



# Enhancement of Farmers' Cooperatives in Georgia

## Report of Baseline Survey

### Qualitative Part

March 2014  
Tbilisi

# Technical Part

## Objectives of the Survey

This survey report is prepared within the scope of the program “Enhancement of Farmers’ Cooperatives in Georgia”, funded by the European Union.

The survey provides baseline information, which, on the one hand, has independent value and on the other hand – represents valuable informational basis for the program in three directions:

1. For establishment of the current state of affairs in the municipality before commencement of agricultural program;
2. For making the most optimal decision about distribution / allocation of priorities and resources at the initial stage of the program;
3. For identification of qualitative indicators, which will be statistically measured on the second stage of the survey, from the rural population;

To be more specific, the following issues were examined within the scope of the survey:

- General characteristics of agricultural activities in the municipality; identification of problems, needs and requirements and possible solutions within the scope of farmers’ cooperatives;
- Types of basic agricultural products per municipalities – direct and indirect factors related to development of specific branch of industry;
- Forms of communication with farmers and representatives of relevant authorities on local level;
- Institutional, branch, social-economic or technical parameters required for enhancement of farmers’ cooperatives.

## Methodology of the survey

The survey was conducted by means of focus group method on local government level. People who, within their competences and authorities, are directly related to agrarian sector on a municipality level were selected in the capacity of respondents aware of the subject of the survey. Such respondents were representatives of Information-Consultation Services -

territorial bodies of the Ministry of Agriculture of Georgia; the authorities under the Ministry of Agriculture on the municipal level – LEPL National Food Agency; “MEKANIZATORI” Ltd.; representatives of local government and administrative bodies. In number of cases, farmers participated in the discussions, as they are interested in development of farming industry within the scope of cooperation.

The survey covered all target municipalities. In total, 16 focus groups were conducted in 16 municipalities.

**Focus groups were conducted with the following technical specifications:**

- Focus groups were held in the buildings of target local municipalities. In most cases, regional authorities of the Ministry of Agriculture are located in the same building. The same buildings house local administration of the municipality and the Sakrebulo; it simplified participation of the respondents in the discussions.
- The composition of focus groups, which included respondents from different agencies, allowed us to trace different opinions among the farmers, experts of agriculture and representatives of the local self-government authorities. Despite of the fact that the respondents viewed one and the same issue from different angles, their positions and feedback on number of topics is almost identical.
- The respondents were very involved and open-hearted. They discussed perspectives and challenges of farmers’ cooperatives in a specific context, which directly or indirectly linked with operation of farmers’ cooperatives and shaped farmers’ behavior in this direction. The respondents were forming their opinion about every issue under consideration and were assessing its positive and negative sides. The respondents explained that their participation in the discussion and their interest was caused by the acute nature of the problem and by emergence of a part interested in the problem.
- Focus groups were held before commencement of agricultural activities. Analysis of agricultural directions of the municipality, which is included in this report, depicts the condition of the previous year. In number of cases, after completion of ongoing works, we may end up with different state of affairs for 2014.

## General Part of the Report

The topic of farmers' cooperatives is surrounded with opposing opinions. All respondents agree about the necessity of farmers' cooperatives, which will inevitably be established and which will positively affect reduction of poverty among the rural farmers via consolidation of labor and intellectual resources of such farmers. Though, it is important to have successful candidates of cooperation at the initial stage of cooperatives, as they will provide the necessary precondition for development of farmers' cooperatives in rural areas; otherwise the farmers will have doubts about the idea of farmers' cooperatives, which will impede implementation of cooperative system for a long time. Thus, the topic of the discussion is whether there are conditions for development of sustainable and successful cooperatives, and if yes – to what extent and in which directions, in consideration of current agricultural situation as well as farmers' socio-psychological conditions.

Respondents talk about number of issues, which form economic-rational motivation of the farmers either to establish or to enroll into farmers' cooperative. Farmers' motivation is made of the ability to manufacture a product that is related to basic trends of development of agriculture, natural agro resources, availability of agricultural services, land titles, beneficial agro-loan policy and etc. In addition, involvement into farmers' cooperative is also predetermined by past experience in farming, and information technologies and organizational management skills.

