



Improving food security and nutrition for a more resilient food system

*Project Document
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Section 1: Basic Information

1.1 Project Name	Improving food security and nutrition for a more resilient food system in Batken, Kyrgyzstan
1.2 Country	Kyrgyz Republic
1.3 Producer Organization (PO)	Agricultural cooperative “Mol Tushum”
1.4 Supervising Entity	UN World Food Programme (WFP) Country Office in the Kyrgyz Republic
1.5 Primary PO Contact(s)	Name: Askarali Boronov Title: Chairman of the Board of Directors Email: askar.aggzk@gmail.com
1.6 Primary SE Contact(s)	Name: Joonyeol Lee Title: Value Chain Specialist, WFP in the Kyrgyz Republic, Email: joonyeol.lee@wfp.org
1.7 Total GAFSP Grant Funding Requested (refer to Annex 2 – Project Budget Table C)	US\$ 1.6 million
1.8 Estimated project start and end date	01/2024 - 12/2026 (3 years)

Section 2: Project Description

<p>2.1 Project Background</p> <p>Despite its importance to the economy, the agriculture sector in the Kyrgyz Republic has not developed enough, and its growth has been insufficient to reduce food security and poverty in rural areas. In Kyrgyzstan, approximately 65% of the population (7 million) live in rural areas, and 25% of the total national labor force (2.7 million) is employed in the agricultural sector (IMF, 2023). However, as the Kyrgyz Republic is a landlocked country with high mountains covering 63% of its territory and only 12% of arable land, 98% of farmers have only less than 2 ha of land (National Statistical Committee, 2017). The agricultural outputs of these smallholders are low because of numerous issues, such as i) limited access to inputs (high-quality seeds and fertilizers), ii) limited access to water resources, iii) weak knowledge and technological gaps in agriculture as a result of insufficient training, and iv) growing vulnerability to disaster and climate change (World Bank, 2021). With insufficient land, small-scale farming, and low productivity, the country lacks food production and heavily relies on food imports, which causes serious food insecurity (WFP Monthly Price Monitoring Bulletin, 2023). For instance, in the case of wheat, considered a vital food in Central Asia, supplying most of the calories to people, whilst the total need is estimated to be approximately 1.2 million tons annually, Kyrgyzstan produces only 0.56 million tons and has to import over 0.65 million tons of wheat (more than 55%) from Russia and Kazakhstan (other staple crops, such as maize and barley, are also in a similar situation) (FAO, 2022). Additionally, due to approximately 45% of farmers live under the poverty line (25.5% of the population in Kyrgyzstan are living under the national poverty line (US\$ 1.4 a day), and 70% of them are farmers living in rural areas) (World Bank, 2023), smallholders (including vulnerable households) do not have enough income to purchase nutritious foods, obtaining most of the calories mainly from the starch-rich foods (e.g. wheat), which are unfortified contributes to micronutrient deficiencies, overweightness and non-communicable diseases (WFP, 2022) (Global Nutrition Profiles, 2023).</p> <p>Although the Government acknowledges these issues, diverse obstacles hamper the development of the agricultural sector. After gaining independence from the Soviet Union in 1991, the Government of the Kyrgyz Republic was tasked to rebuild most of its food systems. However, despite efforts of transitions and three revolutions since 1991, Kyrgyzstan still suffers from political instability, inefficient governance,</p>
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high dependency on the Russian economy, and domestic and cross-border conflicts, which limited the Government's financial and administrative resources in the agricultural sectors. In this process, the Kyrgyz Government has failed to provide farmers with sufficient support, such as extension services for technical training, irrigation, and input provision, resulting in farmers' low productivity and incomes. Only a limited number of smallholder farmers can access training from private extension service providers and high-quality seeds/fertilizers from foreign markets. In addition, persisting gender inequalities, including kidnapping for marriage and violence against women, hinders their access to resources (e.g. land), techniques, and involvement in agricultural value chains, which results in a high-poverty level of women farmers and low agricultural productivity (WFP Field Study, April 2023, See Annex 6). Recently, as the frequency and magnitude of climate-induced disasters have increased by 1.5 times over the past 12 years (UNCT Annual Report, 2021), the natural disasters associated with climate change have become key drivers of food insecurity in the country, impacting the agricultural productivity and incomes of smallholder farmers (UN Common Country Analysis, 2021). Especially in the Batken province, located in the southern part of the country bordering Tajikistan and Uzbekistan, people had to leave their land because of frequent violent territorial conflicts with Tajikistan as well as natural disasters (e.g. droughts and mudflows). As a result, Batken remains to be the poorest region of the country (24.kg, 2022) (See Annex 7).

In these difficult circumstances, the Mol Tushum Cooperative, the PO of this fund proposal, has been playing an important role in improving agricultural productivity, reducing smallholder farmers' poverty and solving the vulnerability of women in Batken. Mol Tushum (which means 'A bountiful harvest' in Kyrgyz) was formed as the farmers' cooperative in the Batken province with the support of GIZ in 2004 (see Annex 6). Despite the country contexts, in which farmers are reluctant to participate in a cooperative because of their native memories during the Soviet Union, the PO was formed with a healthy governance structure and built sufficient capabilities through close cooperation and supervision with diverse agencies, including GIZ, USAID, UNDP, and EBRD (See the EOI document). Even after the projects are over, the PO has conducted diverse supporting activities for its members, mostly smallholders with less than 2 ha of land, during the last two decades; i) collective procurement, sale, and delivery of agricultural inputs (e.g. crops seeds and fertilizers) with credit/delivery service, ii) provision of machinery service at discounted prices, iii) the service of storage and processing of agricultural products (e.g. wheat, rice, and apricots), iv) provision of technical consulting services to its members about climate-resilient agricultural practices as well as organic fertilizers, and v) support for women groups about producing raspberries and their seedlings in the greenhouse (please see Section 2.4 and Annex 6 for the details of the PO's current activities). As a result, the PO has been developing as one of the largest cooperatives in Batken, with about 2,000 members (about 40% of the total members and 30% of the board members are female, including women-led households) and three umbrella branches in each district of the province (Leylek, Batken and Kadamjai district within the Batken province, see map Annex 7). According to the two field research conducted by the WFP GAFSP preparation team in February and April 2023 (please see Annex 6), noting concrete statistics to be absent, members state that most of them could gain a 30 to 40% increase in production yield by using the high-quality inputs, machinery, processing equipment, and advanced techniques, which eventually increased the average incomes of farmers. In particular, by collectively producing raspberries, which require women's labour and have high demand in domestic and international markets, approximately 200 women farmers could participate in the value chains and increase their incomes (by about US\$ 50 a month), which would highly contribute to women's economic empowerment. In addition, as the cooperative introduces and produces organic compost and no-tillage technology to the farmers with the PO's staff and GIZ's support (see Annex 8), evidence shows these new technologies and inputs would help improve soil and reduce water usage.

However, due to the recent crisis (e.g. the global food crisis, Covid-19, the war in Ukraine and violent conflicts between Kyrgyz and Tajik), the activities of the PO have been limited, which deteriorates the food insecurity situation. For instance, as trade flows of agricultural inputs (e.g. fertilizers and seeds) are

interrupted and their prices soar, the PO's capabilities of providing inputs are critically limited. According to the field interviews by the WFP GAFSP preparation team (see Annex 6), the average prices of fertilizers in 2023 increased by 80 to 100% in comparison to 2020. The price is partially affected by the sanctions on the Russian Federation, which is one of the most important exporters of the three major chemicals for fertilizers in Central Asia (WFP, 2022). In this situation, whilst the PO previously in 2018 provided 40 tons of fertilizers (from Uzbekistan) and high-quality seeds (from Kazakhstan and Russia) at 10 to 20% lower prices with credit service (half payment in advance and half after the harvest), the PO could only purchase 23 tons of fertilizers and seeds from the domestic providers with the same amount budget in 2022. As these providers often increase prices by breaking the contract terms, some farmers even gave up purchasing fertilizers and seeds. Also, as training stopped during the Covid-19 pandemic, the members lost their opportunities to learn new techniques, negatively impacting farmers' productivity. Furthermore, violent clashes along the Kyrgyz-Tajik border in 2021 and 2022, related to the limited water and land resources, hinder the PO from conducting their activities in Batken. With two violent conflicts along the Kyrgyz-Tajik border in April 2021 and in September 2022 (when water becomes scarce, and its distribution causes tension between neighbouring countries), 101 people died, 387 were injured, and more than 200,000 people (almost 40% population of Batken) were forced to leave their homes, destroying 1,248 buildings, including residential homes, schools and kindergartens.

As the food prices increased during the crisis, the PO members also suffered from an increased level of food insecurity and poverty. Food inflation reached 16.2% compared to March 2022 (National Statistical Committee, 2023), and the annual inflation rate remains the highest in the Eurasian Economic Union region, undermining the purchasing power of the most vulnerable population in Kyrgyzstan and increasing the cost of diets (WFP, 2023). As a result, poverty in Kyrgyzstan increased to 33.3% in 2021 (National Statistical Committee, 2023), and at least two in five households (38%) were unable to afford a nutritious diet (WFP, 2022). In the case of Batken, where the PO operates, 41% of the population was considered poor (61% would be poor if remittances were unavailable), and 15% was found under high food insecurity (National Statistical Committee, 2022). This poverty level, with negative food-related coping strategies, contributes to iron and folate deficiency, anemia, and other micronutrient deficiency-related diseases, particularly among women and children (NIMAS, 2022).

The PO and WFP assure that the GAFSP funding will contribute to solving the food insecurity and poverty issues for a more resilient food system by strengthening the PO's capabilities. With the GAFSP funding, the PO will scale up the provision of climate-resilient seeds, high-quality fertilizers, and machinery services for more farmers. Training on farmers' capacity strengthening will bring more knowledge and skills in better agricultural practices, post-harvest management, farmer-market linkages and nutrition. Organic compost, water reservoirs, and climate change adaptation training, which are highly important for sustainable land and water resource management as well as conflict reduction, will be supported. Also, the PO will play a greater role in empowering women. These activities of the PO will contribute to increasing agricultural productivity, income, and nutrition status in Batken.

The PO has selected WFP as the Supervising Entity (SE) based on WFP's expertise and long-standing presence on the ground, and trusted relationship with communities. WFP expertise leverages both the global level experience across regions and countries to strengthen food systems, as well as country-level investments made throughout the years, both across sectors and with partners across the nexus. Not only WFP has provided direct contributions to food systems through activities addressing the supply side such as agricultural value chain development and climate change adaptation, but it also stimulated the demand through activities supporting the State Material Reserve and the National School Meals Programme. Here, WFP is actively working towards improving access to markets and advocating for and supporting to improve flour fortification mechanisms. WFP has a strong internal capacity to implement increasingly more complex food systems interventions, thanks to the recruitment of an experienced agricultural value chain expert. WFP has also built strong trust with communities in Batken over the years, as during the last

15 years, the PO's members have witnessed WFP's various support and continued presence on the ground in Batken, even during the direst circumstances. Thanks to its presence and scope of activities, WFP can also nurture synergies with other projects – such as the Green Climate Fund, for a value of nearly USD 10 million between 2022 and 2025, which will contribute through complementary activities, while also ensuring that important lessons learned and findings strengthen the implementation of the GAFSP project.

2.2 Project targeting approach

The people in the Batken province are targeted based on the following factors: i) prevalence of families living below the poverty line based on the data from the [Ministry of Labor, Social Security and Migration](#); ii) exposure to climate-related natural disasters (floods and mudflows) based on the data from the [Ministry of Emergency Situations](#); iii) unemployment rate based on the data from the [Ministry of Labor, Social Security and Migration](#); and iv) a special status given to the region by the [Cabinet of Ministers of the Kyrgyz Republic](#) due to border violence and the area being economically depressed.

Mol Toshum presents a catalytical vehicle to address these vulnerabilities thanks to its proven capabilities to mitigate challenges faced by rural communities during the last decades. Their size provides an important platform for scale in the impact of this project, and its experience over the past 20 years has proven its capacity to provide smallholder farmers with the necessary tools, services, and technical assistance through diverse activities with sustainability for longer-term transformation. With the recent agricultural and food security situation (see Section 2.1), the PO needs support to strengthen its governance and management capacities and to scale up the provision of services to members, such as access to resources (water, fertilizers and seeds), technical support, post-harvest management and marketing to improve productivity, income, and nutrition.

Hence, **the project's primary target beneficiaries are the Mol Tushum cooperative's (PO) members in the Batken province** (see Section 2.1). Currently, the PO has 2,000 members (30% women and 70% men), mostly smallholder farmers, cultivating on less than 2 ha of land (See Annex 6), including women, youth (30%), ethnic minorities (15% Uzbek & 7% Tajik minority), people with disabilities (14% of households have one member with at least one mental or physical disability) and farmers affected by recent border violence ([United Nations Common Country Analysis, 2021](#)). This project expects to **expand the PO membership to 4,500 smallholder farmers (22,500 beneficiaries)** within three years (60% women and 40% men), focusing more on empowering female smallholder farmers and ultimately increasing the number of women members in the cooperative.

In particular, Mol Tushum is considered to be an effective tool for empowering women in rural areas. WFP field study demonstrated that approximately 40% of cooperative members are women, including women-led households. Each district subdivision of the PO has women leaders who work directly with women from villages, disseminating knowledge and providing agricultural inputs. Also, during the WFP field study (see Annex 6), women leaders of the PO presented the directions and sectors that they plan to scale up, mainly focusing on the berries value chains, which have the largest export potential. Using this point, the project aims to cooperate with women groups by scaling up their current production activities with equipment and training for improved economic empowerment and nutrition (see Section 2.3).

