABCC) (US\$0.49 million, all RFPC), which is responsible for implementing the Market Development Component of the on-going ABMP. The ABCC will also undertake procurement function for the entire project. The Credit Line Management Unit (CLMU) (US\$0.11 million, all RFPC), under the Ministry of Finance, will implement Sub-component 1A (the Credit Line), financial transactions under Sub-component 1B, and undertake the Financial Management functions for the entire project. Both units will be responsible for monitoring and evaluation under their respective components. At the project's mid-term and end, independent evaluation of the achieved results will be carried out.

IV. Safeguard Policies that might apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Piloting the Use of Borrower Systems to Address Environmental and Social Issues in the Bank-Supported Projects (OP/BP 4.00)		x	
Environmental Assessment (OP/BP 4.01)	x		
Natural Habitats (OP/BP 4.04)		x	
Pest Management (OP 4.09)	x		
Physical Cultural Resources (OP/BP 4.11)		x	
Involuntary Resettlement (OP/BP 4.12)		x	
Indigenous Peoples (OP/BP 4.10)		x	
Forests (OP/BP 4.36)		x	
Safety of Dams (OP/BP 4.37)		x	
Projects in Disputed Areas (OP/BP 7.60)*		X	
Projects on International Waterways (OP/BP 7.50)		X	

V. Tentative financing

Source:	Amount
Borrower/Recipient	US\$0.1 million
Global Food Crisis Response Program	US\$6.85 million
Total	US\$6.95 million

VI. Contact point

World Bank

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Borrower/Client/Recipient

* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

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