

SHOQATA E PRODHUESVE TË QUMËSHTIT TË KOSOVËS KOSOVO ASSOCIATION OF MILK PRODUCERS KAMP

ASSESSMENT OF THE CURRENT SITUATION OF KAMP

DESK RESEARCH TO DEFINE ISSUES TO DEVELOP STRATEGY AND SUPPORT ADVOCACY AND POLICY WORK AND WAYS HOW TO ADVOCATE

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ACRONYMS

ARDP A	Agriculture and Rural Development Programme
EU E	European Union
FAVUP F	Faculty of Agriculture and Veterinary University of Prishtina
FSDN F	Farm Sustainability Data Network
KAMP K	Kosovo Association Milk Producers
KDPA K	Kosovo Dairy Processors Association
KFVA K	Kosovo Food and Veterinary Agency
MAFRD N	Ainistry of Agriculture Forestry and Rural Development
MEST M	Ainistry of Education Science Technology
MoU N	Memorandum of Understanding
NGO N	Non-Government Organisation
NQA N	Vational Qualification Authority
NMR N	National Milk Recording
TNMS T	Fransparency Neutrality Milk Samples
USAID U	Jnited States Agency for International Development

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EXECUTIVE SUMMARY

The Kosovo Association of Milk Producers (KAMP) is the only national association of commercial dairy producers in Kosovo. KAMP has about 2,000 registered members and therefore represent majority of all commercial dairy farmers in Kosovo who are selling milk to licensed dairy processing plants. This strategy document will layout a roadmap for next five years to come in supporting KAMP to add and enhance additional services through member driven activities aiming to increase production efficiency and competitiveness of Kosovo dairy farms and therefore to increase collection of membership fees.

The aim of this strategy document is to develop self-sustainable dairy producers association, which will provide valuable services for their members, such as dairy farm management and business development skills, technical information, policy advocacy, and participation in policy negotiations. The Increase of self-generated revenues will be the main target. The emphasis will be focused in assisting dairy producer associations in institution building and financial self-sustainability.

The General Objective of this desk research is to chart directions for the Kosovo Association of Milk Producers (KAMP) to become a national center for milk recording and as the advisory body for its members to address issues related to animal health, breeding, husbandry, and general farm management. This document seeks to strengthen and enhance KAMP's capacities to provide advice to, MAFRD, KFVA, and other authorities on necessary steps to protect and support dairy farmers through developing and improving the legal infrastructure for the dairy industry in Kosovo.

The strategy has been drafted taking in consideration the provisions contained in KAMP documents, direct consultation with KAMP representatives/board, and specialists with expertise on the sustainability of the KAMP.

The strategy identifies KAMP's general objective as a national center for milk recording, advisory services in the dairy sector, Training Centre for the dairy sector, preparing training curricula and getting them certified by the National Qualification Authority (NQA). Protecting farmers form unfair trade practices imposed by imported dairy products and furthermore advocacy and lobbying for the local dairy industry to maintain the same level playing field for all actors participating in Kosovo dairy market and finally contributing to the economic development of Kosovo rural regions by consolidating commercial dairy farms for greater efficiency and in producing high quality raw milk.

In order to achieve this objective, the following five courses of actions are identified:

- Strengthening the capacity of KAMP to be as national centre for milk recording
- Increase KAMP capacity to enforce legislation for milk collection samples in the field
- Establish training centre for dairy sector
- Establishing feed analyses laboratory for testing feed quality
- Developing dairy farm monitoring program for KAMP members
- Support for smart farms powered by ICT to boost dairy output
- Advocacy and lobbying

INTRODUCTION

To maintain and grow domestic and export market share, the Kosovo dairy sector must have a clear and compelling point of difference. All actors in the dairy supply chain must work collectively to ensure the standards remain relevant, by giving the consumer and businesses in the dairy supply chain the assurances that they need. Today's consumer seeks assurances about food safety, animal welfare and environmental responsibility. To meet these requirements KAMP will support its members to take the leading role in developing a new local and regional image for Kosovo dairy industry.

To achieve KAMP ambitions for its members and KAMP aspirations for making a competitive Kosovo dairy industry all Kosovo dairy industry stakeholders; dairy farmers, dairy processors, MAFRD policymakers, KFVA, and FAVUP staff, need to step up and commit to making Kosovo dairying work for everyone. That is one of the most important concepts behind this strategy.

The last war in Kosovo severely damaged the dairy sector, causing thousands of farms to be burned and brought about the destruction of some 50% of livestock. The drastic drop in milk production led to increasing unemployment and a trade deficit in food stocks, while the options to develop this sector through investments were almost impossible due to farmers' limited access to credit services. On 4 April 2007, the Government of Kosovo for the first time approved the Agriculture and Rural Development Plan (ARDP) 2007- 2013, which created the first policy support for the establishment of commercial milk production. As a result, since 2010, the Ministry of Agriculture, Forestry and Rural Development (MAFRD) has begun distribution of direct payments of 30 euros per cow to farmers who possess a minimum of five cows.

Besides direct payments for dairy cows in 2014, MAFRD also created financial incentives for farmers to improve raw milk quality. Thus, extra quality milk has a bonus of 0.07 euro/litre, followed by first class milk (0.04 euro/liter), second class (0.02 euro/litre) while third class milk has no bonus.