In addition, the project will also target young people suffering from a lack of employment opportunities. In Kyrgyzstan, more than half of the population is under 25 ([National Statistical Committee, 2022](#)), and approximately 350,000 youth enter the labour market every year, far exceeding the labour demand. As a result, in 2019, the youth unemployment rate was around three times the general unemployment rate, of which 20.5% did not receive any training or education to improve their opportunities (UN Common Country Analysis 2022). Thus, the project will work with the young members of the cooperative (approximately 30%) by strengthening their skills and knowledge of new technologies and techniques in the agriculture sector, which contributes to diversifying their income sources and improving their skills.

2.3 Project Development Objectives and Outcomes

The project's development objective is **to improve food security and nutrition in Batken, Kyrgyzstan, by strengthening the capacities and scaling up activities of the PO**. Through this project, smallholder farmers, including women, are expected to increase their productivity and income, improve their capacities for sustainable water/land resource management, strengthen the farmer-market linkages, and reduce risks and vulnerabilities, which helps to build a more resilient food system in the face of the shocks, such as global food crisis, climate change and violent conflicts. This project eventually contributes to achieving the global goals of GAFSP: not only eradicating poverty (SDG1) and hunger (SDG2) (GAFSP's goal) but also encouraging gender equity (SDG5), and mitigating/adapting to climate change (SDG13), while supporting partnerships (SDG17). This project has the following **five outcomes**;

Outcome 1. More sustainable and climate-resilient food production and resource management: This outcome aims to increase the agricultural productivity and income of smallholder farmers of the PO. With scaled-up revolving funds, the PO will collectively purchase high-quality/qualified fertilizers and seeds from international/domestic actors and provide them to more farmers at lower prices through credit (revolving fund: half payment in advance and half after harvest) and delivery service. As farmers currently have limited access to loans to purchase fertilizers and seeds before harvest from the banks due to high-interest rates and lack of suitable collateral, the role of the revolving fund is critical for farmers to increase their production and sustainability through its reusability of invested funds. The PO currently has robust systems for managing revolving funds without loss, including procurement skills with multiple actors and a money re-collection system from users. It will help farmers, who have difficulties accessing high-quality inputs and finance, to increase their production yield per ha. Drought-tolerant/high-yield/disease-resistant crop seeds will be purchased and provided, and each Umbrella unit will focus on wheat (Leylek), maize (Batken) and potato (Kadamjai) seeds by reflecting the existing major value chains and natural environments which differ among three districts (See Annex 6 for details). Extension services and new machinery also increase production yield and minimize inputs and resources. In addition, organic compost produced and distributed by the PO, water reservoirs, and climate-adaptation training are expected to help increase production yield and incomes and reduce the negative impact of climate change and water/land pollution.

Outcome 2. Improved farmers' post-harvest management capacities and farmer-market linkages in the agricultural value chain: This outcome focuses on increasing farmers' income by enhancing the knowledge/practice of post-harvest management and farmers' linkages to the market. The technical training on post-harvest management (about temperature, humidity, pest control, quality control, sanitary standards, food loss, storage, and pest control) will help farmers store and deliver harvested products to the market in optimum quality and quality, which positively affects the income of smallholders (WFP, 2012). Also, by providing market & entrepreneurship training to farmers, the project promotes farmers' knowledge about finance and various market & business opportunities (including identifying potential buyers), so it can generate jobs and increase income (WFP, 2022). Next, by using previous experience and expertise in local procurement, the WFP purchases a certain amount of wheat produced by the umbrella unit in the Leylek district for three years as public buyers, which provides the PO with a guaranteed market and enough periods to increase their production skills, improve wheat quality, and help them be independent in the future. Strengthening local value chains of the wheat commodities has positive effects far beyond the Batken province; import-dependent key commodities reach the Kyrgyz market demand, and it allows the re-introducing of flour fortification for local produce (GAIN, 2015), which WFP advocates for at scale in national safety nets. Also, as WFP expands the 'farm-to-school' approaches in its current five-year programme, more access to market opportunities can be generated through this collaboration under the GAFSP.

Outcome 3. Enhanced women's economic empowerment: This outcome is related to reducing the vulnerability of women, who are often marginalized in Batken. The project aims to offer new income-generating opportunities for women farmers, by scaling up women groups' berries production. In

particular, the project focuses on scaling up raspberry production, which has sufficient domestic/market demands and requires women's labour. According to the field study of WFP, it is confirmed that women groups in the PO actively and more women farmers hope to participate in the berries value chain linked to international markets (e.g. Kazakhstan and Russia). The project supports seed multiplication (multiplying high-quality and productive seeds for extra income sources), energy-efficient greenhouses, and extension services on berries/vegetable production to support them. In addition, other financial/business literacy/ micro-business training will be provided for women groups to improve women's economic empowerment and reduce their vulnerability.

Outcome 4. Improved nutrition of farmers (and their families): For a healthier diet and improved nutrition, the project highlights the diversification of agricultural production. According to the WFP's research on nutrition (WFP, 2022), two in five households are unable to afford nutritious food, getting most of the calories only from starch-rich food, which negatively affects their health. To cope with it, beyond starch-rich crops (e.g. wheat, potato, maize - three major crops of Kyrgyzstan), the project supports the production of fruit and vegetables, which contain affluent micronutrients and amino acids. It helps mitigate environmental shocks, pest, and disease pressures that are increasing under climate change and improves diet quality and nutrition. To achieve this outcome, support for high-quality seed multiplication and technical assistance for fruits (in particular, berries) and vegetable production are provided to farmers. Also, the project plans to educate farmers, including women, about cooking, sanitation and food nutritional practices, focusing on social behaviour change communication (SBCC), which contributes to a more nutritious and safe food system at the point of consumption. In addition, the wheat produced by the PO and procured by the WFP will be nutritiously fortified with minerals and irons and supplied to the women's self-help bakery workshop in Batken to provide nutritious bread for the school meal at kindergartens, schools, and vocational training centre (in total, 14 schools, 1,800 students), which improved the nutrition of children of the PO members in Batken.

Outcome 5. Strengthened managerial capacities and financial sustainability of the PO: The project aims to strengthen the PO's governance, administrative and operational capabilities by providing training about leadership/management and accounting. Also, by visiting other POs, which have been doing similar activities, the project will provide the PO's leaders and board members with training on good practices and management skills. The office equipment, such as computers, accessories and new licenses for the accounting software programs will be provided as well. On the other hand, the project contributes to strengthening the financial sustainability of the PO by using the profits generated from seed multiplication, organic fertilizer production, and machinery service as the PO's stable income sources. The profits of these activities will be used for management fees and reinvested for other PO activities.

2.4 Existing Efforts and Scale up Opportunities

The PO is currently conducting **five activities with their own fund and capabilities**, even after the international agencies' (e.g. GIZ, UNDP, USAID, and EBRD) projects were finalized – and this GAFSP project will protect these development gains, and build on them to scale up activities:

1. Providing high-quality/certified fertilizers, including organic ones, to smallholders: Since the GIZ project (2005-07), the PO has been providing high-quality/certified fertilizers (mainly from Uzbekistan) to its members at relatively lower prices. By using its own money in the PO's account (about US\$ 35,000) as the revolving fund, the PO enables farmers to divide their payment (half-paid in advance and the other half after the harvest). By doing so, the PO is annually purchasing 20-23 tons of fertilizers directly from the nearby factories in Uzbekistan (worth US\$ 70,000) and distributing them to farmers with delivery service. The PO has enough skills and a fund managing/accounting system (strengthened by EBRD's project (2007-10)). However, because of the recent rapid price increase and high fluctuation, the PO has had difficulties in purchasing minimum amounts of fertilizers, which the factories in Uzbekistan require the PO to buy. On the other hand, the PO's members currently produce and sell organic compost, so-called *bio humus*, by processing organic waste (e.g. manure, vegetables, leaves, etc.) with red earthworms

on a small scale. Members and non-members in this region purchase this organic compost at low prices and use it in their farms, particularly for vegetable and fruit production. The PO already plans to scale up organic compost production by building medium-scale compost production facilities on the PO's land and purchasing manure and vegetable waste from farmers. Each umbrella unit only requires training and financial support in the initial stage.

2. Providing productive and climate-resilient seeds to smallholders: The PO has been purchasing high-quality/high-yield crop seeds (e.g. wheat, potato and maize) directly from international/domestic companies and selling them to its members at lower prices, with the revolving fund and credit/delivery services. As the climate and soil conditions slightly differ, farmers in the three districts had different crop value chains; thus, each umbrella unit provides different crop seeds (Leylek: wheat, Batken: maize, Kamadjay: potato). According to the field research of WFP, the umbrella unit in Leylek currently has 8 tons of high-quality winter wheat, produced through the GIZ projects (2016-18, 18-22) for the next year. If the amount of revolving funds is scaled up by the GAFSP project, the PO will provide climate-resilient/drought-torrent/disease-resistant seeds (wheat, maize, potato) to more members.

3. Producing berries and their seedlings in greenhouses: Female members of the PO have already established four greenhouses by themselves and collectively cultivated raspberries, which have extremely high demand in the international and domestic markets. According to the interview, the traders often wait in front of the farms or give more money to buy the raspberries in advance. As shock-freezing processing workshops were recently established in the Batken area, it enables export at higher prices to neighbouring countries. In this situation, the women's groups ask for technical training and financial support to scale up their activities (including seed multiplication of raspberries and vegetables).

4. Supporting extension services and equipment: The PO currently provides extension services to its members through its own staff, who have worked at the Ministry of Agriculture, or by private extension service providers. Between 2016-2022, the PO, which learned no-till technology through GIZ (see Annex 8), provides related wheat production extension services to its members. Also, the PO has been offering technical knowledge and skills, acquired in the process of international partners' projects; GIZ (2016-18, 2019-2022), USAID (2012) and UNDP (2012) (please see GAFSP EOI, p. 5) about good agricultural practices, market information, fertilizers, irrigation and soil control. Next, the PO helps its members to use rice processing equipment, apricot processing equipment and storage facility, and tractor accessories (e.g. fertilizer/pesticides sprayer, ploughing tools, and sowing machines) at discounted fees. This equipment and facilities were provided by the projects of GIZ (2016-18, 2019-2022), USAID (2012) and UNDP (2012), and they are under the management of the PO, currently providing services to the PO's members.

2.5 Project Components

Component 1. Strengthening farmers' access to inputs and capabilities for sustainable production: This component contributes to increased agricultural productivity through improved access to agricultural inputs and good farming practices adoption. By scaling up the revolving funds for fertilizer (Activity 1.1) and seeds (Activity 1.2), the PO aims to improve farmers' access to high-quality inputs. In the case of fertilizer, once each umbrella unit's fund is scaled up to US\$ 90K through the project, enough to purchase a minimum amount from factories directly at low costs, the PO begins to negotiate with international and domestic input providers with strong bargaining power and purchase fertilizers in advance (e.g. September) when they are cheaper, which brings more benefits in terms of price, quality, and variety of inputs. The revolving funds are managed through the PO's existing accounting and collection system. The high-quality and drought-resistant seeds of wheat, potato, and maize are also provided through a similar system. To ensure equitable access to inputs, the PO will create a list of members who wish to purchase inputs in advance, receiving 50 % of the cost, with the remaining costs paid after harvesting. Also, through the national or local specialized private extension service providers and NGOs, the PO provides training on technical assistance and good farming practices about the major products (wheat/maize/potato) during the winter and early spring when farmers are less busy as well as during the cultivation season

through the field level training (Activity 1.3). Technical training focuses on climate-sensitive good agricultural practices, but detailed contents are determined by analyzing the current techniques gaps and farmers' needs. Next, the project supports each umbrella unit in purchasing a new tractor and related accessories (Activity 1.4). Although the PO has some accessories (for sowing seeds, spraying fertilizer/pesticide, and ploughing), it does not have tractors, which annually causes difficulties in finding a tractor during the busy farming season and external expenses. To ensure that all members have access to tractor and other machinery services, as well as maintenance of any machinery, the PO will implement a service provision system in which machinery will be provided from district to district (the details for equitable access, such as roaster and distribution plan will be decided through the PO bi-annual total member meeting), while members will sign up in advance to receive these services at a lower cost. Payment for such services will be made in advance (via bank transfers) so that the tractor driver is aware of the demand within the district. The tractor operator's wage and maintenance fees will be deducted from the income (money earned through the user charge). This service provision system ensures sustainability during and after the project implementation period, allowing the PO to cover all maintenance and service costs, while also earning additional revenue. Additionally, each PO umbrella unit agrees to construct/rent a garage with a roof, where the machinery will be stored and maintained. The PO also agrees that it will pay 70 % of the total cost if 30 % is supported by the GAFSP fund. These activities are expected to increase the agricultural productivity of more smallholders (Outcome pillar 1 and 3 in Table E, Annex 3).

Component 2. Improving the sustainable use of land and water resources: This component aims to reduce farmers' high dependency on chemical fertilizers gradually as well as improve farmers' sustainable use of water and land resources not only on individual farms but also at the landscape levels. To reduce dependency on fossil-based fertilizers that can potentially be the main contributors to soil degradation and water pollution, the project supports the PO in scaling up its organic compost production with technical training and initial investment so that the PO can form a compost production farm, produce and distribute it to their farmers at a low price (Activity 2.1). It helps to optimize the fertilizer amount, increase the productivity and income of the PO members, and improve soil fertility and health. Also, by drilling the ground (up to 100 m) and installing water pumps/generators or making reservoirs (Activity 2.2), the project increases water access for farmers who suffer from frequent droughts relying on rain-fed land. Next, training on climate adaptation techniques, particularly drip irrigation, is provided to farmers (Activity 2.3), for climate-smart water resources management in Batken, where insufficient water often results in violent clashes between the Kyrgyz Republic and Tajikistan. This kind of training is expected to help reduce hardships for early response and crop choices as well. The demonstration plots with adoptable drip irrigation facilities will be formed to promote the techniques to local farmers. The infrastructure (both the organic compost production site and the area where the water drilling works took place) will be constructed on PO property or through a legal arrangement with a PO member, guaranteeing that all PO member rights are preserved. All members will access organic compost at a reduced price, as well as free bio-humus worms for smaller-scale production in their own gardens. The revenue from organic compost and harvest sale from the agricultural land where the water pump is located will be shared equally among members (maintenance fee for the pump and infrastructure renovations will be deducted to ensure sustainability). At the same time, the soil test on 30 spots among each cooperative member's land, will be conducted through the Kyrgyzstan National Agricultural University, to provide the correct status and prescriptions on fertilisers, which will contribute to the proper usage of fertilisers protecting the environment. These activities will increase the number of farmers receiving inputs or services on climate-resilient or sustainable agricultural practices and the land size where climate-resilient or sustainable agriculture practices are implemented, eventually contributing to increased productivity and enabling the sustainable management of natural resources (Outcome pillar 1 and 3 in Table E, Annex 3).