Besides, within the scope of the program, branch priorities must be identified in each municipality and farmers' cooperatives and relevant service units must receive adequate assistance within the scope of the program; it will, on the one hand, create more conditions for establishment of sustainable cooperatives and on the other hand – shall support competitiveness and economic growth of specific branch in the municipality.

As a result of the survey it was found that current conditions of the municipalities in the context of agricultural directions, level of people's involvement and cooperation potential is different in each municipality, although the problems pertinent to the specific directions of agriculture are more or less common, with slight differences among the municipalities. Thus, the findings of the survey are provided together with overview of agricultural branches; priorities of each municipality are highlighted and needs are specified. Moreover, the report includes several important circumstances that relate to socio-psychological background of the farmers and represent very important circumstances for planning of right strategy and communication with farmers, within the scope of farmers' cooperatives.

## Basic Part of the Report

### Cattle-Breeding

In almost all questioned municipalities cattle-breeding is a top branch; according to the respondents, it is explained by increased export of livestock from Georgia and sale of cattle on local market during recent years. Cattle-breeding takes top positions in those municipalities with crop cultivation as key profile. As they say in Marneuli, during recent years, increased priority of cattle-breeding is also demonstrated by the total amount granted as low-interest state agro loans, where 80 % (GEL 8 million) was allocated to cattle-breeding. Also, in Gardabani respondents speak about the trend of increased interest towards cattle-breeding, which relates to the economic importance of this branch – in comparison with crop cultivation, which are perishable and become second priority due to poor storage and sale. Increased number of cattle and ruminants is identified in Vani and Samtredia, as well as in Ninotsminda region where total area of cultivated land is gradually decreasing and turning into pastures.

Though, recently increased demand and prices on meat and meat products raised the interest of rural population in breeding the cattle; though, development of this branch requires basic changes and increased demand asks for rehabilitation and development in compliance with modern requirements: in particular, the respondents speak about number of issues, which could be eliminated only as a result of systemic measures executed by the Government; they also identify the directions, where farmers' cooperatives can play effective role in terms of production and service in cattle-breeding industry. In those municipalities, where cattle-breeding is more developed, they speak about state regulations, which will create the basis for successful operation of farmers' cooperatives in this branch. Sagarejo Region is facing acute problems in the field of cattle-breeding; according to the respondents, tis region is number 1 by total number of cattle and ruminants. Because of high number of animals, the following measures must be taken in the first places:

**Stock-taking of animals** – *“If I have no idea how many animals I have, I will not be able to identify necessary works and areas for development of the branch”*. The respondents speak about the measures, which could be implemented for the sake of systemic change of the branch, once the total number of animals is established; in particular:

**Identification of the optimal number of animals according to total pasture area of the municipality** – “*we don’t know if the pastures of the municipality correspond to the number of animals*”. Though, they also point out that solution of the problem is also related with the issue of land inventory; currently, the municipality has no information about classification of land area – as per agricultural type (land is for cultivation or pastures), as well as the ownership type (private or state). As a result, the problem is that “*farmers depend not on their own land but on private pastures; cattle enters others’ fields and destroys the crops*”. Thus, “*cattle must be kept by those who have pastures*” (Sagarejo).

Establishment of the rule/regulation of pasture management – in Ninotsminda and Tetrtskharo municipalities the respondents spoke about the importance of pasture management, which means rotation grazing and on the one hand decreases soil erosion due to overgrazing and on the other hand – expands the pasture area and feeding value.

**Respondents speak about broad scope of animal diseases and identify veterinary measures, which require systemic approach by the government.** as per the respondents, under current circumstances, when disease is widespread and the awareness of farmers – very low, it is important to provide free vaccination within the scope of state program; it would significantly contribute to improvement of animal health and would increase farmers’ awareness about animal care; as a result, animal disease would decrease – “*we (agricultural information consultation center) conduct vaccination only at the areas of disease outbreak, but local vaccination at the outbreak points provides only temporary solution of the problem*”, as “*one sick animal endangers the whole herd*”; in addition to the above, “*the state must accustom the farmer with vaccination; therefore, it must be free at the beginning and then become paid*” (Sagarejo).