In the frame of the project "Improved Livelihood and Strengthened Position of Rural Dairy Farmers" supported by We Effect; one objective of the project is Strengthening of Civil Society Organisations /Stronger Organisations and to conduct of desk research to define issues to support advocacy and policy work and ways how to advocate.

With this purpose, a preliminary assessment was carried out to evaluate the current situation of KAMP, and information collected was inserted in a document that was used as a starting point for the development of the strategy contained in this document.

Development of the Strategy

The strategy has been drafted taking into consideration the desk research work, the provisions contained in KAMP documents, direct consultation with KAMP representatives and professional expertise on sustainability of the KAMP.

The document is divided into two main chapters:

- 1. Assessment of KAMP
- 2. Development of a strategy for KAMP

SECTION 1: ASSESSMENT OF KAMP

Kosovo Association of Milk Producers (KAMP) was established in 2005. Its headquarters are situated in Pristina in rented offices in the city centre with basic conditions for office work: desks, chairs, laptop and printer. Also, KAMP has operational offices at the premises of Kosovo Food Veterinary Agency in Pristina.

KAMP has a website (<u>www.shpqk.org</u>) which sets out the Association's objectives, achievements, its vision and what it offers to its members.

It gained support from the following projects:

- USAID (United States Agency for International Development) funded projects 2004-2018
- Canadian Fund for Local Initiative;
- EU supported Transparency and Neutrality of Milk Sampling Project
- Training Program for the Dairy Sector Phase I and Phase II, supported by The Netherlands Ministry for Economic Affairs and Climate
- Wee Effect partner 2023 2025

1.1 FUNCTIONS AND ACTIVITIES OF KAMP

- KAMP has the role of advocacy between dairy farmers and government organisations, nongovernment organisations (NGOs) both local and foreign, and international donors such as EU, USAID and World Bank etc.
- KAMP has a mandate from KFVA for collecting milk samples to bring to the milk laboratory for milk analyses.
- KAMP has an important role in policy making with regard to the milk production sector.
- KAMP is expected to provide training on topics related to milk production, such as farm management, dairy hygiene and animal health issues.
- KAMP produces and distributes to farmer's different leaflets and brochures.

1.2 FUNCTIONS AND ACTIVITIES OF TRANSPARENCY AND NEUTRALITY OF MILK SAMPLING (TNMS) PROJECT

Between years 2004 and 2010 prior to establishing and operating the TNMS project, the Kosovo dairy processing companies would collect and deliver samples of raw milk to the KFVA national laboratory for testing. The results, recorded manually, would then be returned to the dairy processing companies. The dairy processors in turn would rely on the test results for calculating the payments they made to dairy farmers. This situation sowed confusion and distrust among dairy farmers, leading allegations that dairy processors were falsely penalizing financially farmers for supplying supposedly subpar grades of raw milk. On the flip side, dairy processors complained that the lack of transparency and removed any financial incentive for farmers to produce raw milk of the higher quality that dairy processors and the market demanded. This led in short order to a temporary breakdown in the system, and the suspension of the raw quality-linked pricing scheme.

USAID, together with KVFA and other international donor partners, in year 2010 designed and in its initial phase supported financially the implementation of the Transparent and Neutrality Milk Sampling (TNMS) project activities aiming to improve the quality, quantity, and competitiveness of the raw milk produced by Kosovo's dairy farms through proving premium prices for higher quality produced of raw milk . Delivering the raw milk test results via SMS application to all dairy farmers and to dairy processors via KVFA website affiliated with the TNMS project has proven to be an

important catalyst for the economic growth of the Kosovo dairy industry. The SMS message application makes information on the quality of raw milk quickly available to all those dairy farmers, throughout Kosovo, who are participating in the TNMS project. This effort dovetails with the TNMS project stakeholder's mission's primary goals of strengthening Kosovo's private-sector economy, increasing employment (especially among rural populations) and reducing the country's significant trade imbalance. The successful integration of science and technology has improved the competitiveness of Kosovo's dairy processing plants, increased the incomes of its dairy producers and gained the trust of the Kosovo consumers in consuming domestically produced fermented dairy products.

As the TNMS project in part belongs to KAMP, is implemented through KAMP, and is currently providing major support to KAMP's activities and infrastructure, it is appropriate to describe the functions and activities of the TNMS project. The main purpose of the project is to implement the Administrative Instruction MA- Nr. 20/2006 on Quality Standards and Categorization of Raw Milk. The TNMS project offices are located in the Identification and Registration of Livestock (I&R) building belonging to KFVA in Fushë Kosova where it has a small but fully equipped office.

The project is staffed by a Project Coordinator, Financial Officer and six field officers. The six field officers are each provided with an air-conditioned van belonging to KAMP which they use to collect every month bulk milk samples for quality and purity testing at the KFVA laboratory from around 2000 participating farmers.

The Project Coordinator reports to a TNMS Management Board composed with representatives from local institutions, such as KFVA, MAFRD, KAMP, and KDPA.

The main outcomes of the project should be:

- Raised farmers' awareness of the importance of maintaining hygiene at the farm which is reflected in the improvement of the quality of fresh milk in Kosovo;
- Increased confidence of farmers in the outcomes of the analysis of their raw milk samples;
- Increased number of dairy processors participating in the scheme to pay dairy producers their government subvention which is allocated according to the quality of their raw milk;
- Employment by KAMP of the project staff at the end of the project to assist KAMP to achieve financial self-sustainability;
- Continuous improvement of the quality of fresh milk.