Component 3. Diversifying food production and reducing vulnerabilities of women: The project promotes the diversification of products by supporting women farmers in producing berries and vegetables, which contributes to improved nutrition and women's economic empowerment. The PO encourages more women farmers to cultivate berries and vegetables by providing greenhouses in 12 villages (Activity 3.1). By considering climates and main uses, the greenhouses are designed as energy-efficient ones with double-roof, drip-irrigation systems, and hail protections, which minimize the amount of water and fuel usage and reduce the natural risks. All women members will have access to the greenhouses and berry seedlings through their self-help groups, while the revenue from the sale of seedlings and harvest will be used to maintain the infrastructure. The leftover revenue will be shared equally among women members of the PO. Next, the project provides extension services for berries (Activity 3.2) and vegetable production (Activity 3.3) (the specific types of vegetables will be decided by analyzing the market and consulting with women groups). These activities provide employment opportunities to women groups and increase their incomes. In terms of building an energy-efficient greenhouse with less water and fuel resources, and using climate-resilient seedlings of berries and vegetables, these activities also increase the number of farmers and land using climate-resilient or sustainable agricultural practices, linked to Outcome pillar 1, 2, 3 and 4 in Table E, Annex 3.

Component 4. Improving post-harvest management, farmer-market linkage, and nutrition: This component focuses on improving knowledge/practices about post-harvest management, farmers' linkages to the market, and social behaviour communication change (SBCC). First of all, the PO offers training on post-harvest management (e.g. technologies and practices about sanitary, temperature, humidity, pest, quality control, sanitary standards, food loss, and storage) with equipment provision for market-linkage improvement (Activity 4.1). The equipment is small but essential cost-effective storage equipment at households and PO levels (e.g. tarpaulins, hermetic bags, pest traps, repairing the PO's storage houses). The training will include components about how to trade their products, improve the product value, pack products, analyze the market demands and promote their products, which helps improve the farmers' knowledge about business and their linkage to local and international markets. Next, the project implements nutrition training on preparing a balanced meal and managing food safety by providing skills training to farmers, including women groups (Activity 4.2). Finally, the project procures the wheat produced by the umbrella unit in Leylek and supplies them to the women's bakery workshop in Batken (Activity 4.3). The WFP contracts with local processors about i) purchasing wheat from the PO and ii) processing wheat into nutrition-fortified wheat flour, which the women's self-help bakery in Batken uses to supply nutritious bread to the nearby kindergartens, schools, and vocational training centre (1,800 students in 14 schools). The bakery was established through the Rural Women's Economic Empowerment project (RWEE) by WFP in 2020-2021 and was damaged during the border violence in 2022. Through this activity, the project aims to i) provide a guaranteed market to the cooperative enough to promote its techniques and collaboration skills, ii) make a sustainable business model for women in this region with employment opportunities, and iii) improve the nutrition of children, who are family of the PO members in conflict-affected Batken district. These activities contribute to increasing employment and marketing opportunities for farmers and improve nutrition (Outcome pillar 1, 2, 3 and 4 in Table E, Annex 3).

Component 5. Strengthening the PO's governance and operational capacities: The project aims to strengthen the PO's governance, administrative and managerial capabilities by providing diverse training. First of all, training for leadership and cooperative management (Activity 5.1) and training about accounting and financial management (Activity 5.2) are provided to consolidate a democratic and transparent management system. Also, strategic planning and mobilization training (Activity 5.3) contribute to increasing membership, improving the decision-making process, planning/monitoring membership fees and advancing the procurement process. In particular, the training on how to manage the membership list and increase members will be conducted with the lecture and assistance of specialists. Marketing and entrepreneurship training (Activity 5.4) is expected to increase the cooperative's access to the market as well as its business opportunities. Next, to improve their knowledge

about cooperative management and new product cultivation, the best practice tour to other cooperatives (Activity 5.5) is included as one of the capacity-building training. Finally, office equipment (Activity 5.6), such as computers, account software programs, etc. are provided for effective management. In the case of requiring more training, the SE will provide training to ensure the PO has sufficient capabilities for organizational development. The WFP also will support the PO to include more vulnerable groups as its members by linking them with WFP's current climate change and social protection activities, which helps the PO to use strong incentives to increase its paying members. The PO agreed to hire a full-time accountant to manage the membership fees, revolving funds, and profits systemically. Also, by allowing the PO's leaders and board members to other POs conducting similar activities successfully, the project provides the best practice training to the PO. In addition, the project provides office equipment (e.g. computers, printers, and software licenses for accounting programme), which needs to be updated. Whilst the PO has been managed with well-structured regulations, these additional activities help to enhance leadership, management, accounting skills, and good practice benchmarking, which are expected to improve the cooperative management capacities in the long term with sustainability (Outcome pillar 5 in Table E, Annex 3). (The details of the activities above will be determined through the discussion and agreement among cooperative members, and an SOP will be formed between the PO and SE. The PO also agreed to include vulnerable groups and women in the membership by lowering the membership fees (or paying later) and organizing village-level women groups. Instead, by adding 1% profit to the prices of fertilisers, which is still much lower than market prices, the PO can secure a sustainable income source enough to offset the reduced membership fee).

2.6 Elements to strengthen the PO and PO members' resilience

During the implementation of projects with other international agencies (GIZ, UNDP, USAID, EBRD), diverse capacity activities were provided to the PO. GIZ supported the PO in providing diverse services for the production and building the governance structure, internal rules/regulations and operational capacities. As a result, the PO continuously provided services to farmers with governance (committee, board and elections), administrative (well-managed by members following regulations and procurement system), and fiduciary (accounting system and accountant) capabilities. For instance, for decision-making on what and how to support members, the main governing body (the Council) of the PO calls for a general meeting of the members (usually occurs on an annual basis), while the PO's board and audit commission are responsible for reporting the implemented projects. However, during the recent pandemic and border violence, the PO demonstrated limited capabilities in the following areas (see Annex 6): i) insufficient sources of revenues for the PO to provide the needed support to smallholder farmers and ii) relatively weak leadership/management and accounting skills of the umbrella POs (compared to the main PO). Thus, the project will focus on i) strengthening the farmers' access to advice and technical assistance, as well as support in solving key resource issues (water, fertilizers and seeds) through Components 2 and 3 (see Section 2.5), ii) provide market access opportunities, and iii) strengthening the governance, administrative, and fiduciary capabilities of the umbrella POs through Component 5 (please see Section 2.5). It will contribute to enhanced operational capacities, improved soil health, increased productivity, income and nutrition, and sustainable management of water resources, which eventually increase the resilience of smallholders in the face of shocks and stressors in the future. The profits gained from organic compost production, seed multiplication, and machinery services will improve the PO's financial sustainability (see Component 1 in Section 2.5), to continue its activities against the possible shocks.

2.7 Elements to enhance food security among the targeted project beneficiaries

The project contributes to enhancing six aspects of food security (*availability, access, utilization, stability, sustainability* and *agency*) among the PO members - targeted project beneficiaries. First, regarding *availability*, the project helps members increase agricultural production yield by supporting access to high-quality and climate-resilient inputs/equipment and adopting good farming and post-harvest loss practices. According to the WFP's field study (see Annex 6), smallholder farmers can increase their yield

by 30-40% by using better-quality inputs. In addition, improved farmer-market linkages and promoted women's participation in the berries value chain would increase members' incomes, strengthening beneficiaries' *access* to food. Indeed, women smallholder farmers stated that their monthly income would increase by US\$ 50 by scaling up their berry production (WFP Field Study, 2023). Furthermore, by supporting organic fertilizer production, providing post-harvest management training, and educating members about nutrition, the project not only increases/optimizes the product supply to the market but also improves food safety related to *utilization*. Diversified food production enhances members' resiliency and household income, benefiting both *access* and *utilization*. Increased production of crops increases incomes, improves storage and reduces food dependency on the imported market, which contributes to the *stability* of food security. The training on climate-resilient practices on efficient water resource management and improved access to water also strengthened the *stability* by contributing to reducing the water-related conflicts with Tajikistan. The PO independently selects the food to produce, which supports the *agency* component. Additionally, the project will enhance the decision-making skills of PO members regarding food production, processing, and distribution through training sessions, thereby strengthening their capacity. Finally, under the *sustainability* component, the project will create a basis for a stable food security situation and contribute to the social economic, and environmental welfare.

2.8 Alignment with the country's agriculture and food security strategy/plan.

The project is aligned with the Food Security and Nutrition Program in the Kyrgyz Republic for 2023-2027 (a program developed by the Ministry of Agriculture with assistance from WFP and to be endorsed in 2023), which builds the objectives of the [National Development Strategy of the Kyrgyz Republic](#) for 2018-2040 (points 3.1, 3.2, 3.3) and [National Development Program of the Kyrgyz Republic](#) until 2026 (points 6.2, 7.2, 9.2). Both strategies have clear aims to ensure the availability of food for consumption by i) stimulating domestic food production, ii) increasing the sustainability of the agriculture sector, iii) improving the nutritional status of the population, iv) forming effective food systems management, and v) supporting women's employment to boost agricultural production. The project outcome and activities are directly aligned with both National strategies, as it aims to support PO members to i) increase production yields, ii) strengthen the capabilities of smallholder farmers to increase the sustainability of the agriculture sector, iii) provide food and training to raise awareness on the importance of nutrition, iv) introduce new technologies to form effective food systems management, and v) empower female smallholders to boost berries and vegetable production.

Also, the project aligns with the [Regional Batken Development Plan](#), focusing on supporting local small businesses and smallholder farmers by strengthening their capacity for new technologies and market access. Finally, the project aligns with the [Strategic National Program for the development of sustainable food systems by 2030 in the Kyrgyz Republic](#) priorities a) increased food production; c) improved public management and administration; and d) promotion of healthy food consumption.

2.9 Major risks that could inhibit the achievement of the project development objective

To proceed with the project activities as planned and achieve targeted outcomes, the PO will analyze the possible risks and prepare plans through close cooperation with the WFP. The expected risks are categorized into 1) external, 2) programme-related, and 3) institutional. These risks are monitored constantly by the WFP's full-time monitoring staff in Batken, as well as by the PO.

First, as external risks, the PO and WFP prepare plans for the case of i) political instability, ii) associated humanitarian emergencies, and iii) uncontrollable natural disasters. As explained in Section 2.1, the Kyrgyz Republic often has political revolutions, domestic conflicts between ethnic groups, violent territorial conflicts with Tajikistan, or droughts. If these external issues create a force majeure situation, the PO and WFP will inform the GAFSP Coordination Unit and Steering Committee immediately, adjust/modify the implementation methods and periods, and even decide to postpone/cease projects depending on the circumstances. Also, in the cases of natural disasters and violent conflicts, WFP will provide emergency

relief to the Batken province, including the PO members.

Second, the PO and WFP will monitor and solve programme-related risks, such as aid fragmentation, inadequate management of project changes, misunderstanding of the local contexts, and lack of operational/managerial capacity and skilled personnel. The PO and WFP continue to communicate with other international/domestic donors and find proper spaces to cooperate in pursuing a synergy effect of the GAFSP project. Also, WFP supports the PO by using the existing pool of national professionals, close relations with local government and organizations, as well as logistics lines. Indeed, WFP has extensive experience (over 15 years) in working in the field in this region and conducted diverse training for farmers about production extension service, post-harvest management, and climate change adaptation through close cooperation with FAO, NGOs, and private extension service providers. The agricultural value chain specialist of the WFP Kyrgyzstan office will manage the overall project with rich experience and specialized knowledge. If the PO's capabilities are identified as insufficient in some sections of the project, the WFP will provide additional training and guidance to the PO.

Third, regarding institutional issues, the PO and WFP will take preventative measures to stop corruption, discrimination, and cost overrun. The WFP will provide annual training about the WFP's code of conduct to the PO, obliging the PO to follow the code of conduct and prepare a feedback system. Additionally, whilst the project budget already reflects Kyrgyzstan's economic situation, the PO and WFP will conduct continuous price/exchange rate monitoring and early warning assessment to mitigate the unexpected exchange rate because of the economic instability. Finally, the PO and WFP prepare a transparent complaint-reflecting system by assessing of beneficiary's satisfaction/complaints and including the beneficiaries in the existing 24 hotline system (feedback mechanisms) of WFP.