In terms of proper communication, local veterinary plays crucial role in increasing of vet service acceptance by the farmers and implementation in practice. Thus, the respondents stress the **importance of assistance provided by local veterinary service centers within the scope of the program and increase of the qualification and skills of veterinaries** - as they stated in Akhalkalaki and Marneuli, farmers still use Russian/old medications. “*Market mainly offers Russian medicines, which cannot fight the modern diseases*”. In addition, often villages have no veterinary service; it is located far away and they have to apply to central village to get the service. Getting information about disease outbreak and preventive measures depends on chance; it especially relates to the farmers who do not seek information actively. They use

veterinary sales centers of central villages and there they can only get general consultation after the identification of threat and/or where only medication is sold.

Though, there are different opinions relating to farmers' passiveness, which in its turn is caused by their pessimistic attitude – “*nothing will get better, anyway*”, and by their laziness – “*they don't bother themselves*”. Naturally, both of these factors relate to lack of awareness about the importance of timely veterinary service and their negative experience, as treatment of sick animals is less effective or is very expensive; thus, it is important to raise the awareness about prevention of animal diseases, which serves two key purposes: on the one hand, prevention of animal diseases includes larger groups of farmers and on the other hand, learning about the benefits of prevention will allow “passive farmers” to avoid animal diseases and increase referrals to veterinary services; in its turn, it will increase animal productivity and farmers' income generated from cattle.

As it was noted during the survey, in terms of wide-spread diseases, it is possible to partially resolve the problem if farms will be provided with so called disinfection barriers, which would allow for sterilization of animals entering the farm.

It must also be mentioned that animal diseases are more wide-spread in the regions adjacent to movement routes – Kvemo Kartli and Samtskhe-Javakheti, and less spread in Sachkhere and Chiatura Municipalities. The respondents explain it by the territories being “closed / isolated”. Though, lack of veterinary service and lack of breed testing experience are identified as obstacles to development of this branch.

**All respondents agree that priority must be given to intensification of the branch via implementation of modern methods of animal care and exploitation. It is possible to establish farmers' cooperatives in this direction or enhance relevant service centers, which will meet the needs of the farmers in the following directions:**

**Improvement of animal breeds** – for the purpose of improvement of animal breeds and increase of productivity in the municipalities, priority direction for farmers must be arrangement of breeding activities (breeding bulls) and implementation of artificial insemination of animals. As it is noted in number of municipalities (Samtskhe-Javakheti, Kvemo Kartli and Kakheti), many non-governmental organizations carried out programs in this direction. Though, the respondent state that the demand is not very high, which is explained by lack of such centers and by low awareness of the farmers – “*they are not willing to implement innovations; they*

*don't know what will be the outcome; if the cow eats a lot, it will it also give more milk and meat? Better to have two cows instead of ten if these two equal to ten". (Tetrtskharo)*

Though, some respondents state that despite of the care of cattle, “we feed them but the animal does not give product, because the breed is bad”. Some respondents say that bad breed of the animals is caused by poor nutrition of such animals. “Our animals are actually experiencing famine; animals need care” (Samtredia).

**Perennial pastures and improvement of feed base** – in all surveyed municipalities the respondents state that in spring they experience lack of pastures. Due to lack of pastures or inefficient management of existing pastures, in winter animals are fed with rough/dry feed, which is not the feed for milking or meat animals. In the municipalities people state that there are number of farmers' unions, which could be provided with assistance within the scope of farmers' cooperative program (e.g. purchase of combines, seed-cleaning aggregate and other machines); it is also possible to offer improved feed base on local level: in particular, small farmers' cooperatives must be supported in the following directions:

- **Seeds production** – availability of Lucerne and other seeds is complicated, and price is high.