Although the field staff of the project are in a good position to pass on extension messages to dairy farmers through regular contact, so far, the TNMS field staff have received specific training related to dairy farming though all of them have a degree in veterinary science.

1.2.1 PROJECT FUNDING

Currently, TNMS project operational costs are covered by deduction from the monthly milk payment check that each dairy producer receives from his milk processor for the raw milk supplied in that particular month. If that dairy farmer participates in the bulk raw milk-testing scheme and receives a subvention from MAFRD depending on the test results of bacterial cell count of sampled milk. The deduction is 0.002 cents per litre of milk delivered to the dairy processor, which is sent directly through bank transfer from the dairy processor to the TNMS project/KAMP.

Project revenues are increasing from month to month, as well as the number of dairy processors that transfer the deductions. This is an indication of increased farmers' interest in participating in the project, as well as the increased number of dairies willing to cooperate.

1.3 GOVERNANCE OF KAMP

Kosovo Association of Milk Producers (KAMP) is an organization of local commercial dairy farmers from across Kosovo, which means that KAMP is governed by the elected representatives who are dairy farmer-leaders coming from seven geographic regions throughout Kosovo whom KAMP management is passionately serving.

Based on the Statute of KAMP, the General Assembly of KAMP organizes a meeting of its members (milk producers) once every three years to elect two representatives from each of the seven regions of Kosovo, namely: Pristina, Mitrovica, Peja, Prizren, Ferizaj, Gjilan and Gjakova.

The 14 selected representatives comprise the Management Board of KAMP. They elect a President and two Vice-Presidents from their members. With the support of the project "Improving the Livelihood and Strengthening the Position of Dairy Farmers in Rural Areas" supported by We Effect, in 2023 KAMP organized 6 meetings with members to represent women on the board of the association. The meetings are held in the 6 regions of Kosovo and the representation of women on the KAMP board will be 10 - 20%.

In addition to the Management Board, KAMP has a Professional Board, or Advisory Body, consisting of four University Professors. The role of the Advisory Body is to provide professional consultancy on innovative ideas for the future vision of the milk sector in Kosovo. This Advisory Body operates voluntarily and, currently, is composed of four Professors from the University of Pristina, Faculty of Agriculture and Veterinary.

KAMP has an Executive Director, selected by competition, who executes decisions made by the Management Board and liaises between the Management Board and the Advisory Body. Neither the Executive Director or the members of the Advisory Body have the right to vote in the Management Board of KAMP.

1.4 HUMAN RESOURCES

Table 1. KAMP human resources

Turatitantian	Staff		
Institution	Technical	Administrative	Total
The board of KAMP, President of KAMP		14	14
Executive Director		1	1
Professional board or advisory board	4		4
Project coordinator		1	1
Project Officer	1		1
Financial Officer		1	1
Field Officer	6		6
ТОТ	11	17	28

1.5 FUNDING OF KAMP

Currently, two sources of funding exists for KAMP: 1. Monthly membership fees and payment for raw milk quality testing implemented through TNMS project and 2. Annual membership fees based on the number of milking cows in the farm. The criteria for annual membership fees are based on the number of milking cows in the farm are as follows:

- $1-5 \text{ cows} \quad 0 \in$
- $6-10 \text{ cows} \quad 20 \notin$
- 11 30 cows 50 €
- $31 60 \text{ cows} \quad 100 \in$
- 61 100 cows 150 €
- >100 cows 200 €

The income from annual membership fees is small and farmers do not pay regularly. KAMP needs to convince MAFRD to only provide subsidies on milk to dairy farmers who have paid up KAMP annual membership fees. The scheme for payment for milk quality is operating well because milk producers who want to receive subventions from MAFRD dependent on milk quality can only apply if they are members of the TNMS project. This source of funding is creating financial sustainability for KAMP as farmers pay regularly 0.002 euro per liter of milk to TNMS, which is part of KAMP.

To enable KAMP to collect membership fees from its members it must be able to demonstrate the value of membership by creating opportunities for its participants to increase their profits from dairy farming which they would not be able to get if they are not members of KAMP.

SECTION 2: DEVELOPMENT OF A STRATEGY FOR KAMP

The overall strategy for the dairy sector is to improve the domestic market position by responding and delivering to the end market in a timely manner with dairy products of consistent quality and quantity. Fuelled by good milk prices and the scarcity of alternative income-generating opportunities, the number of commercial dairy farms has increased in recent years in Kosovo. Nevertheless the milk yields per cow are still about one-half of commercial dairy farms coming from neighbouring countries and one-third of the average in the EU.

Given that a high proportion of dairy products are imported, the primary strategy in the dairy sector is import substitution. To substitute some of the imported dairy products, the domestic dairy industry should aim for greater dairy farm production efficiency, diversification of the variety of dairy products at the processing level and enhancements to dairy supply chain relationships. It is estimated that small-scale dairy farmers are producing at only 40 percent of their capacity due to lacking of up to date information on milk quality and dairy farm hygiene, animal nutrition and feed quality, reproduction efficiency and animal health. The more commercially oriented dairy production sector has made significant progress in previous years however, these larger farms are the ones that are advancing rapidly and demanding more infrastructure and services in order to compete effectively.