Section 3: GAFSP thematic areas

3.1 Women and Girls' empowerment.

As explained in Section 2.1, rural women who face high intersectional vulnerability ([UN Women, 2023](#)) can be empowered through the necessary support for their economic activities. The project addresses gender inequalities by supporting women's empowerment in agriculture under all project components with special activities related to Outcomes 3 and 4. The project improves their access to technical agricultural knowledge, raises their awareness of the important aspect of nutrition and strengthens their capacity in good farming practices. The skills and knowledge obtained during the training significantly increase the quality and quantity of female farmers' products and improve the involvement of women in the decision-making process of issues related to family farms. WFP, together with other UN agencies, has concluded a [Joint Programme Rural Women Economic Empowerment \(RWEE\)](#) project and successfully supported women in rural areas to benefit from diversifying their income and actively participate in socio-economic decision-making in their respective villages, including projects related to the agriculture sector and nutrition aspects of the community. The PO already has women leaders and members who have been promoting new technologies and disseminating better-quality berry seedlings among women in surrounding villages. With the project support, the PO will scale up this initiative by assisting them to build more energy-effective greenhouses with drip-irrigation systems and grow berries and vegetables. It ultimately diversifies agricultural products and diets, which eventually improves the income and micronutrient deficiency issues of people, including women and girls. Through nutrition education, women can gain and use the knowledge within their households, and this knowledge will be spread among other women (non-cooperative members) in Batken, changing their diet consumption behaviours. The women's self-help bakery (established through the RWEE project in Batken province) is also used to create more jobs for women as well as improve the nutrition of the children, including girls.

3.2 Climate adaptation and/or mitigation

The agriculture sector in Kyrgyzstan is highly risk-prone to climate change, because of insufficient infrastructure, policies, techniques, and support (please see Section 2.1 for more details). Also, because of the lack of an irrigation system, the productivity of the agriculture sector is closely tied to climatic conditions, such as precipitation levels, the seasonal distribution of rainfall, long-lasting heat waves and the moisture content during the growing season. In fact, over the past five years, anomalies in climate have impacted irrigation works and crop yields, and changes in precipitation have affected farming practices, such as the timeline for the planting season.

Hence, the project envisages scaling up climate-resilient and drought-tolerant seed provision to assist smallholders in adapting to climate change. With this process, PO members use a new type of high-quality and climate-resilient seeds to improve the quality of crops and reduce losses due to extreme climatic events like droughts and extreme heat. Also, the project will assist in drilling underground water in rainfed lands to assist smallholder members of the PO in using agricultural lands without depending on the climate. Next, to prevent land degradation and desertification, which pose serious threats to the people, economy and natural environment, the project supports the PO using their no-tillage techniques and producing organic compost (see Annex 8). The PO will also assist smallholder farmers in cultivating land with zero soil disturbance. Minimum tillage prevents soil degradation and reduces the risk of landslides and mudflows in the targeted area, especially in rainfed agricultural lands on mountain slopes. The drip irrigation system also contributes to water resources management, reducing the risk of water-related conflict near borders. Furthermore, with a contribution from the WFP's Green Climate Fund project (initiated in 2023, US\$9.6 M) directed at strengthening the capacity of the Government and smallholder farmers in Climate Adaptation and disaster risk management, the smallholder farmers in Batken (including members of the PO) will receive climate adaptation services (tailored climate information from the KyrgyzHydroMet for evidence-based decision making); strengthen the adaptive capacities of rural communities (climate risk profiles in Batken province); and develop skills on energy efficiency through training and climate risk reduction asset creation.

3.3 Nutrition

Malnutrition in all its forms and diet-related non-communicable diseases, including the problem of under or overweightness and obesity, continues to be one of the main contributors to the disease burden of Kyrgyzstan (WFP, 2023). The National Integrated Micronutrient and Anthropometric Survey (NIMAS) in the Kyrgyz Republic, which was presented in November 2022, demonstrated that over 70% of children from 6-59 months do not meet the minimum dietary diversity requirements, while a large proportion of children, women, and adolescent girls face deficiency in vitamins and micronutrients (folic acid, iron, vitamin D, vitamin A, etc.) (NIMAS, 2022). It is mainly due to a lack of knowledge, unhealthy diet habits and poor daily rations of micronutrients. Furthermore, adolescent malnutrition (especially for girls) is overlooked, even though this period should be considered a window of opportunity to prepare them for a healthy reproductive life and to prevent the onset of nutrition-related chronic diseases in adult life. This socioeconomic status highlights the urgency for nutrition-sensitive approaches in all social sectors.

To address this issue, under Outcome 4, the project envisages nutrition training for members, including women, to increase smallholder farmers' awareness of healthy and diverse diets, considering local food availability. Also through newly established greenhouses and drip-irrigation systems, women farmers will diversify their diets and improve their nutrition intake (to buy more nutrient-rich foods like fruits and vegetables). Finally, the project increases accessibility to fortified wheat flour by processing wheat produced by the PO's members at the local miller factory and supplying it to women's bakery shop, which contributes to addressing micronutrient deficiencies of children. WFP purchases a certain portion of the produced wheat flour (108 MT in three years) to provide fortified wheat flour to previously established women's bakery. The bakery is also used as a vocational training centre and nutrition training classes, further contributing to addressing the micronutrient deficiencies of children, including young girls.

Section 4: Project Implementation, Sustainability, and Budget

4.1 Project budget

The total GAFSP grant funding requested is **US\$ 1.6 million for the total components** cost. The total component cost (US\$ 1.6 million) is divided into **five parts**: **Component 1 (US\$ 465,735)** - Strengthening farmers' access to inputs and capabilities for sustainable production; **Component 2 (US\$ 360,107)** - Improving the sustainable use of land and water resources; **Component 3 (US\$ 362,148)**- Diversifying food production and reducing vulnerabilities of women; **Component 4 (US\$ 373,174)** - Improving post-harvest management, farmer-market linkages and nutrition; and **Component 5 (US\$ 38,836)** - Strengthening PO's governance and operational capacities.

Component 1 includes the revolving fund for fertilizers (Activity 1.1: US\$ 247,347), the revolving fund for crop seeds (Activity 1.2: US\$ 85,734), crop production technical training (Activity 1.3: US\$ 74,136), and machinery (tractor) (Activity 1.4: US\$ 31,518). *Component 2* is to produce organic compost with facilities and training (Activity 2.1:US\$ 98,090), water reservoir construction/drilling (Activity 2.2: US\$ 150,906), and climate adaptation training (Activity 2.3: US\$ 111,111). *Component 3* consists of greenhouse construction (Activity 3.1: US\$ 213,876), berries production training (Activity 3.2: US\$ 74,136) and vegetable production training (Activity 3.3: US\$ 74,136). *Component 4* includes post-harvest management training with equipment for market linkages (Activity 4.1: US\$230,451), nutrition training for SBCC (Activity 4.2: US\$ 74,136), and procurement of PO's wheat for the women's bakery (Activity 4.3: US\$ 68,587). Finally, *Component 5* is leadership/cooperative management training (Activity 5.1: US\$ 6,178), accounting and financial management training (Activity 5.2: US\$ 6,178), strategic planning and mobilization (Activity 5.3: US\$ 6,178), marketing and entrepreneurship (Activity 5.4: US\$ 6,178), best practice tour training (Activity 5.5: US\$ 10,296) and office equipment (Activity 5.6: US\$ 3,828) (for details, please see Annex 2). (Also, in case of successfully getting additional funds from other projects that WFP KO is aiming for, WFP will double the frequency of the training (Activity 5.1 to 5.5) within the US\$ 30,000.)

4.2 Institutional and implementation arrangements between the SE and the PO.

The GAFSP funds will be transferred from GAFSP to and managed by the SE (WFP). WFP will enter into a Field-Level Agreement (FLA) with the PO, specifying the overall budget and its breakdown across categories and activities. All project activities and decisions are planned and made through close communication between the PO and the WFP. The major project decisions are reviewed and confirmed by the project steering committee, formed among the PO chairmen and WFP Kyrgyz Republic Country office representatives. The decisions made by the steering committee are materialized and elaborated by the project implementation committee of an actual working group that takes charge of the practical operation and support. As the project implementation committee, the PO's board members and full-time staff conduct the project activities in the field. The WFP team, consisting of the Outcome 1 unit staff, monitoring staff, field assistants, and the value chain specialist, focuses on monitoring, management and support of the PO. Also, the PO and WFP maintain a robust reporting system. The PO reports project progress, difficulties, achievements, and changes monthly, quarterly, bi-annually and annually. Implementation and final reports are also included in the reporting system. These are checked and submitted to the project steering committee. All the progress and results will be reported to the GAFSP Coordination Unit semi-annually. Additionally, video clips, photos, and interviews are recorded for assessment and public relations.

According to the implementation schedule coordinated by the project steering committee, the fund is distributed quarterly (but in advance calculating the preparation period) from the WFP's bank account to each umbrella PO's account. The decision of the project steering committee is based on the PO's detailed plans, accounting and contract documents, and other related records that prove the PO's activities and fund usage. By reviewing them (and conducting additional field monitoring if necessary), the steering

committee reflects them at the following fund transfer. In the case of the major problems found in this process, the PO agrees that WFP may cease the transfer and cooperate with the PO to find solutions. Concerning procurement, it is conducted by the PO under the supervision of the WFP to increase the capability of the PO. For instance, the tractor purchase, contracts with input providers, and greenhouse construction go through the open tendering process by the PO. The WFP monitors the process through the report and by the field staff in the Osh sub-office. After pre-checking, the WFP approves the contracts and transactions between them. However, in the case of procuring the wheat produced by the PO, the WFP uses its own local and regional procurement process with professional and affluent experience in this kind of activity (e.g. contracting the milling company to purchase, process, and fortify the wheat and deliver it to the women's bakery through a tender). Finally, in the case of the training, in which the WFP has expertise (e.g. climate adaptation, post-harvest management, marketing and entrepreneurship, nutrition, etc.), the WFP manages the fund and process together with the PO.

4.3 Partnerships

The PO cooperates with private agriculture extension service providers to conduct training, introduce new and climate-smart agriculture technologies and provide field consultations to smallholder farmers. The extension services providers are chosen through a tender process by the PO through the supervision of the SE. Also, the PO engages with private companies to purchase the necessary materials for greenhouses, drip irrigation systems and tractors. The private companies also should pass a tender process of the PO under the supervision of SE. Next, the PO will engage with women members and youth who are leaders of women and youth groups in their respective villages. The PO continues to cooperate with these women groups through their members to disseminate the necessary information and knowledge to the public. In the case of the bakery, WFP works with a women's self-help bakery in the Batken district to provide locally grown products to nearby schools, kindergartens and vocational training centres, as well as a potential market for local farmers. The bakery plans to participate in the Government tender to provide bread and buns to schoolchildren. WFP has also consulted with the World Bank and FAO, to align and create synergies with the implementation of the future GAFSP project "Strengthening Producer Organizations in Kyrgyz Republic". Partners will leverage investments to enhance the impact of both projects and ensure sustainability through close linkages with Government plans and investments.

4.4 Stakeholders' Engagement

During the development of the proposal, the board of the PO held a council meeting together with the village leaders (PO members) to discuss the proposal and areas that need support to scale up. Following the council meeting, the PO held a general meeting with members and disseminated information on the GAFSP fund to generate ideas from all the members, including women, youth and people with disabilities. Finally, the PO and WFP held two meetings and conducted two field studies, between 6th-10th February and 3rd-5th April to i) research the main issues in their value chain and needs of the PO, ii) build the project objectives, and iii) find the possibility to scale up their activities. WFP met each umbrella unit of the PO (Leylek, Batken and Kadamjai districts) with the leaders from each village, women leaders, and general members of the PO. Project details were explained and feedback was received on what activities the project should focus on to assist smallholder farmers. During the discussions, all members prepared and expressed their views on the key priorities. At the same time, in February and April 2023, WFP conducted an annual exercise of Community-level Consultations (CLCs) to hear from beneficiaries and local partners in the Batken province. WFP met with hundreds of smallholders, community leaders, women groups, heads of village councils, representatives of district departments, district education departments, sanitary-epidemiological stations (SES) and municipal services in the Batken province. The CLC exercise is an important mechanism of WFP's community-based participatory planning approach to ensure the collection of practical feedback on the quality of implemented food security and nutrition projects and to establish and strengthen partnerships with local institutions and other stakeholders with local development priorities and capacities. During these discussions, similar priority areas raised by the

members of the PO were raised by other residents and farmers in the Batken area. The capacity strengthening of smallholder and cooperative levels was mentioned numerous times during the consultations and identified as issues of local significance. The smallholders expressed the willingness to become cooperative members if the organization could provide necessary extensions and other services. Finally, WFP discussed with Government authorities, as well as development partners, such as the World Bank and FAO (amongst others), to ensure alignment and complementarity.

Annex 1 – Information regarding the existing or recently closed activity(-ies) to be scaled up

2.9.1 Associated Project name	Revolving fund to provide fertilizers through favourable schemes, as well as organic compost (bio humus) to smallholders
2.9.2 Country(-ies) of implementation	The Kyrgyz Republic
2.9.3 Grant size (US\$)	US\$ 51,000
2.9.4 Financing entity(-ies) (e.g., SE, Government, bilateral aid organization, CSOs, international organization)	GIZ
2.9.5 Project status	<input type="checkbox"/> Under Implementation <input checked="" type="checkbox"/> Closed – The project financed by GIZ was completed in 2007; however , the PO continued to implement the project on its own through the revolving Fund
2.9.6 Project objective	To introduce the use of high-quality fertilizers based, firstly, on loans and then on the revolving fund system
2.9.7 Project document checklist to be submitted	<input type="checkbox"/> Project Design/Appraisal Document <input checked="" type="checkbox"/> Most recent implementation status/progress or closing report After the successful completion of the GIZ-financed project and all the set conditions in 2007, the PO has been continuing to provide fertilizers to its members on a 50/50 payment system. Additionally, the PO has been successfully using bio humus as fertilizers on an annual basis and advocating the use of organic fertilizers by its members.