*“Last year we could hardly find the seeds of sainfoin in the country” (Kaspi)*

*“we must implement new technology for preparation of feed base – for instance, in Ukraine they use the plant received as a result of crossbreeding of sorrel and spinach; this plant is rich in protein and fats, has more crop than sorrel; it grows tall and does not need seeding or special care during many years; it was seeded in Marneuli for testing; this culture must be introduced to people”. (Marneuli)*

- **Modern technology of food preparation and storage** – farmers have limited access to animal feed, produced in granules or briquettes. As there are quite few produces, unit price of animal feed supplement on market is high. As they stated in Kaspi Municipality, there is a local enterprise and groups of interested farmers, which creates a precondition for enterprise inventory and provision of relevant technologies, aimed at production of cheap food supplements.

The respondents speak about specific initiative aimed at establishment of farmers' cooperatives in cattle-breeding. For instance: in Akhalkalaki Municipality, meat sellers are interested in establishing multifunctional cooperation, in which primary meat production, slaughter-house and sales centers will be integrated in one union of farmers: *"I will not be forced to go from village to village and buy meat; our members will be busy with primary production; the farming business will be organized according to the conditions of production and sales"*. (Akhalkalaki).

In almost all municipalities the respondents stated that **there are certain needs and farmers' interest with regards to collection of milk products / sale**. As it was mentioned by the respondents from Kaspi Region – the region where cattle-breeding is top branch, there are no milk collection center and milk processing factory – *"few milk buyers (physical persons) may come around and buy milk"*. As respondents from Samtredia mentioned, there are plans to build a large milk processing factory, which will probably become the consumer of milk produced by the farmers. Though, they also speak about the immanent feature of large industrial companies to offer farmers low price for high incomes; respondents also discuss necessity of such collectors and processors within small farmers' cooperatives. It will increase motivation of farmers to produce and will support development of the business.

*"In Georgia natural dairy production is quite rare. We fail to meet our need not because there is no production, but because production and supply are chaotic and"*. (Kaspi)

Though, we must also mention the problems indicated by the head of Association "Algeti 2008" operating in the field of milk production and sale, as the impediments for their operation:

- Volume of milk and its price are instable and change by season, which impede stable relations with collector/seller; besides, *"Often the company does not take milk as they have days off"*.
- Because of instable relations with the collector, the business cannot expand – *"we are not able to collect milk in a stable manner. If the company has a day off, what can we do with milk? That is why many farmers disjoined us"*.
- Offering milk products is quite difficult because of noncompetitive environment – *"Farmer submits cheese which is not inspected; farmer, unlike us, has no tax liability. That is why the shop buys products from those who sell it cheaper. We are looking forward to adoption of law on food safety, which will eliminate such obstacle in sales"*.

In Vani (villages: Sulori, Dzulukhi, and Zeda Vani) and Tetrtskharo regions (villages: Tbisi, Jorjiashvili, Asureti) farms were identified, which are involved in primary production of goat milk. As per the respondents, in terms of well-arranged primary production of goat milk, here is the potential for production and sale of goat milk products. Primary production of goat milk in a well-organized manner unconditionally requires farmers' unification: *"If unification and collection of certain amount of milk is impossible, no milk processor will come up to our villages"*. Besides, milk processing is possible on site / locally. It requires financial assistance to the farmers. They namely speak about technical equipment, which they cannot buy without the help of donor organization; for example: pouring machine, pasteurization machine, vacuum machine, ripening fridge, packaging materials, and distribution vehicle – for sale of products.

*"No one will buy goat milk if it is not inspected, as goat milk may cause brucellosis. Goat cheese is in demand, if packaged. There are no conditions on a local level to produce finished product"*. (Tetrtskharo)

In Samtredia Municipality (villages: Kula, Sajavakho, Jikhai, Ghaniri), together with cattle-breeding farms, there are two poultry farms concentrated on egg production (village: Ilori.)

In Marneuli, as well as Sagarejo and Kvareli, they speak about the profitability of **wool collection center**. These ideas are based on local resources and need /local and external markets, which would turn into a profitable business in terms of cooperatives.