In order to meet these challenges, it is essential that dairy processors begin to engage more effectively with dairy farmers. It is this direct linkage that will enhance technology adoption, increase producer confidence to invest and result in increased yield and quality of milk and, ultimately, other dairy products. KAMP will work with all stakeholders in the dairy value chain, to strengthen these linkages and to expand the services for its members.

Without a strong link between all actors in the dairy industry, the farmers are not able to learn about modern farming techniques and to be trained on best practices. In the same time, without that link, the university professors and researchers are not able to study the problems in the sector and contribute to the development of the dairy industry. In addition, the new graduates of FAVUP are not prepared to offer value added services to farmers their entire knowledge is based on theoretical knowledge without any practical work. As a result, despite all the aid that the sector has received previously, the dairy farmers have not become very competitive compared to their peers in the neighboring countries let alone those in the developed countries.

Two active dairy associations in Kosovo represent dairy producers and dairy processors. Associations, like any business, move through a growth curve. There is an initial response from the sector, generated by high expectations that the association will facilitate improved business-operating conditions. This initial period is followed by a stage that is often characterized by disappointment, as expectations are not fully realized. Members often question their investment in the association, the board of directors often moves slowly and, if not addressed, the association can deteriorate into a state of inactivity. The associations can move out of this stage into a period of productivity by re-aligning expectations that are realistic and offering viable services to their members.

Several opportunities exist for local dairy farmers and dairy processors to invest in gaining additional local market share, but the key to all of them is building trust and collaboration in the dairy supply chain and production and processing to the highest standards of efficiency and quality. All actors in the dairy value chain need to step up and commit to making dairying work for everyone to achieve the aspirations for production and processing to the highest standards of efficiency and quality.

KAMP will work closely with the dairy processors association in building capacity to provide viable services to members and by serving as an effective voice for the industry on regulatory issues.

The following steps are advocated to improve dairy farm management and production efficiency through expanding KAMP services for its members which in return will increase KAMP revenue streams and ensure its financial self-sustainability.

- STRENGTHENING THE CAPACITY OF KAMP TO BE A NATIONAL CENTER FOR MILK RECORDING
- INCREASE KAMP CAPACITY TO ENFORCE LEGISLATION FOR MILK COLLECTION SAMPLES IN THE FIELD
- ESTABLISH KAMP TRAINING CENTER FOR DAIRY SECTOR
- ESTABLISHING FEED ANALYSES LABORATORY FOR TESTING FORAGE FEED QUALITY
- DEVELOPING DAIRY FARM MONITORING PROGRAM FOR KAMP MEMBERS
- SUPPORT FOR SMART FARMS POWERD BY ICT TO BOOST DAIRY OUTPUT
- ADVOCACY AND LOBBYING

2.1 STRENGTHENING THE CAPACITY OF KAMP TO BE A NATIONAL CENTER FOR MILK RECORDING

KAMP is the only entity in Kosovo that is performing milk recording and quality control of the milk produced in Kosovo. However, the activities performed by KAMP are very limited and they mostly consist of collecting bulk raw milk samples, transporting to KVFA laboratory and reporting on the results to farmers. Although currently with limited scope, KAMP is the only institution capable of becoming national milk recording centre.

A National Milk Recording (NMR) centre includes milk-recording service specifically designed for generating data and building robust insights that empower farmers to make informed decisions on cow productivity. National Milk Records is foreseen to collect data on innovative range of milk quality, milk pregnancy testing, energy balance, health testing and urea testing. The data will enable farmers to monitor the performance of their cows over time. By comparing data from different lactations or periods, farmers can assess the progress or decline in individual cow productivity.

FORESEEN ACTIONS

- Commence a pilot project for individual cow milk testing at the KVFA milk laboratory with a small sample of commercial dairy farmers who are KAMP members. The Individual cow milk testing will enable to provision of information on dairy cow health, energy balance and dairy cow pregnancy testing. The test result does depend on accurate animal identification and good milk sampling techniques.
- Setting up InterHerd+ a comprehensive software package that allows farmers and KAMP advisers to manage and analyze KAMP member's dairy herds records by combining on-farm records and external data.
- KAMP together with professors and students from the Faculty of Agriculture and Veterinary University of Prishtina will produce an annual study report analyzing KAMP member's dairy herd performance

- The KAMP project staff need training on milk recording, milk quality, and farm management
- Supporting KAMP with special equipment for measuring milk quantity and other demonstration equipment during training sessions;
- Supporting KAMP staff to train farmers in milk recording and fertility;
- Supporting milk laboratory to increase the number of milk samples that can be tested.

2.2 INCREASE KAMP CAPACITY TO ENFORCE LEGISLATION FOR MILK COLLECTION SAMPLES IN THE FIELD

Consistent raw milk supply and better raw milk quality is essential to meet market needs and is important in better linking dairy farmers to markets and increasing farmers' sources of income. Indeed, dairy farmer market needs are met through enhancing raw milk quality and production efficiency that adds increased value to the final dairy products.

Good-quality raw milk has to be free of debris and sediment; free of off-flavors and abnormal colour and odor; low in the bacterial count; free of chemicals (e.g., antibiotics, detergents); and of normal composition and acidity. The quality of raw milk is the primary factor determining the quality of fermented dairy products. Good-quality dairy products can be produced only from high-quality raw milk.