	
<p>Organic biohumus fertilizer produced by the PO members</p>	<p>GIZ-Mol Tushum leaflet explaining the amount of fertilizer needed and its costs</p>

Table A.2

2.9.1 Associated Project Name	Provide high-quality seeds to members through the seed multiplication process
2.9.2 Country(-ies) of implementation	The Kyrgyz Republic
2.9.3 Grant size (US\$)	Approximately US\$ 7000 annually
2.9.4 Financing entity(-ies) (e.g., SE, Government, bilateral aid organization, CSOs, international organization)	GIZ
2.9.5 Project status	<input type="checkbox"/> Under Implementation <input checked="" type="checkbox"/> Closed
2.9.6 Project objective	To strengthen the capacity of the cooperative through the provision of high-quality seeds to members through the seed multiplication process
2.9.7 Project document checklist to be submitted	<input type="checkbox"/> Project Design/Appraisal Document <input checked="" type="checkbox"/> Most recent implementation status/progress or closing report Currently, the PO has 8 tons of high-quality seeds bought from abroad in 2021. Due to weather conditions, the seeds were not planted in 2022, however, the PO plans to plant these seeds and multiply them to 40 tons in 2023. These high-quality seeds will be sold to smallholder members on preferential terms.

Table B.2



High-quality wheat seeds stored by the PO for seed multiplication



Sample of high-quality wheat seeds shown to WFP at the PO storage room

Table A.3	
2.9.1 Associated Project Name	No-tillage technology and extension services
2.9.2 Country(-ies) of implementation	The Kyrgyz Republic
2.9.3 Grant size (US\$)	US\$ 333,300
2.9.4 Financing entity(-ies) (e.g., SE, Government, bilateral aid organization, CSOs, international organization)	GIZ
2.9.5 Project status	<input type="checkbox"/> Under Implementation <input checked="" type="checkbox"/> Closed – The project under GIZ financing was successfully completed in 2018, and then the PO continued to implement it on their own
2.9.6 Project objective	To introduce and spread no-till technology in the Batken region to increase yield and stop soil degradation
2.9.7 Project document checklist to be submitted	<input type="checkbox"/> Project Design/Appraisal Document <input checked="" type="checkbox"/> Most recent implementation status/progress or closing report After the successful completion of the GIZ-financed project in 2018, the PO has been continuing to introduce no-tillage technology to its members and smallholder farmers in the province. Moreover, as per positive results after the official end of the funded project, the PO was chosen to provide extension services on the introduction of the no-tillage technology in the Batken and Jalal-Abad provinces (2019-2022).

Table B.3	
 <p>Mol Tushum Fertilizer Sprayer belonging to the PO</p>	 <p>No-Tillage Seeder belonging to the PO</p>

Table A.4	
2.9.1 Associated Project Name	Economic empowerment of women smallholders in the Batken province
2.9.2 Country(-ies) of implementation	The Kyrgyz Republic
2.9.3 Grant size (US\$)	US\$ 14,500
2.9.4 Financing entity(-ies) (e.g., SE, Government, bilateral aid organization, CSOs, international organization)	Internal fund
2.9.5 Project status	<input type="checkbox"/> Under Implementation <input checked="" type="checkbox"/> Closed
2.9.6 Project objective	Greenhouses to grow early berries and vegetables for internal market and export abroad
2.9.7 Project document checklist to be submitted	<input type="checkbox"/> Project Design/Appraisal Document <input checked="" type="checkbox"/> Most recent implementation status/ progress or closing report <p>The project has been successfully implemented since 2018 by women leaders of the PO. They are spreading the raspberry seedlings bought from Poland to neighbouring villages and started building greenhouses on their own. The recent launch of a shock-freezing workshop in the area increased the demand for berry products and women farmers are aiming to scale up their project to meet the demand.</p>

Table B.4	
 <p>Greenhouse built by PO members to grow berries, outside view</p>	 <p>Greenhouse built by PO members to grow berries, inside view</p>

Annex 2 – Project Budget Tables

Table C: Project Costs, Implementation, and Financing

Components	Sub-activities	GAFSP Funding Requested		Other Funding Source (US\$)
		Amount Requested (US\$)	Fund management & procurement	
Component 1. Strengthening farmers' input access and capabilities for sustainable production	1.1. Revolving fund for fertilizer with credit/delivery service	274,347	PO	34,294 (PO)
	1.2. Revolving fund for seeds with credit/delivery service	85,734	PO	11,432 (PO)
	1.3. Crop production extension services	74,136	PO and SE	
	1.4. Machinery (tractor and accessories)	31,518	PO	73,542 (PO)
Component 2. Improving the sustainable use of land and water resources	2.1. Biohumus (organic) compost	98,090	PO and SE	
	2.2. Water reservoir/water drilling	150,906	PO	
	2.3. Climate adaption training (drip-irrigation, climate adaptation info & techniques)	111,111	PO and SE	
Component 3. Diversifying food production and reducing vulnerabilities of women	3.1. Greenhouse	213,876	PO	
	3.2. Berry extension service	74,136	PO and SE	
	3.3. Vegetable extension service	74,136	PO and SE	
Component 4. Improving post-harvest management, farmer-market linkage, and nutrition	4.1. Post-harvest training with equipment for market linkages	230,451	PO and SE	
	4.2. Nutrition (how to cook and eat nutritious and safe food)	74,136	PO and SE	
	4.3. Link to the women's bakery – provision of wheat flour (108 MT)	68,587	SE	
Component 5. Strengthening	5.1. Leadership & Coop Management	6,178	PO and SE	

the PO's governance and operational capacities	5.2. Accounting and Financial management	6,178	PO and SE	
	5.3. Strategic planning and mobilization	6,178	PO and SE	
	5.4. Marketing and entrepreneurship	6,178	PO and SE	
	5.5. Best practice tour to other POs	10,296	PO and SE	
	5.6. Office equipment	3,828	PO	
TOTAL COST FOR ALL COMPONENTS		1,600,000		

Table C2: Budget details

<i>Project Budget Table (US\$1= 87.48 KGS)</i>			
Component 1. Increasing farmers' input access and capabilities	Location	Total costs (US\$)	Note
1.1. Revolving fund for fertilizer with credit/delivery service	<i>Leylek</i>	91,449	<i>8M KGS as half the cost to purchase 60 tons a year</i>
	<i>Batken</i>	91,449	
	<i>Kadamjai</i>	91,449	
In 2022, spent 6 M KGS (3 M KGS by the PO) (through half paid by members in advance and half after the harvest) to purchase 23 tons of fertilizers -> Target: 16 M KGS to purchase 60 tons, thus require 8 M KGS more			
1.2. Revolving fund for seeds with credit/delivery service	<i>Leylek</i>	28,578	<i>2.5M KGS for wheat seeds</i>
	<i>Batken</i>	28,578	<i>2.5M KGS for maize seeds</i>
	<i>Kadamjai</i>	28,578	<i>2.5M KGS for potato seeds</i>
In 2022, in the case of wheat seeds -> 54 KGS/kg (wheat seed price) x 180kg/ha (required seed per ha) x 1 ha/person x 500 people (1/4 of the total members) = about 5M KGS (maximum) -> need 2.5M KGS more (through half paid by members in advance and half after the harvest)			
1.3. Crop production extension services	<i>Leylek</i>	24,712	<i>60K KGS x 3 year x 6 villages for wheat x 2 times a year</i>
	<i>Batken</i>	24,712	<i>60K KGS x 3 year x 6 villages for maize x 2 times a year</i>
	<i>Kadamjai</i>	24,712	<i>60K KGS x 3 year x 6 villages for potato x 2 times a year</i>
Concerning all training, the project assumes that each training (of any topic) costs about 60K KGS (cost of hiring trainers and equipment)			
1.4. Machinery (tractor)	<i>Leylek</i>	10,506	<i>30% x 1 tractor and accessories (about 3M KGS) = about 0.9M KGS (GAFSP: PO=30:70)</i>
	<i>Batken</i>	10,506	
	<i>Kadamjai</i>	10,506	
1 tractor and accessories are 3.1M KGS (Maximum), and cooperative members will provide 70% of the cost; thus, it needs about 0.93 M KGS.			
Total: Component 1.		465,735	

Component 2. Improving sustainable use of land and water resources	Location	Total costs (US\$)	Note
2.1. Organic compost	<i>Leylek</i>	28,578	<i>Make a farm on the cooperative's land (500K KGS x 5 places or 1 big one)</i>
	<i>Batken</i>	28,578	
	<i>Kadamjai</i>	28,578	
	<i>Training</i>	12,356	<i>60K KGS x 3 year x 3 coops x 2 time</i>
To construct and operate a compost facility (about 100 m ²) on the PO's land, it requires approximately 2.5K KGS ((10K KGS for earth warms + 400K KGS to purchase and transport manure and waste + 90K KGS for constructing sites). It plans to build 5 ones in each district and provide training two times. In addition, the soils of 30 farms of each cooperative's members will be examined through the National Agricultural University laboratory.			
2.2. Water reservoir/ water drilling	<i>Leylek</i>	50,302	<i>1 place 600K KGS x 6 places (3 greenhouses & 3 rain-fed lands) or 1 big one enough to supply 16 ha</i>
	<i>Batken</i>	50,302	
	<i>Kadamjai</i>	50,302	
In 2022, water drilling: 2K KGS/m x 100m (maximum depth) + 400K KGS (pump, motor and labour etc.) = 600 K KGS. Water reservoir: 350K KGS for 100 m ³ one and 600K KGS for 200 m ³ one			
2.3. Climate adaption training	<i>Leylek</i>	37,037	<i>Training: 60K KGS x 3 year x 6 village + demonstration plots for drip-irrigation: 120K KGS x 3 years x 6 villages</i>
	<i>Batken</i>	37,037	
	<i>Kadamjai</i>	37,037	
Total: Component 2.		360,107	
Component 3. Diversifying food production and reducing vulnerabilities of women	Location	Total costs (US\$)	Note
3.1. Greenhouse	<i>Leylek</i>	71,292	<i>1 greenhouse (1.5M KGS) with hail and gail protection facility x 4 villages (depending on the size, the number of greenhouses can differ)</i>
	<i>Batken</i>	71,292	
	<i>Kadamjai</i>	71,292	
1 greenhouse (including material, construction, and heating system) in local procurement costs (currently about 700 K KGS for a standard 100 m ² greenhouse) and energy saving model (two layers of roof, opening system, heating collection, and steal frame) is about 1.3 M KGS (maximum). 1.3 M/one greenhouse x 3 villages = 3.9 M KGS. Also, anti-hail for berry cultivation and gale bracing for potential arch-type GHs is 200K KGS			
3.2. Berry extension service	<i>Leylek</i>	24,712	<i>60K KGS x 3 year x 6 village x 2 times</i>
	<i>Batken</i>	24,712	
	<i>Kadamjai</i>	24,712	
3.3. Vegetable extension service	<i>Leylek</i>	24,712	<i>60K KGS x 3 year x 6 village x 2 times</i>
	<i>Batken</i>	24,712	
	<i>Kadamjai</i>	24,712	
Total: Component 3.		362,148	

Component 4. Improving post-harvest management, farmer- market linkage, and nutrition	Location	Total costs (US\$)	Note
4.1. Post-harvest management training with equipment for market linkages	<i>Leylek</i>	76,817	<i>Training: 60K KGS x 3 year x 12 village (USD 24,712) + equipment for post- harvest management: 125K KGS x 3 years x 12 villages (USD 52,103)</i>
	<i>Batken</i>	76,817	
	<i>Kadamjai</i>	76,817	
4.2. Nutrition	<i>Leylek</i>	24,712	<i>60K KGS x 3 years x 12 villages</i>
	<i>Batken</i>	24,712	
	<i>Kadamjai</i>	24,712	
4.3. Link to the women's bakery	<i>Batken</i>	68,587	<i>bread for 1,800 students a year = about 36 MT annually (108 MT in total)</i>
	<i>0.1 kg/student x 1,800 students x 200 days/year x 3 years x 70 soms/kg = about 4.6 M KGS. (In the case of the last procurement of WFP in 2018, the contract included the mill factory i) bought the wheat at the village, ii) transported it to their mill, iii) processed it to the fortified wheat flour by mixing it with good quality wheat). In addition, it requires 1.4 M KGS more (transportation cost, etc.) -> In total, 6 M KGS (US\$ 68,587)</i>		
Total: Component 4.	373,174		
Component 5. Strengthening the PO's governance and operational capacities	Location	Total costs (US\$)	Note
5.1. Leadership & Coop Management	<i>Leylek, Batken, Kadamjai</i>	6,178	<i>60K KGS x 3 year x 3 coops</i>
5.2. Accounting and Financial management		6,178	<i>60K KGS x 3 year x 3 coops</i>
5.3. Strategic planning and mobilization		6,178	<i>60K KGS x 3 year x 3 coops</i>
5.4. Marketing and entrepreneurship		6,178	<i>60K KGS x 3 year x 3 coops</i>
5.5. Best practice tour to other POs		10,296	<i>100K KGS x 3 year x 3 coops</i>
5.6 Office equipment		3,828	<i>(1 Accounting software, 1 computer, 1 printer, 1 accessory, etc.) x 3 district</i>
Total: Component 5.		38,836	
Total component cost		1,600,000	

WFP Indirect Support Cost for the implementation of this project will be covered through the Administrative Fee, as agreed with the GAFSP Coordination Unit.

Table D: Summary of Project Funding (To be completed for all projects).

Funding Source	Amount	Has this funding been secured (Y/N)?
GAFSP grant amount requested	US\$1.6 m for component costs	N
PO co-financing¹	US\$ 119,268	Y
Other Funding Sources (<i>SE, ODA, international NGOs, etc.</i>)	None	N
Total Project Funding	US\$ 1,719,268	
Additional comments, if any: N/A		

¹ Include financial contributions only. Additional information on financial and in-kind contributions can be described under the "Additional Comments" section.