As we can see, functioning of any branch of industry in the municipality means effective cooperation of several stakeholders and makes up a long-term process of production, processing and sale. That is how the respondents see operation of a cooperative in a long-term perspective. (Akhalkalaki)

*"Cooperative may be established by a physical person, but a cooperative may establish another cooperative, which will link it to primary products. Large-scale cooperative will resolve sales problems more easily. Large cooperative may directly communicate with large customers, such as government organizations or different food companies"*.

Capacity/potential of cattle-breeding business and the necessity and readiness of its development within the scope of cooperatives are discussed not only in those regions where cattle-breeding is developed. For instance, in Kareli the respondents state that the highland zone of the municipality has the best feed base for development of cattle-breeding. According to the respondents, the plain does not allow for great economic development; though, the highland zone of the municipality represents rich resource for development of cattle-breeding (more than 10 000 hectares of pasture land). *“People earn their living in the plain, but we need surplus product, which will provide protein feed to not only our regions, but also to the capital city. Highland resource of the municipality, with its relevant altitude from the sea level and complete natural system is totally unexplored”*. Though, they also state that development of cattle-breeding must be based on state policy on animal husbandries. *“At this stage, it is difficult to accomplish it within the scope of farmers’ cooperatives, as there are no settled areas in the mountain and the infrastructure is not developed.”*

## Crops

Almost in all municipalities crops take major share of households. In some cases the crops are grown in the orchards and gardens of the household and are used to meet minimal needs (for example, in Sachkhere, Chiatura, Kareli, Khashuri); in number of municipalities surplus products are supplied to regional centers (Gardabani, Marneuli, Akhalkalaki, Gurjaani) and they have export potential.

In Gardabani and Marneuli, annual plants, in particular – vegetables and melons hold significant part in land fund of the municipality and in consideration of the municipality’s soil and climate conditions – represent the best resources for internal supply and export of early product.

*“It is possible to get three harvests; early potatoes are collected in April; In May tomatoes are planted, and then – on the same land - green beans are grown”*.

*“We have products at the earliest date, when the price is the highest”*.

In Marneuli they annually grow 104 000 tons of vegetables; Gardabani grows 80 000 tons of vegetables. According to the respondents, there are 1200-1500 greenhouses in Marneuli; farmers of Gardabani also discuss greenhouse farms as priority direction and the willingness to establish / enhance farmers’ cooperatives in this direction. As of today, 250 hectares of land

are provided with dripping system and the priority for the Municipality is to expand such area. Irrigation is a big problem for Gardabani. According to the respondents from Gardabani, only 60 % of total area of arable land (25 000 hectares) is intensively processed and cultivated. It is possible to exploit 8000 hectares of land in the upper zone of Gardabani Region (Akhali Samgori, Teleti, Lelmshveniera), if land irrigation is provided. It must also be mentioned that irrigation problem is very painful in Tetrtskharo, Kaspi, Gori and Khashuri Municipalities. As the respondents explain, these municipalities are considered to be wind erosion zones, where destruction of wind belts caused loss of great amount of moist and made the land unfertile without the irrigation system.

Respondents of Marneuli and Gardabani speak about large scale production of vegetables and melons and its food value. They also regretfully state that *“Armenian vegetables, Turkish potato, Iranian cucumber are sold in Georgia but in near past, local factories would process 1500 tons of tomatoes, and 50 000 tons of potatoes were supplied to the Union”*. The respondents believe that the reason is high price of local products, caused by small production, low quality seeds, and consumption of higher labor resources in terms of poor technological conditions.

In Gurjaani, traditional vinery is becoming less popular and total area of 15000-16000 of vinery has decreased to 7000 hectares. The respondents talk about profitability of horticulture, especially peach gardens. Total area of peach gardens is more than 4000 hectares and optimal harvest of peaches goes up to 300 000 tons. To compare – last year grapes harvest made 40 000 tons.

*“In Chumlaki only, the market every day receives 500-600 tons of peaches. Its sale requires 200 minibuses. In general, 100 000 people are involved in peach growing in Kakheti; sales involves 50000 people. It is necessary to develop a reasonable state policy for peach growing and sale; it would resolve the issue of employment of major part of Kakheti population”*.