The hygienic quality of raw milk is of crucial importance in producing milk and milk products that are safe and suitable for their intended uses. To achieve this quality, good hygiene practices should be applied throughout the dairy supply chain. Milk testing and quality control should be carried out at all stages of the dairy value chain.

TNMS (Transparency and Neutrality of Milk Sampling) project is a Raw Milk Quality Improvement Program, at its initial stage is funded by USAID projects, and the EU, currently is funded by KAMP members. Since the start of the TNMS project, the raw milk quality has been improving steadily but to reach goals set by KAMP for reaching the EU raw milk quality standards. KAMP intends to support the improvement of dairy farm management practices and raw milk quality improvements through organizing training sessions at dairy farms that are KAMP members.

This strategic objective of KAMP includes working in conjunction with dairy industry actors and KFVA in introducing the "Seal of Quality" certificate. The new "Seal of Quality" for raw milk will motivate selected dairy farm participants in the TNMS project to join the "Seal of Quality" program to stimulate consumer confidence in Kosovo processed dairy products. An authorized body comprised of representatives of KAMP, KDPA, MAFRD, KVFA, and UPFAV will grant the "Seal of Quality" to dairy farmers, which can maintain predetermined quality management dairy farm practices for raw milk produced at their farm. The "Seal of Quality" is a stamp of assurance. It lets dairy processors and consumers know they are buying high-quality raw milk made with milk from cows that are participating in TNMS and producing raw milk at the highest EU raw milk quality. When you see the "Seal of Quality" logo on a product in a store or on a menu in a restaurant, you can trust it is the real thing, and not an imitation.

The new "Seal of Quality" for raw milk is a voluntary program for dairy farmers who are selling their milk to dairy processors restaurants, retailers and food manufacturers. To get the approval, they must meet strict requirements. First, their dairy products must be made with milk from cows raised in Kosovo dairy farms who are KAMP members and must meet the highest the EU raw milk quality standards.

The current technical and infrastructural capacities need to be upgraded in order for KAMP to implement current TNMS activities and to add additional operating activities. TNMS currently is located in the KFVA Identification and Registration (I&R) office. The office of TNMS has a total space of 10-15 m^2 and the office has basic conditions for office work, such as: desks, chairs, laptop and printer. These office utilities belong to KFVA.

FORESEEN ACTIONS

- Continuation of the Raw Milk Quality Improvement Program for KAMP members through TNMS project
- Introduce the "Seal of Quality" certificate for raw milk
- Increase collection of KAMP dairy farmer membership fee, though increasing the number of dairy farmers participating in the bulk milk sampling scheme and individual cow milk sampling scheme for dairy farms who have been awarded the Seal of Quality" branding for raw milk.
- The field officers of KAMP need to train farmers regularly on milk sampling and farm management in order to increase the capability of the farmers and reliance on KAMP for technical guidance;
- KAMP needs to invest more in technology for transporting milk samples from farmers to the milk laboratory.

2.3 ESTABLISH A TRAINING CENTER FOR DAIRY SECTOR

To enhance the economic performance Kosovo dairy farmers must address the responsibilities inside the farm gate. The strategy that will be followed by KAMP is to be focused on the key areas that make a difference in improving dairy farm management practices. Dairy farming is no exception and demands high management standards if reasonable returns are to be achieved and sustained.

KAMP will make concerted efforts to transfer training skills and knowledge about good dairy farming practices to an extended group of dairy farmers who are members of KAMP. The goal is to disseminate the dairy farm management information and the innovations through organizing roundtable discussions and farm visits.

Many small scale dairy farmers are lacking the knowledge on best dairy farm management practices. Organizing dairy farm management improvement events through demo farm visits will help in sharing best farm management practices. The knowledge transfer will be achieved by visiting another farm business for the day, shadowing all aspects of the day-to-day operation in order to gain a full understanding of how the demo farm management practices are differing from other dairy farm operations.

Training represents a key element for KAMP's involvement in the milk sector and farm management as it contributes to updating the level of knowledge of field officers and KAMP advisors involved in taking milk samples and training farmers on farm management.

KAMP is implementing periodical trainings for the farmers and staff. Trainings are provided mainly through international donors. Training strategy has not yet been developed. KAMP must create a training unit that will be in charge for preparation of training plans and preparing training curricula. KAMP will seek accreditation of the training unit by the National Qualification Authority (NQA).

The overall objective of this action is to increase the quantity and enhance the quality of milk production in Kosovo through increased and consistent cooperation between KAMP,FAVUP and the dairy farmers throughout Kosovo; thus, contributing to improve competitiveness of Kosovo dairy farmers.

The goal of this action is to create a sustainable link between the commercial milk producers (members of KAMP) and the dairy experts from the FAVUP whereby the dairy experts will provide continuous know-how support to the commercial milk producers enabling them to produce larger quantities of milk with higher quality.

The purpose of the dairy training center is to organize practical training for dairy farmers, students, graduates, veterinarians, and other dairy specialists. Furthermore, the purpose of the dairy farm training center is to present to the milk producers, students and veterinarians the most up to date technology used in the dairy farming industry. The long-term goal of the dairy training center is to provide continuous extended advisory services to KAMP members.

This action intends to improve dairy farm management efficiency for Kosovo dairy producers through various trainings on balancing dairy feed ration, proper milking and cooling procedures, dairy farm record keeping and herd health.