Annex 3 – Project Full Logframe

Table E: Results Monitoring Matrix

Indicators	Unit of measurement	Baseline ²	End-of-project target	Data sources/data collection instruments
Project level indicators				
Changes in agriculture income	KGS (Som)	0%	10%	Household survey (Baseline and endline)
Outcome pillar 1 - Increased agricultural productivity				
Outcome Indicator (Tier 2.1)				
Increased agricultural productivity	Crop production weight (tons)/ land area under cultivation (ha)	14 tons (wheat) 36.8 tons (corn) 170 tons (potato)	30%	Household survey (Baseline and endline) (the base line is based on the national statistics https://www.stat.kg/en/pendata/category/183/ However, the figures among direct beneficiaries will be determined further after the baseline survey)
Output indicators (Tier 2.2)				
(GAFSP #1) Number of people receiving direct benefits (person) Disaggregation: of which, number of female	person	0	4,500 (30% 1,350 females)	Project monitoring data documented in the progress report on a regular basis
(GAFSP #2) Land area receiving improved production support (hectare) Disaggregation: Area provided with new/improved irrigation or drainage services (hectare)	hectares	0	2500ha (50ha)	Project monitoring data documented in the progress report on a regular basis
(GAFSP #3) Number of smallholder producers/processors receiving productivity	person	0	2,500 (30%, 750 females)	Project monitoring data documented in the progress report on a regular basis

² The baseline figures will be updated with a household survey at the beginning of the project implementation.

enhancement support (person) Disaggregation: Of which, female producers/processors				
Outcome pillar 2 - Improved farm-to-market linkages				
Outcome Indicator (Tier 2.1)				
Percentage of agricultural production sold on domestic and regional markets	percentage	5%	10%	Household survey (Baseline and endline) (the base line is based on the national statistics https://www.stat.kg/en/pendata/category/15/ However, the figures among direct beneficiaries will be determined further after the baseline survey
Output indicators (Tier 2.2)				
(GAFSP #6) Farmers that are supported in accessing improved marketing opportunities (farmer)* Disaggregation: Of which, number of females	person	0	500 (30%, 150 females)	Project monitoring data documented in the progress report on a regular basis
Outcome pillar 3 - Reduced risk and vulnerability				
Outcome 3 Indicator (Tier 2.1)				
Number of farmers whose livelihood has become more resilient to shocks (farmer)	person	0	2,300	Household survey (Baseline and endline)
Output indicators (Tier 2.2)				
(GAFSP #12) People receiving improved nutrition services and products (person) Disaggregation: Of which, number of females	person	0	1,800 (50%, 900 females)	Project monitoring data documented in the progress report on a regular basis

(GAFSP #13) Number of farmers receiving inputs or services on climate-resilient or sustainable agricultural practices (farmer) Disaggregation: Of which, female farmers Disaggregation: Of which, number of farmers adopting technologies or practices received	person	0	500 (30%, 150 females; 30%, 150 farmers)	Project monitoring data documented in the progress report on a regular basis
(GAFSP #14) Agricultural/land area where climate resilient or sustainable agriculture practices are implemented (hectare)	hectares	0	50 ha	Project monitoring data documented in the progress report on a regular basis
Outcome pillar 4 - Improved rural livelihoods and entrepreneurship				
Outcome 4 Indicator (Tier 2.1)				
(GAFSP #8) Direct employment provided (<i>full-time equivalent</i>) Disaggregation: Of which number of jobs are provided to females	person	0	200 (30%, 60 females)	Household survey (Baseline and endline)
Outcome pillar 5 - Improved institutions				
Outcome Indicator (Tier 2.1) – Improved Institutions: Institutional capacity of supported organizations measured by capacity index (to be defined by the project)	Entities	0	3 entities with improved capacity index	Project monitoring data documented in the progress report on a regular basis
Output indicators (Tier 2.2)				
(GAFSP #10) Persons receiving capacity development support (person) Disaggregation: Of which, number of females	person	0	30 (30%, 9 females)	Project monitoring data documented in the progress report on a regular basis

Annex 4 – Preparation Team

Name	Title	Organization	Email
Askarali Boronov	Chairman of the Board of Directors, Head of the Umbrella Cooperative in the Batken district	“Mol Tushum” Agriculture Cooperative	askar.aggzk@gmail.com
Latif Sattarov	Head of the Umbrella Cooperative in the Leylek district	“Mol Tushum” Agriculture Cooperative	permatov@mail.ru
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Annex 5 – Field research report by the WFP preparation team (First: 6-10 Feb, Second: 3-5 Arp 2023)

The first field research of WFP (6 to 10 Feb 2023)

* Note: Compared to the first research note, the Second one contains more details about the PO's status and needs and the short value chain analysis

Meeting #1

Time: 7 Feb 2023, 15:00

Place: Osh Education Centre

Participants: Abdirashit Ake (former cooperative chairman), Joonyeol Lee (value chain specialist in WFP), Kubanych (monitoring staff of WFP in Osh office)

1. Foundation of 'Mol Tushum' and its first activity with the help of GIZ

- 2004 initiated by the GIZ (functional in 2005) in Batken province (now three branches of cooperatives – each in three districts of Batken province – Leylek, Batken, and Kadamjai districts)
- The main activity of the cooperative at first was supplying good fertilizers from Uzbekistan to farmers at a low price through the cooperative.
- At those times, most fertilizers were unofficially imported, and farmers could not find any official line of fertilizer purchase, which means there was no guarantee about the fertilizers. Also, farmers lack knowledge about fertilizers (which kinds, how much, where, and how often to use)
- In this situation, GIZ proposed that the former chairman form a cooperative in Batken province to purchase 600 tons of fertilizers from Uzbekistan and sell them to farmers at low prices, under the condition of i) increasing the number of cooperative members from 25 to 1,000 for three years, ii) giving instructions to farmers on how to use fertilizers, iii) paying the money GIZ supported (about 65 million KGS) back after three years, and iii) accumulate 1.5 million KGS of capital in the cooperative itself.
- Farmers (no matter what kinds of crops they produce, if they want to purchase fertilizers) could join the cooperative by paying 100 KGS for enrollment and extra contributions, ranging from 500 to 20,000 at their will.
- In 2007, the cooperative, which started with 25, grew to one with about 2,000 members (three branches, 500-700 members per umbrella unit), and with the contribution of farmers, it could make 1.5 million sums of capital.
- Through the cooperative, farmers could purchase good-quality fertilizers (by half payment in advance and half after harvesting) at a low price.
- Also, the fertilizers were delivered to farmers' houses (which helped farmers to reduce the delivery fee as well)
- In this process, the chairman and cooperative board members (3 consultants + 5 farmers, elected through the annual meeting of all members) were obligated to manage funds, purchase/sell fertilizer transparently, and pay back the money to GIZ.
- Three years later, the money GIZ initially supported to purchase fertilizers (65 million KGS) was returned successfully as planned.
- After the GIZ fund was returned, the cooperative continued its fertilizer activities.
- Also, the cooperative started to purchase high-quality seeds from Bishkek (usually maize and wheat) and sell them to its cooperative members at a low price with a half-half payment method (half of the payment in advance and half later after the harvest)

2. Other activities of the cooperative with UNDP, USAID, EBRD and GIZ

- In 2007, EBRD gave the PO training on accounting and software.
- In 2012, UNDP proposed to work together for the dried apricot workshop with a fund of 400,000 KGS. The cooperative built a small storage room and drying room with UNDP
- Also, in 2012, with USAID, the PO built the rice processing workshop.
- The rice processing workshop was launched in Kadamjai with a capacity of up to one ton daily.
- Today, the rice is sold under the brand "Dary Batkena" in some markets and supermarkets in the Kyrgyz Republic
- Most recently (2016-18 and 2019-2022), with a fund of 20 million KGS, the cooperative worked with GIZ; one pilot project about planting crops in non-arable lands without processing the soils first between 2016-19, and the cooperative received technical assistance about the agricultural extension services about the wheat cultivation with no-tillage technology between 2019-2022.
- The final financial reports were submitted to GIZ Oct 2022.

3. Current main activities and plans

i) Seeds

- The umbrella units sell the crop seeds (wheat, maize and potato) to members at a low price.
- they have a plan to diversify the seed types and bring new types of seeds (such as more suitable for the land and climate, more productive and drought-tolerant ones) (e.g. new high-quality wheat seeds, not the low ones which only can be used to feed castles)

ii) Fertilizers

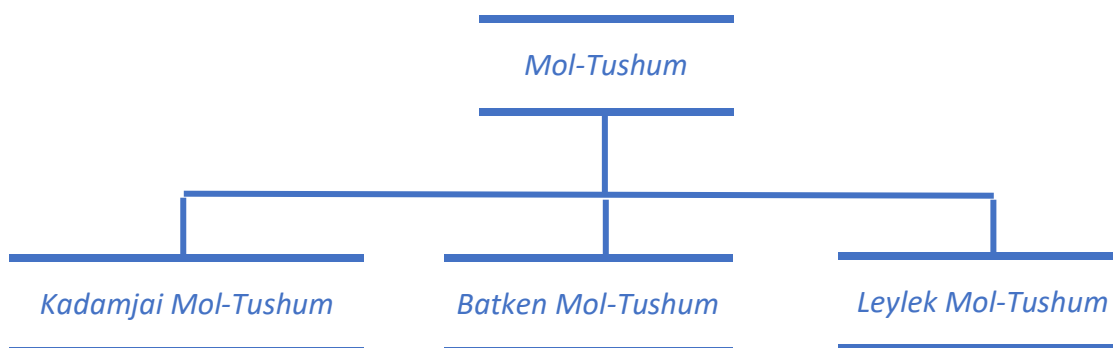
- they would like to scale up fertilizer purchases, in the situation farmers have trouble with the quality and price of fertilizers
- illegal import of fertilizers makes it farmers hard to know the brand and ingredient
- The fertilizer price is increased because of the high reliance on a few providers and price soar with global inflation

iii) Technical training

- The coop wants to provide farmers with technical assistance and extension services/training.
- In southern areas, there is 'RAS – rural advisory service', the private technical service provider, which plays an important role in agricultural training and consulting.
- However, the activities of RAS are rather weak (mostly focused on Osh and Jala Abad) and expensive in Batken province.
- But the coop wants to do a similar role in Batken.

4. Current situation and operation of the cooperative

- The Mol-Tushum cooperative has been re-registered in the Ministry of Justice and has three umbrella units; Batken-Mol-Tushum, Lylek Mol-Tushum and Kadazmhai Mol-Tushum.
- About 2000 members of the initial cooperative (Mol-Tushum) from mentioned three districts of the Batken province have been disseminated among the mentioned three cooperatives regarding member-farmers deployment.



- There were full-time staff before covid. But, because the profit from selling seeds decreased, the staff work as half-time or volunteers.
- Three consultants and 5 farmers consist of the board members, and they elect a chairman.
- the former chairman worked for 19 years and retired.
- Now, to become a cooperative member, farmers first submit an application form with 100 KGS and collectively put their names on the list at the end of the year.
- In the annual meeting, the members check the accounting and activities and decide how to use the profits. (Usually, by selling the seeds, the coop gets 7 soms/kg)
- About 20 per cent of profits are distributed to farmers according to their shares (how much they invested), 30-40 per cent for reinvestment, and 30-40 per cent in saving for emergency case

Photos and participants



Meeting #2

Time: 9 Feb 2023, 11:00

Place: PO Office in Kadamjai

Participants: Almaz (head of the cooperative in Batken) and 10 PO members, and 2 members from WFP

1. Wheat cooperative and its cooperation with GIZ

- The GIZ project helped establish the cooperative
- The chairman also cooperated with WFP by participating in the WFP project and inviting WFP to his annual field demonstration.
- GIZ also provided equipment and machinery; its project finished in 2021.
- with the help of the GIZ, the coop can change the seeds, which are much better than the previous ones (30-40% production increase).
- Also, farmers could do processing together.
- chairman is elected annually with 9 board members, and the PO has a meeting quarterly
- the cooperative also provides consulting to farmers and receives the fee for consulting and training.
- The cooperative offers technical training and uses revolving money

2. Issues (challenges)

- All seeds are imported (10 t from Kazakh, 5 t from Russia, and newly ordered 30 t from Kazakh) (cannot produce locally), and seeds are sold to farmers (50% first and 50% later, or 100% at the beginning)
- Revolving funds are not enough to cover all the fertilizer and seeds costs that the cooperative purchase collectively.
- Also, it lacks a warehouse, tractors, and skills to store seeds and harvested wheat).

Photos and participants



The second WFP field research (3 to 5 Apr 2023)

Meeting #1

Time: 3 Apr 2023, 08:00 am

Place: Osh State University

Participants: Abdurashit Khalmurzaev – Former Head of Mol Tushum, Joonyeol Lee – WFP, Oleksandr Morozov – WFP, Alena Pukhktii – WFP, Almaz Tchoroev - WFP

Key Notes:

1. Previous projects:

- The farmers in Batken province are poor due to climate issues (e.g. drought, mudflow), lack of water and poor soil.
- Batken climate has been dry for the past four years (not enough rain), and the irrigation system is not as advanced.
- GIZ (2005-2007, USD 51,000) helped the cooperative organize and manage a revolving fund for fertilizers and seeds.
- GIZ's (2016-2018 and 2019-2022, USD 333,300) project about good agricultural practices, such as the introduction of no-tillage technology.
- UNDP: (2012, USD 18,000) and USAID (2012, USD 65,000) the PO requested support in apricots and rice processing due to the demand and low processing costs. UNDP has bought equipment, Kadamjai PO unit has invested. The equipment cleans and packs rice. There were sales, including export to Russia, but no profit gained.
- EBRD (2007-2010, USD 8,000) the project about adapting the new financial software programme with BAS.