In Kvareli, same as in Gurjaani, *“the population has to cope with the negative results of mixing up the breed features and planting of hybrid vineyards”*. Vineyard area was reduced; currently, vineyards/wine-making is again considered to be priority, but the municipality does not have seedling farms and breed testing laboratories. The respondents particularly highlight the need to exploit and develop “Kindzmarauli” zone.

In Sachkhere and Chiatura, arable land resource is scarce. Cattle-breeding and plant cultivation are harmonized and yielded products are almost equal; for instance, yielded crops/cereals are used for animal feed. Here, the respondents find it hard to name priority direction of agriculture. Small household farms are used to meet family needs. As the respondents stated in Sachkhere, in the Municipality they used to grow champagne grapes and process them at local champagne factory; though, since the processing factory stopped its operation and the state policy dictated to “*grow grapes only for family consumption*”, total area of vineyards reduced from 4000 to 1900”. In Sachkhere, corn is basic culture; it is a local endemic breed, as explained by the respondents, and it has high nutrition value. Respondents speak about production of small quantities of bio products. According to recent surveys, crop productivity in Sachkhere-Chiatura reduced by 30-50. The reasons of reduced productivity are the following: use of low productivity seeds; failure to rotate cultures; use of ineffective means against parasites and weeds; lack of irrigation and draught.

Samtredia and Vani – plants and crops are much more diversified and the following directions are identified, and arranged according to the priority ranking and potential for local development with the support provided within the scope of farmers’ cooperatives:

In Samtredia:

- Greenhouse farms for greens, cucumbers, tomatoes, bell pepper, strawberries, melons, flowers (communities: Bashi, Ianeti, Melauri, Sajavakho, Ghaniri, Melauri);
- Seedling farms for seedlings of kiwi, vine and persimmon;
- Household plantations of strawberries (villages: Melauri, Vazisubani, Kulashi, Akhalsofeli, Nabakevi);
- Cabbage, lettuce (villages: Ghanighi and Kula);
- Grain crops (Villages: Gomi, Vazisubani, Bashi, Ianeti, Etseri).

Also, in Samtredia, focus group was attended by the group of farmers who decided to produce high quality raw silk, which will be consumed by Arab countries, China and Japan. For this purpose, during the first stage, funding must be provided from the cooperatives development fund for arrangement of mulberry seedling farms.

### In Vani:

- Greenhouse farms for greens, cucumbers, tomatoes, bell pepper, strawberries, melons, flowers (communities: Tobanieri, Mtisdziri, Shuamta, Amaghleba and Salkhino);
- Growing Laurel in large volumes, with good sale prospects (Villages: Bzani, Dikhashkhoshi, Tobanieri, Zeda Vani, Amaghleba, Zeindashi, Gora). Within the scope of the cooperatives it is possible to buy laurel dryers, which are unaffordable for individual farmers; such dryers will help receive ready-made product in a timely manner, will increase the quality and price.
- Melon cultures, including watermelons and sweet melons (Villages: Shuamta, Tsikhesulo, Salkhino and Mtisdziri);
- The respondents talk about profitability of traditional onion culture; but, because of fragmented land and absence of storages, this culture is not cultivated any more. It is notable that little interest of farmers to restore such “profitable” culture as onion is partially caused by hard work it requires – *“Onions require hard work; it is troublesome”*.
- Main source of income for the municipality is nuts. Hazelnuts grow in all communities of Vani region, especially in Dzulukhi, Zeda Vani, Sulori, Gadidi and Khumuri. According to the respondents, hazelnuts become quite profitable because there are ways to sell them. That is why recently hazelnut trees have developed into plantations – *“hazelnuts found their way; people sell them and earn profit”*.
- Persimmon is also very well developed (approximately 3000 tons per year) in the following communities: Shuamta, Tobanieri, Chkvishi, Khumuri. The respondents discuss the possibility of producing dried persimmons by means of cooperation capacity;
- In all villages of the municipality they grow wild plums (sour plums), which are used in production of dressing. The respondents believe that small canning factory will be quite profitable. They also noted that micro-canning enterprise of apples and pears is Sulori and shock freezing of fruit would be profitable.