Furthermore this action aims to improve the supply chain through focus group discussions between milk producers and dairy processors, FAVUP staff, policy makers and dairy specialists. This action seeks to improve the working environment, marketing and policy framework for milk producers by guiding them towards the production of high quality raw milk as specifically demanded by dairy processors and end consumers.

FORESEEN ACTIONS

The following actions will be undertaken by the KAMP in order to set up a system for the permanent education of the staff and farmers:

• Build up the training center facility in the premises of KAMP.

The dairy training center is expected to be fully equipped and includes a training room, a demonstration barn for milking cows, a milk room equipped with cooling tanks, one fully equipped vehicle for field trips, and additional space for administration and other related activities.

• Establish a training unit within KAMP.

The unit will be in charge of the preparation of training curricula and training KAMP staff and farmers in the dairy sector. The unit will generate income and help KAMP to become more sustainable. With this unit, KAMP will get the training curricula accredited and will increase the income through training farmers and certifying them;

- Prepare a training plan and training curricula;
- Accreditation of training curricula by the National Qualification Authority (NQA).

The curricula in which KAMP intends to be accredited need to be in line with the demands of the farmers and industry and in line with the requirements of the NQA. KAMP needs to apply to the NQA which is the authority that has the mandate for accrediting training institutions from the Ministry of Education, Science and Technology (MEST). With accreditation, the capacity of KAMP as an agricultural training and education body will extend to vocational education. Agricultural schooling for youth which combines theory and practice (internship on pilot farms) with different periods (1 month up to 6 months, winter school) should be considered. Essential is the combination of theory and practical farm work;

- Certification of farmers trained.
- Design a fundraising program to expand the services for KAMP members

To implement this action KAMP is lacking financial resources for developing additional services for its members. KAMP should develop a fundraising program to find donors who can support the implementation of this action to add and enhance services for its members. Establishing a KAMP diary-training center will strengthen KAMP's identity through visibility enhancement of routine practices dealing with KAMP's mission, vision and core values.

2.4 ESTABLISHING FEED ANALYSES LABORATORY FOR TESTING FORAGE FEED QUALITY

Domestic dairy production faces critical gaps in competing with imported products. The principal gaps concern low milk yields, high cost of production and small profit margins. Closing this gap would have an immediate impact on growth, especially in terms of benefits to small-scale dairy farmers.

The first concern is with regard to the unbalanced dairy feeding rations. Throughout Kosovo, farmers are suffering losses due to inefficient feeding practices. A key factor within the milk production industry that determines the quantity of raw milk is the quality of feed consumed. Proper feed analysis would help the farmers to properly balance the feed ration before it is given to the dairy cows. It is important to note that the "forage feed", comprises over 50% of the total feed consumed by the dairy cows. Forage feed is produced throughout the summer and is fed to the dairy cows and raw milk yield at the farm level. Good quality forage is a predisposition for healthy dairy cattle since their body structure requires great amounts of quality feed provided at all times. This action plan to utilize KAMP leads farmers to disseminate the knowledge gained on proper feeding to the

rest of the dairy farmers throughout Kosovo. In addition, the action plans to provide NIR equipment that could be used to perform feed analysis continually. Furthermore, the dairy training center through KAMP field officers and FAVUP graduates will provide advice to farmers consistently. As such, the creation of the link between KAMP, FAVUP, and dairy farmers guarantees success in improving dairy farm management efficiency. The dairy farmers; members of KAMP, already pay a membership fee to support the activities of KAMP.

Seeing the needs of farmers in the field and the lack of a laboratory for nutrition analysis, KAMP aims to create a laboratory for forage feed analysis to provide services for farmers and create additional income from these services.

The cost of the feed represents over 60% of the total cost of milk production. For dairy cattle quality forage is a very critical part of a cost-effective feeding program. The purpose of this activity is to demonstrate the value of testing forages to help increase milk yields and reduce the overall feed cost of producing milk.

FORESEEN ACTIONS

The following actions are identified for establishing an animal feed laboratory:

• Establish fully equipped animal feed laboratory for providing feed analysis services.

For this action a NIRS (Near Infrared Spectrophotometer) will be put up in KAMP premises including drying and grinding the samples. Setting up will be done by consultation with supplying companies. After setting up supplying companies will provide additional online training on the use of the NIRS.

• Drying and grinding of samples on location.

For this option a grinding mill and drying oven will be purchased. The samples, via an "inbound" contract, will be send to accredited lab in EU countries.

• Sending complete samples to accredited labs in EU countries

For this option, no equipment will be purchased (except equipment to take samples). Samples will be analyzed in an accredited lab.

• Determine crude protein, energy and moisture levels of the forage feed samples.

There is widespread recognition that forage generally supplies a relatively low-cost source of nutrition for dairy cows. However, the relationship between forage quality and the level of profit realized from quality forage- feed to dairy cows is often underappreciated. Therefore, once the laboratory is set up and running KAMP will test forge feed of its members to determine crude protein, energy and moisture levels.