2. Fertilizers revolving fund:

- Mol Tushum had 1990 members, there are document archives of members joining the PO (collected by the accountant). The PO has 3 leaders, and each leader would have up to 700 members under his umbrella.
- Mol Tushum, together with the assistance from GIZ, received fertilizers in 2005. The fertilizers were distributed among its members at a cheaper price. With a revolving fund, they had been purchasing fertilizers from "Oshkrasteks" company in Uzbekistan and sold it to its members on a 50% credit basis. Once the funds were replenished, they would buy more fertilizers in autumn when they are cheap and sell them again in Spring.
- After 2020, this time, prices doubled.
- Currently, Mol Tushum is providing less amount of fertilizers due to the price being twice as much higher. Farmers cannot afford to buy fertilizers. Although farmers who grow crops still need fertilizers and continue to use fertilizers. Additionally, buying fertilizers in Batken is problematic, the cooperative attempted to sign a contract with companies from Uzbekistan.

3. Seed revolving fund:

- Seeds: The Mol Tushum cooperative has also managed a revolving seeds fund in Batken. The seeds grown in Batken had less production yield or low quality.
- According to Abdurashit, bad-quality land and lack of rain have stopped the seed growth in Batken.
- However, thanks to the previous projects and revolving fund, farmers can purchase good seeds from outside, are trained with the necessary equipment to produce seeds successfully

4. No tilling technique:

- Mol-Tushum specialists have learned the no-tilling technique from GIZ (2016-18, 2019-22) and have all the necessary equipment to cultivate (except for a tractor).
- The former head of Mol Tushum explained that the equipment is up and running, and no tilling cultivation is not a problem. However, he pointed out that in Batken, the technique is not useful due to the lack of a tractor.

5. Financial reporting:

- The cooperative has experience providing both financial and other reporting.
- While working with diverse international organization, Mol Tushum has been providing financial reports monthly, including accounting documents, following the standards of UNDP and GIZ.
- The accounting records confirmed the operations of the Mol Tushum. Most budget operations were conducted through bank account (no cash).
- Every branch had its accountant trained with EBRD (2007-10). However, the accountant, who was responsible for all the procedures, died recently, but all procedures were handed over to a new accountant.
- The cooperative conducted a tender process. It learned from GIZ projects.
- In Mol Tushum, there was a procedure for preparing tender documentation (at least three companies, etc.)

6. Ideas for a project:

- Abdurashit suggested considering a project to use land by pumping water out of the ground.
- He believes this would be more economically beneficial than renting arable land.
- Pumping water and making water reservoirs can give farmers access to more land.
- To discuss the possibility of pumping water from underground, we can call Ahmet ake (0556755375). He is a specialist who has already researched this field and can demonstrate which land can be used.
- Jirgal, the PO's member and expert, is a well-qualified agronomist.
- The cooperative has worked with him successfully in the past, and he can be helpful in the future
- The apricot processing workshop was established in the Batken province, and were ready to export its products.

7. Division of Mol Tushum into three entities:

- The Mol Tushum cooperative was divided into three entities as per the Law on the Cooperatives to effectively support the increasing number of members. The members divided the assets between three entities in a peaceful manner. Instead, it was decided to stay under the same association.

Photos and participants list in Osh State University



Meeting #2

Time: 3 Apr 2023, 15:00- 16:00

Place: Samarkandyk village, Women's self-help bakery workshop

Participants: women Leader (Kanykey) + 11 workshop staff and members (all female), Joonyeol Lee – WFP, Oleksandr Morozov – WFP, Alena Puhktii – WFP, Almaz Tchoroev - WFP

Key Notes:

1. Operation of the workshop before the conflicts

- Before it, the workshop, built with the support (equipment and training) of WFP as one part of RWEE in 2021, hired 6 full-time staff, producing bakeries and confectionery for special village events, such as wedding ceremonies.
- During the training, they learned how to make bread, cakes, and pizza and sold them to the public when there were orders.
- The staff got paid 8,000 KGS (almost US\$ 100) monthly, a considerable amount for local people.
- Also, the women, who used to stay home without any activities, could find jobs and grow their self-esteem and power in the house.
- With their effort, the workshop also received 645,000 KGS from Batken Development Fund from the government (the whole process was done by themselves) and built the underground water tank in front of the workshops (56 tons).
- Next, other women also received training about making bakeries in this workshop from the women who work there. As part of the training, the workshop received fruit-drying equipment worth 35,000 KGS from the Aga Khan fund.
- It shows their capabilities in business, sustainability, and ownership.

2. Conflict and its effects

- Since the conflict between Kyrgyz and Tajikistan last September, all villagers (about 13,800) have had to run away (4 casualties and schools & kindergartens were damaged).
- Still, only 80% returned, and 20% refused to return because of fear.
- During this process, the workshop was also damaged (found a few bullet holes).
- Electricity lines and the refrigerator are damaged.

3. Application to School tendering

- Before the conflict, the women's group planned to participate in the tendering for the school meal in their district.
- The leader analyzed the market and competitors and prepared the document.
- The district has 8 schools (+vocational training center) and 6 kindergartens (approximately 5,000 students and around 1,800 under the 4 grade) and one lyceum.
- The district-level education department opens a tender for bread for one year every September.
- Even though the workshop was not registered as a limited company, it works as a private entrepreneur and is eligible to participate in the tendering process.
- They have all the necessary documentation and register as a Private Entrepreneur.
- Also, there are only 2 competitors supplying bread, but the leader concluded that her workshop is clean and well-equipped at better prices.
- The workshop's capacity is also considered enough to produce the bread for 1,800 students when they hire 10 staff and drivers for the delivery.

4. Their desire and request

- The villagers think the conflicts are related to natural resources, including land and water.
- They asked the government to repair their workshop, which is also responsible for this conflict. Refrigerators and electricity lines are essential to be recovered.
- Also, they want more women to receive training in bakeries, which can give them job opportunities as well as reduce the cost of living as they can bake by themselves.
- It can empower women economically and socially.
- Additionally, another woman approached WFP staff and explained that they have relatives in the Batken region who also would like to establish a bakery and would like technical training and equipment.
- There are other women groups (about 80 women near the workshop) who wish to have another assistant from the UN.
- UN provided the seed, training, and equipment to grow raspberries, cucumbers, and tomatoes in their home gardens and farms.
- As there is much domestic demand, raspberries and other products sell well.
- The women's groups want to expand the scope with more women and cultivate the strawberries, which they consider promising in this region.
- In addition, they want a physiological treatment session for their PTSD after the conflicts.

Photos and participants list in Samarkandyk village, Women's bakery workshop



Meeting #3

Time: April 4, 2023, 9:30 - 10:30

Place: Razzakov town, Mol Tushsum's umbrella unit in Leylek district

Participants: Leader (Latip ake) + 11 workshop staff and members (1 female), Joonyeol Lee – WFP, Oleksandr Morozov – WFP, Alena Puhktii – WFP, Almaz Tchoreev – WFP

Key Note:

1. Mol Tushum Leylek Organization Structure

- Board members: 1 Chairperson and 3 board members
- Revision committee: 3 people
- Overall, 600 members, paying membership fees on an annual basis
- There is no official full-time staff, due to the lack of funds. One specialist is involved voluntarily. If they are supported, they will hire full-time staff as well.
- 40 % of the members are women
- Previously, salary to staff was paid depending on the profit from fertilizer and seed sales to members
- One person is hired to guard the PO's lands
- Rent an office, renovating now, with 15,000 KGS per month

2. Activities of the cooperative

- Most farmers have less than 1 hac land and are poor.
- The main basic activities are the provision of extension services, seeds, fertilizers, and equipment
- They provide fertilizers and seeds on a 50% payment and the rest after collecting the harvest basis.

- Because of the long distance from Batken, they purchase the seeds and fertilizers by themselves to provide them at lower prices.
- The current scheme is to collect money (about 600 thousand KGS) from the cooperative members, and then they buy seeds and fertilizers.
- The PO provides certificates that the seeds and fertilizers are good quality. Members do not buy fertilizers at the market due to their low quality
- When using high-quality seeds and fertilizers, the farmers can produce the wheat 40 % more.
- There is little fund to assist those cooperative's members who need financial assistance (for example, to buy seeds in spring), money should be returned in autumn without interest.
- Currently, they have about 500 K KGS in this fund
- They bought the seeds from Kara-Suu and Bishkek, while fertilizers came from Uzbekistan.
- Currently, they have 8 tons of good quality wheat, which they wish to plant and increase the amount to sell for preferential prices to their members.
- Wheat seeds are 54 soms/kg in market.
- With 200 kg of good-quality seeds 200 kg, they can produce 40 tons of wheat. (More than 50% more productive than the normal one).
- They provided extension services to farmers through external specialists, but the members pointed out that this is too expensive.
- However, they admit that they need training for the new members and hiring experienced professionals, which requires financial support.
- The cooperative has 2 no-tilling planting equipment and 2 fertilizer spraying machines (But no tractor to use this equipment).
- They provide this equipment for members and farmers for rent.
- Usage fee for no-tilling equipment is 3,500 KGS per hectare.
- They need a tractor as they spend a lot to rent a tractor, and always hard to hire during the busy farming season. Also, most of the money is used to pay for the rent of the tractor.
- The head of the cooperative pointed out that they wanted to buy a tractor last year; however, because the prices increased, they could not buy it.
- They are happy to finance 70 % of the tractor cost if there is 30 % of financial assistance.
- They believe the new tractor will cost around 6 million KGS.
- Last year, the cooperative managed to rent 50 hectares of rainfed land for the cooperative.
- The land is not of the best-quality soil and needs to pump water out from underground.

3. What is grown by local farmers

- The local farmers mainly focus on growing winter wheat (and some barley).
- There is a local milling workshop, so the wheat grown locally is turned into flour and used mostly in the internal market.
- In fact, they had to buy a lot from outside as they cannot produce enough.
- Growing wheat would benefit them and work out to be cheaper than buying wheat flour imported from Kazakhstan or Russia.
- Local women also grow potatoes, carrots, and apples.
- In the case of vegetables, they used to sell to Tajikistan, lost the market after the conflict
- However, they can still sell the vegetables to their market
- Female members are interested in growing berries and vegetables (e.g. tomatoes, cucumber).
- Currently, the price of a tomato is 200 KGS per kg in the local market, which is very profitable.

4. Documentation and finance

- The new cooperative was registered in 2019. It has all the documents in one place from July 2019 onwards. Documents before 2019 are stored in Batken, and the archive was divided. The current documents are in Leylek.
- There are two Statutes of the Cooperative: one before 2019 and one after
- The cooperative accountant has 20 years of experience. However, he passed away. The new one tries her best but needs some training.

5. Activities that would be beneficial for members

- Members of the cooperative want to continue focusing on wheat. because majority of farmers have cows, sheep, and chickens. (Wheat is also used to feed cattle)
- As for wheat, firstly, PO members consider that it is possible to grow good-quality wheat enough so that they don't need to import Kazakhstan's ones
- Also, they will benefit by baking bread on their own (in this case, training is required)
- Wheat is beneficial for growing chicken. There is demand for chicken in the local market, and no medium or large chicken farms in the district. The members believe that with the wheat enough to feed chickens, they could provide meat for local café, restaurants, and shops.
- Some farmers are currently producing organic compost, and the PO wants to scale up
- But still, there are the members' high demands for fertilizers from Uzbekistan.
- The government plans to improve the quality of 50 hectares of PO's land through water drilling, but lack of funds
- Cultivating vegetables and selling them is considered as a good option by the female PO members. (Beneficial in terms of income and house food consumption)
- Growing vegetables helps honey production in future
- Members need capacity-strengthening, especially for the young cooperative members who joined recently.
- Greenhouses are also essential for women members. Many people want to make a greenhouse instead of apple trees.
- Drip irrigation will help.
- They want to learn how to negotiate and pack their product.
- Warehouse as well (they sell their wheat at a low price as it gets spoiled in their warehouse quickly)

7. Accounting system in place

- Title documents are in place
- There is a bank account opened (Ayil Bank), but no online banking
- Financial transactions between the cooperative and its members are diligently documented
- No opportunity to check how financial transactions with external contractors are documented

Photos and participants list in Razzakov town, Mol Tushsum former branch



Meetings #4

Time: April 4, 2023, 14:30- 16:00

Place: Batken district (township centre)

Participants: the umbrella unit members of Batken District 11 (5 female and 1 chairman)

Key Note:

1. Status

- Re-registered in 2019, 500-600 members
- There is an entry fee, but monthly or annual fees are not required
- Board members: 1 chairperson, 1 accountant, 1 specialist, 1 consultant
- Depending on the project, they would hire up to 10 consultants/specialists
- Revision committee – 3 people
- Council members – 1 chairperson, 3 members
- Currently, the chairperson and accountant are receiving a salary (did not say the amount of salary)
- After the pandemic, activities were limited, people worked remotely
- 40~50% are women (but they don't know the exact number of women-headed households).
- Women get more assistance, for example, given more time to pay the second portion when getting seeds or fertilizers
- The PO does not have its land, only the land of its members

2. Activities of the cooperative

- 50 % of members participating in the meeting are currently cultivating maize (They also cultivate some rain-fed wheat, but it is not successful in the Batken district)
- The PO bought high-quality corn seeds from Agrosafe company (Osh).
- Depending on the villages, they cultivate diverse types of products.
- High land close to the mountain: maize, potatoes, apricots, apple
- Lower land close to the border: maize, rice (such as Ak-Turpak), raspberries, strawberries, tomatoes, chilli
- In particular, berries (300 som/kg) are promising
- The cooperative has also rented out lands.
- low-quality maize cannot sell it to the market. However, as they cannot produce enough, they had to purchase it from the market. Corn is also used for fodder purposes.
- 3 of them worked with GIZ to cultivate wheat with no-till technology, seeds from Kazakhstan.
- Water drilling is possible in some areas but is also hard and expensive (costs 2,000 soms per 1 m drilling, but minimum 80-100 m and easy to get dried often)
- Due to volatile fertilizer prices, currently, it is difficult to work with fertilizers. (By the time when they bring fertilizers to Batken, the price is often higher than the market prices.)
- The PO members highlighted the positive experience of working with the WFP