• Monitor milk production per cow to determine the effects of the improved forage feed quality

For this activity, KAMP will cooperate with FAVUP to engage students in their thesis research to monitor milk production per cow to determine the effects of the improved forage feed quality

2.5. DEVELOPING DAIRY FARM MONITORING PROGRAM FOR KAMP MEMBERS

Consumers today are more interested than ever before in the food that they consume: how it has been produced, its safety and wholesomeness, who is producing it, and how animals are treated. The Dairy Farm Monitoring Program is focused on earning the trust of all KAMP members by setting the highest standards when it comes to animal care, workplace settings, and environmental and antibiotic stewardship. The Dairy Farm Monitoring Program helps ensure the success of the entire Kosovo dairy industry by demonstrating to Kosovo consumers that KAMP members are committed to producing the best milk with integrity.

The Dairy Farm monitoring Program focuses on six program areas: 1.Farm Sustainability Data Network (FSDN) 2.Animal care 3. Environmental stewardship, 4. Workforce development. 5.Antibiotic stewardship and 6. Biosecurity. Through these six programs, the Dairy Farm monitoring Program will work with dairy producers who are KAMP members and dairy industry partners to demonstrate the implementation of the highest standards in milk production by Kosovo dairy farms.

FORESEEN ACTIONS

• Initiation of Farm Sustainability Data Network

The Farm Sustainability Data Network (FSDN) it is a new initiative introduced by EU commission through its European Green Deal plan to make the EU economy sustainable and carbon neutral by 2050. The FSDN initiative will expand the scope of the current FADN network to also collect farm level data on environmental and social farming practices, as well as provide farmers with reporting on their farm performance. The data collection methodology will be in line with the existing one for the current FADN. KAMP will assist and train its members to introduce and expand the list of new data and variables to be included in the future FSDN database

• Developing Animal Care Guidelines

Detailing science-based animal care guidelines that evolve with the latest dairy research. Ensuring the integrity of the dairy farm monitoring program with third-party verification by qualified dairy experts who evaluate a representative percentage of farms each year to demonstrate that the Dairy Farm Monitoring Program is working as intended.

• Dairy farmers the environmental stewards

The dairy farmer environmental stewardship estimates farm-level GHG emissions and energy intensity using a scientific, peer-reviewed model. The dairy farmer environmental stewardship program area with the help of third-party verification by qualified experts helps dairy farmers to

track and communicate their dairy farm environmental achievements. The data needed to estimate GHG emissions and energy use intensity include:

- a) Milk production
- b) Herd data
- c) Rations
- d) Manure management
- e) Energy use
- Workforce development

Talented people have the skills and motivation to succeed in the dairy industry. Skills are developed through a combination of education and experience. The most profitable and sustainable dairy farms have good management practices appropriate to the farm system. Achieving good management practice requires a skilled and motivated workforce.

Kosovo dairy farms provide year-round employment in rural communities but with low wages and without labour safety regulations. One of the main challenges facing today Kosovo dairy farmers is Labor shortages— how can a dairy become the employer of choice?

The dairy industry provides thousands of jobs to hired workers, not to mention the family employees who make their living through dairying. Workforce Development (WFD) focuses on the people who work year-round at dairy farm premises to provide excellent cow care and produce wholesome milk. There are strong community perceptions about dairy farms, based on historic views of long hours and hard work. Modern dairy operations are much more diverse with roles that are highly skilled and provide genuine career opportunities.

The strategic approach for workforce development is to stimulate the demand for a career in the dairy industry that starts in the school system, engaging at all levels but focusing particularly on students midway through their secondary schooling.

The Workforce Development program is focused on developing a manual to implement at dairy farm premises best practices, with a focus on developing sustainable management processes and procedures to promote positive human resources (HR) and safety outcomes.

The retention of talented people depends on demonstrating the greater opportunity and value of a career in the dairy industry. This could be complemented by successful planning to ensure renewal of talent on farms, in research, and dairy training institutions.

• Antibiotic stewardship

There are occasions when animals may become sick or injured and need antibiotic therapy to overcome that challenge and to help an individual animal threatened with a disease or injury. KAMP members take this responsibility to take precautions to ensure that milk from antibiotic-treated animals does not enter the food supply.

The antibiotic stewardship program aims to provide ongoing education for dairy farmers on the responsible use of antibiotics to keep cows healthy and the milk supply safe. The goal of KAMP

members is to produce the best-tasting, safest, and most wholesome milk possible. Kosovo consumers demand the best milk and KAMP dairy farmers should strive, through continuous improvement, to not only meet their needs but to exceed their expectations every day.

Day in and day out, dairy farmers provide the best in animal husbandry. As part of continuous improvement, KAMP members evaluate the best management practices and disease prevention protocols to keep our animals healthy and comfortable

The antibiotic stewardship program is focused on developing a manual containing steps to prevent drug residue best practices to implement at dairy farm premises.

• Biosecurity stewardship

Biosecurity includes dairy farm management practices designed to protect cattle and people from disease exposure. Focus on preventing exposure whenever possible. Biosecurity stewardship focuses on providing dairy farmers with the tools to keep their cattle and dairy businesses safe from the unseen threat of disease. KAMP in collaboration with KFVA and FAVUP staff provides the resources needed for farmers to build their own "every day" or "enhanced" biosecurity plans.

The strategic approach is for KAMP to develop a prevention biosecurity Task Force, which includes representation from dairy farmers, KFVA state animal health officials, FAVUP biosecurity experts and the veterinary community, who will be responsible for developing the information manual for enhanced biosecurity measures at dairy farms members of KAMP. The biosecurity Task Force will guide the KAMP biosecurity stewardship program ensuring that it fosters a culture of continuous improvement and that the best biosecurity management practices, evolve with the latest biosecurity research.