3. Current activities

- Seed revolving fund: a small amount recently, 50:50 payment, mainly corns to the members, from the Pioneer company, stored in the warehouse, testing the seeds in Osh or Bishkek (cost just 800 KGS), and some wheat (2 years ago worked with GIZ but not good results and have 10 tons of seeds but equality is not good)
- Fertilisers: between 2005-2010, purchasing fertilizers and using 50/50 ways to pay, purchasing from Fergana, Uzbekistan, cheaper in January, but temporally stopped because of the conflicts with Uzbekistan, and the volatile exchange rate often caused the cancellation of the contract with fertilizer providers, farmers also don't want to buy at the higher prices than market one
- Extension services: provide training with agronomists and specialists. There is high demand for it
- Apricot cleaning, sorting and packaging lines belong to the cooperative, providing 3 services; i) farmers come with their workers just to rent the line, ii) when farmers bring apricots, the cooperative hires the workers and rents the line, or iii) members of the cooperative sell their apricots to the cooperative, and the PO cleans, sorts and packs it, sells it to supermarkets in Osh and Bishkek
- Through the Aga Khan project, some villages received raspberry seedlings and started growing them. They are satisfied as they can sell the products for higher prices

4. Desirable/profitable activities in the opinion of the cooperative members.

- In general, the following ideas for cultivating were proposed as beneficial: raspberries, strawberries, blackberries, peppers, tomatoes, etc. The production depends a lot on the area (mountains, plains, etc)
- Female members want to focus on greenhouses and berries, especially raspberries and strawberries.
- Strawberries would also be beneficial because the climate allows Batken to grow such berries.
- Economically focusing on berries would be beneficial for the region, because there is already a logistical centre in Kadamjai that buy berries and freeze them to export to Russia.
- Prices for berries have not fallen for the past 3 years as there is high demand.
- Berries mean raspberries, strawberries, blueberries, and blackberries

- Seeds – they would like to work with corn seeds more.
- Training for all the mentioned areas is appreciated
- The largest land that the farmer has in Batken is 1 ha, and they want to look into the possibility of using underground water to use rainfed land.
- They want to learn how to do drip irrigation and scale up to produce organic compost
- Water drilling is necessary and there is underground water, but quite an expensive process.
- Greenhouses are the ones they need most (35-40 villages, maybe 9 villages first?)
- A positive experience with WFP

5. Accounting system in place

- There is a permanent accountant.
- Title documents are in place.
- There is a bank account opened (Ayil Bank) with online banking.
- The accountant uses licensed 1C Software
- Financial transactions between the cooperative and its members are diligently documented.
- Financial transactions between the cooperative and external contractors are documented, and contractual work is in place.
- Online reporting to the local tax agency is in place.
- There is experience with financial reporting requirements by other donors.
- There is experience in procurement procedures established through cooperation with GIZ.
- Lion's share of operations via bank transfers.

Photos and participants list in Batken city, Mol Tushsum branch



Meeting #5

Time: 5 Apr 2023, 09:30 –11:30

Place: Mol Tushum umbrella unit in Kadamjai, Kadamjai office

Participants: Mol Tushum side – chairperson and 11 participants (3 women), WFP side – 4 people

Key Note:

1. Structure of the cooperative

- Re-registered in 2019, there are nine sub-groups in the Kadamjai umbrella unit, and two of them are headed by women
- 686 participants, approximately 45% are women
- The chairman is a professional agronomist (with a degree, education, and extra certificates)
- The PO previously worked with international organizations to give the extension service
- Also, there is a certified veterinarian who provides services to the PO members
- The entrance fee is 100 KGS (one time), and all other fees are voluntary
- Board members – 2 people full-time staff (3 persons in general), 9 people as founding members, and 1 person from the founding members
- The PO regularly holds an annual autumn meeting to know the preferences of members (what to plant and what they need, etc)

2. Current activities and situation

- The average land size of farmers differs depending on the villages (ex. AK-Turpak 2.5-3 hac, or others 1 or less than 1 hac)
- Currently, the PO produces 60% of products for daily use and 40% to sell
- Kadamjai district has 6 administrative areas, and the Mol Tushum cooperative works in all of them.
- Each local government of 6 areas has different directions about the major product: i) Ak-Turpak – Rice, ii) Bolotkhan – Berries, Potatoes, grape, iii) Aiyrbash - Horticulture, potatoes, iv) Birlik – Potatoes, carrots, apples, v) Maidan – Horticulture, cattle (close to mountains), vi) Orozbekov – Raspberries, apples and cattle
- Most of the money was in the hands of the farmers. Currently, they have 3, 700,000 KGS, collected money from all farmers
- Only one person intentionally did not pay, and legal action was taken against this farmer. They won, and the court ordered the law enforcement bodies to collect the money owed to Mol Tushum
- The cooperative distributes fertilizers to the farmers. In 2020, they distributed 25 tons of fertilizers on a 50 (in advance)-50 (after the harvest) deal
- In 2022, 30 tons of fertilizers were distributed. Fertilizer bought from Kyrgyz Gumar (organic fertilizer) and Janyryk, located in Jalal-Abad
- They still have a revolving fund for the fertilizer purchase (3.3 million KGS)
- Those farmers, who did not want to receive fertilizer because of the price, received money back from the cooperative with a 1 % of interest rate
- Some farmers would like to join the cooperative – the potential to expand
- They own agriculture equipment – no tilling machine, fertilizer sprayer, plough, or disk harrow. But The cooperative does not have a tractor, the most important equipment
- Currently, the equipment is rented out to one of the cooperative’s members, who provides services to the members at a 30 % cheaper price. Instead, he pays rent to the PO
- The rice processing line was received with the assistance of GIZ.
- It consists of washing, sorting, and packaging (800-gram packages), and belongs to the cooperative
- Recently, the line was moved to Ak-Turpak, near the rice production area, as, this year, they want to try to manage the line in a new way.
- The line will also receive rent and provide services to the members at a 30 % cheaper price.
- The decision on what to sell and what to do is made up at the annual meeting with all members.
- The PO is selling potato seeds and plans to cultivate them to multiply the good-quality seeds when they get the land from the Government.
- They cooperated with GIZ on winter wheat with no-till skill, but the result was not good. no one wants wheat cultivation in Kadamjai now

- Some women's group has built 4 greenhouses by themselves, producing berries and using organic fertilizers.
- Last year, get 1,400 seedlings for raspberries and get 220 soms/kg.

3. Difficulties

- Most farmers are facing a lack of equipment, funds, and technical training
- Concerning fertilizer, recently, the illegally traded ones are cheaper than the officially traded ones, but they cannot trust the quality of illegal ones.
- Sometimes, the price is different from the one they decided to buy, which causes many members to give up their purchase. In this case, the cooperative returns money (50% paid in advance) with a 1 % of interest rate.
- The reason why they give the interest is to make more farmers participate and form a larger amount of funds to purchase the minimum amount that the factories require.
- If they even order 30 tons of fertilizers from the factory in Fargana, Uzbekistan, it is still insufficient to trade with the factory directly.
- If able to buy fertilizers in advance in the autumn, the price will be lower, and the PO will be able to give it to farmers for a lower price.
- Also, because of insufficient precipitation, wheat and barley cultivation failed. They focus on the potato instead.
- They need techniques to use water wisely and new water reservoirs.
- Arable land and access to water are also insufficient, and the average quantity of the products that the members are producing is insufficient to export in bulk (however, there is a high demand for potatoes)
- No government support for the cooperative

4. Need support and proposals for future work

- The PO needs high-quality seeds, simple irrigation systems and fertilizers.
- Production yield is insufficient to sell to the market, even though market demand exists.
- Fertilizers and seeds are the priority that farmers require.
- The use of high-quality seeds and fertilizer can increase the production yield by 40%
- In the Ferghana Valley, the PO negotiated with a factory to buy fertilizers. This would be cheaper than the illegally traded one, but they can only sell the larger scale (one wagon – 60 tons).
- Some farmers are producing and selling organic compost, using red earthworms.
- PO members see lots of potential in horticulture development.
- Raspberries, horticulture, and dried fruit are the biggest export potential for the PO.
- The biggest demand in the international and domestic market is raspberries and cherries (the main market is Kazakhstan and Russia)
- In the places where groundwater is available, there was an idea proposed to introduce pumps and use drip irrigation for cultivation
- The Po can cultivate two products in one season (e.g. potatoes and corn).
- There is a high demand for a tractor, which may help further to provide services to the population throughout the season as different products are grown at different time
- Without support from the national level, it is hard to prepare land on their own, training and fertilizers.

- For several years now, the government has been saying that cooperatives should be developed, but it has not provided any real assistance to do so
- At the PO's land, the PO will collectively decide what to sow.
- A possible option: one part raises cattle, and the other part grows fodder for it; as a result, it will be cheaper to buy in total, work together and provide support to each other

5. Accounting system and finance issues

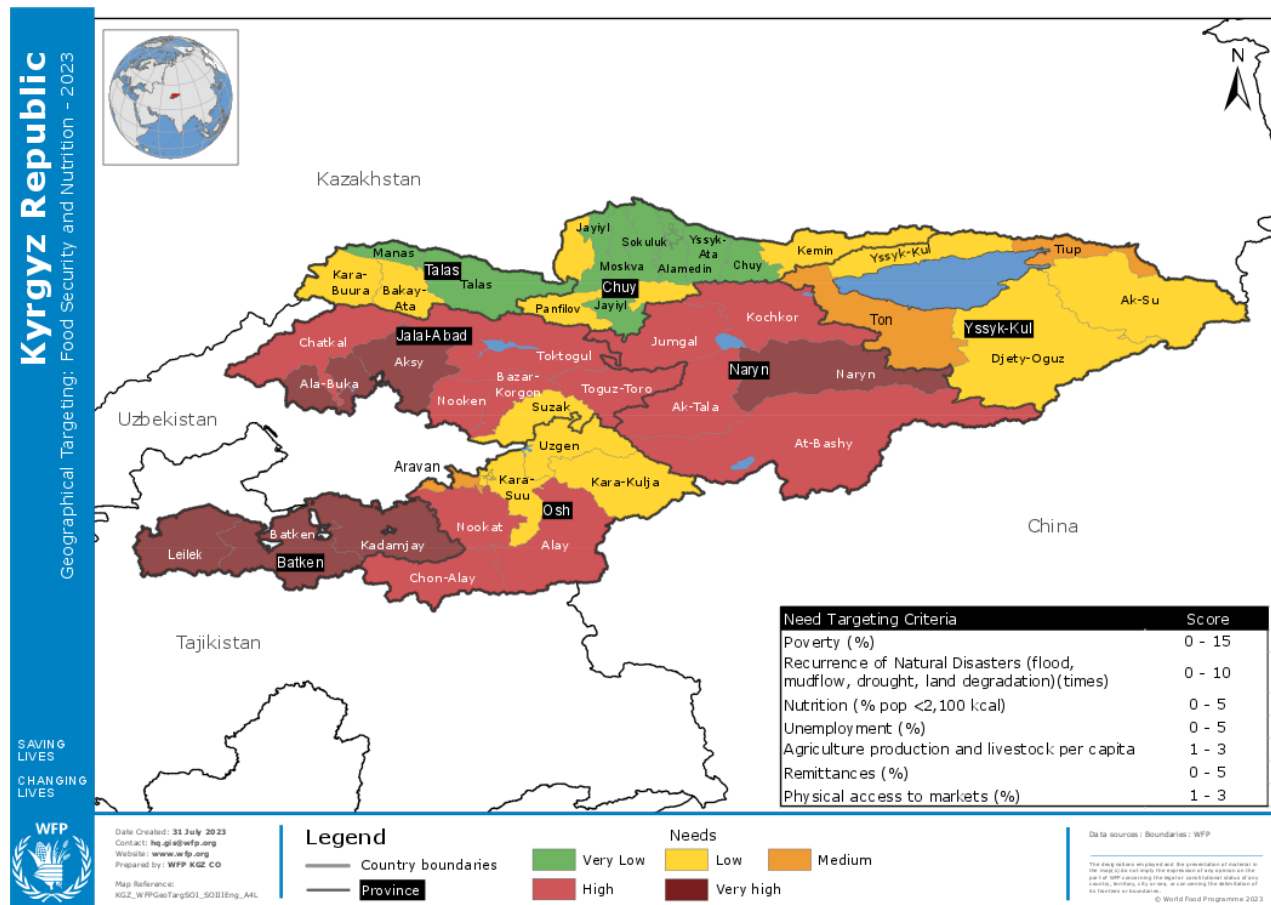
- Now, the cooperative has 3,7 million KGS in its account
- The revolving fund exists, and it works
- There is a part-time accountant.
- The PO is experienced in international transactions
- There is a bank account opened (Ayil Bank) with online banking.
- The accountant uses licensed 1C Software
- Financial transactions between the cooperative and its members are diligently documented.
- Financial transactions between the cooperative and external contractors are documented, and contractual work is in place. The Chairman himself does contractual work.
- Online reporting to the local tax agency is in place.
- There is an experience with financial reporting requirements by other donors.
- There is an experience in procurement procedures established through cooperation with GIZ.

Photos and participants list in Kadamjai city, Mol Tushsum branch



Annex 7 – Project implementation map

Map 1. Vulnerability map of each region in Kyrgyzstan



Source: WFP, 2023

Map 2. Project implementation area (Batken) and locations of the PO