• Promoting KAMP work on social media and while implementing its activities.

Social media plays a very important role in enhancing interactions and information flows among different stakeholders in the dairy industry. The utilization of social media to promote KAMP activities remains underused. KAMP plans to increase its visibility by promoting its activities through expanding and enhancing the utilization of social media.

2.6. SUPPORT FOR SMART FARMS POWERED BY ICT TO BOOST DAIRY OUTPUT

In recent years, Kosovo dairy farms have been subjected to an increment of the demands in terms of quality, together with a reduction in the price of their product, which meant the necessity to increase the efficiency of the production. It is at this point, that the adoption of the "Smart farming" practices comes into play. The term "Smart Farming", tries to incorporate advanced technologies such as sensors, artificial intelligence, and robotics to farms as a medium of increasing the efficiency of the production of food and minimizing the use of resources. The tasks of farm management, with the use of these technologies, are not only based on the positioning but also take into account improved data and the context in real-time. From the farmers' point of view, Smart Farming should provide them with assured value in the form of better making of decisions for more efficient farm business management.

Production of dairy animal feed is an important part of the dairy farm business management. In recent years due to climate change like all other agriculture crops the production of forage feeds for dairy animal feeding is impacted by droughts, shortened seasons, and unpredictable weather patterns. Protecting dairy animal feed crops against natural hazards and making them more sustainable could allow Kosovo dairy farmers to continue raising dairy farming productivity against climate changes and be able to sustainably produce more high-quality milk for the domestic market and also for exports.

Currently, none of the dairy farmers in Kosovo use ICT services in the dairy farm decision-making process. The application of information and communication technology (ICT) will transform Kosovo dairy farms into smart farms, giving the dairy sector a boost.

FORESEEN ACTIONS

• At least two dairy farms will utilize the ICT services in the dairy farm decision-making process

At least two dairy farms that are KAMP members will be transformed into "Smart farms" by utilizing the ICT services. To boost the dairy farm output farm managers will be able to select multiple parameters through using a multiple or a single technology measuring several parameters. The most commonly measured parameters through ICT technologies are: daily milk yield per cow, cow activity, mastitis, and milk components.

• Dairy farm management knowledge transfer

Many small-scale dairy farmers lack knowledge of the best dairy farm management practices. 'Smart farms" utilizing the ICT services. will become a model dairy farm. Organizing dairy farm management improvement events through demo farm visits will help in sharing best farm management practices. The knowledge transfer will be achieved by visiting 'Smart farms" for the day and shadowing all aspects of the day-to-day operation to gain a full understanding of how the demo farm management practices differ from other dairy farm operations.

2.7 ADVOCACY AND LOBBYING

Consumers are assumed to buy a product up to the point where the perceived value of the product equals the price of the product. KAMP, together with KDPA and Kosovo government officials must take the responsibility to avoid unfair trade practices and ensure that there is a level playing field for all actors in the market and that the unfair trade practices are monitored closely to avoid distorting competition. It is essential for KAMP to fully understand the dairy market environment in Kosovo, and be able to evaluate if the market is working efficiently and whether the KAMP members are getting an acceptable share in the Kosovo dairy market.

KAMP will identify key policy areas and initiatives that will have a significant impact on the dairy farmers' enabling environment in Kosovo. This includes becoming more engaged in regional initiatives aimed at preparing for EU accession and enhancing competitiveness in regional markets. To this end, KAMP will facilitate training, workshops, and study tours to contribute to the

development of best practices and lessons learned through efforts to improve the dairy farmers' enabling environment in Kosovo and regional markets.

Potential Areas for Policy Analysis and Specific GOK Initiatives

The main objective of this action will be that government policies and programs provide better conditions for the development of agriculture and farmers- --- - milk producers. Within this strategy, KAMP will work together with local and national authorities for a practical approach to agricultural development and support for milk producers, at the level of municipal strategies for agricultural development, as well as national laws and regulations that support farmers and the marketing of agricultural products. Through advocacy and lobbying, KAMP aims to achieve the following results:

- Increased transparency in the granting of grants and subsidies both from the central and local level that allow effective access
- Creation of special programs to support small farmers
- Improved gender equality in agricultural sectors

Furthermore, KAMP together with KDPA and supported by UPFAV graduates will analyze and monitor the enforcement of Kosovo government policy initiatives related to the dairy industry such as:

- Anti-dumping policy and enforcement for imported dairy products
- Food safety and quality control policy for locally produced and imported dairy products
- Branding and labeling policy for locally produced and imported dairy products

FORESEEN ACTIONS

- Improve relationships with national and local government institutions and other stakeholders in the dairy supply chain,
- Support at the municipal and local level for the development of strategies for the development of the milk production sector, increasing support with grants for small farmers;
- Lobbying to the government so that all grant beneficiaries have professional training
- Advocacy for the implementation of the law on agriculture;
- Support with professional expertise for the MAFRD and representing the interests of milk producers in the preparation of laws and other measures that have an impact on milk producers
- Lobbying to improve gender equality on KAMP board members and in agricultural sectors
- Lobbying the Ministry of Finance to exempt milk producers from input taxes;
- Lobbying for the implementation of environmental rules;