In Shida Kartli, the respondents traditionally speak about the importance of fruits and vegetables nationwide, especially – horticulture. In terms of variety of fruits, Shida Karti Region is number one in the country. The region is traditionally known for apples. The regions hold second position in peach-growing, after Kakheti. Though, as per the respondents, traditional fruit culture *“is beyond critique. Today we are talking about the problem of sale, but we forget that our fruit is not for export; it is rather for canning”*. Shida Karti holds stable

number 1 position in plums, despite of the fact that total capacity of plum production is reduced, in comparison to 2006. The region holds nationwide top position in cherry and sweet cherry production since 2008. According to the respondents, during recent years, cornel and medlar seedlings are being extensively planted. It is explained by “*less expenses for care and easy sale*”. The respondents also speak about profitability of almonds and walnuts – for domestic consumption and export purposes. Shida Kartli has another priority, which is grain crop – wheat and barley. According to the data of 2011, the region holds second position in total area of both cultures’ crops (wheat is sown on 12.900 hectares and barley – on 4,900 hectares). It must be mentioned that wheat consumption is steadily growing, but local production fails to meet the demand and same as in case of other agricultural products - 550-800 thousand tons of wheat or flour are being imported annually. Import volume significantly exceeds local production; seeds are also produced in little quantities locally; losses are high and low quality wheat is produced in great volumes.

Traditionally, Shida Kartli region is one of the largest producers of vegetables after Kvemo Kartli and Kakheti. The following vegetables are produced there: potatoes, beets, cabbage, carrots, onions, garlic, asparagus, peppers, eggplant, etc. Lack and low profitability of greenhouses fails to supply domestic markets during the winter period and this is the period when import is carried out.

All respondents agree that local products are insufficient for domestic consumption. Local products also fail to compete with imported products on local market. “*Local cultures are expensive, and meat and milk produced locally is also expensive; that is why we need to start the work not from storages and refrigerators but from the fields and pastures*”. (Gori)

Thus, the respondents talk about series of measures and activities aimed at exploration of local market and to some extent – export of products. These measures and activities must be carried out in a consistent manner, by means of effective communication between production, service and sales circles. Several important directions were identified in the context of the above communication; these directions may be covered within the scope of local farmers’ cooperatives and facilitation of agricultural services. In particular:

**Use of effective means against parasites and weeds:** –“*Last year the virus destroyed the crops. People have no idea how to fight the virus; there are no service centers that would provide farmers with information and relevant materials.*”

**Establishment / enhancement of seedling and seed production farms** – according to the findings of the survey, low productivity seeds are used. In several municipalities seed and seedling husbandries/farms are more or less provided, though in some municipalities (for example: in Marneuli - Kartlisi, environment and analytics) the seeds are not available to the farmers:

*“Seeds of Dutch potatoes cost GEL 2.50; one hectare requires three tons of seeds, which makes GEL 700. Farmers cannot afford it”. (Marneuli)*

Within the scope of farmers’ cooperatives, with joint effort of the farmers, purchase of seeds becomes more available – *“If once it is supplied, then it will be produced. For instance, in mountainous areas, which are free from viruses, such seeds will be used for next few years.” (Marneuli)*

In Gurjaani and Kvareli, the respondents talked/supported the idea of establishing vine seedling factories. According to the respondents, there are small seedling husbandries, but their seedlings fail to meet local demand, because of low quantity and high price. *“There are farmers, who produce seedlings, but this activity should be provided in a more organized manner; every farmer should not produce seedlings for himself, but they need to get together as a cooperative”; it must also be noted that control over seedling husbandries must be assumed by the government; their operation must be subject to license and quality of seedling must be certified with relevant document.”*

The respondents of Samtredia and Vani noted that establishment of seedling greenhouses will support development of top branch of this municipality – greenhouses.

**Storage and refrigerating facilities** – the respondents believe that arrangement of small refrigerating facilities within the scope of support to farmers’ cooperatives is very important. For instance: as they say in Marneuli, *“one large company is planning to arrange a large refrigerator facility and major share of profit will go away from the population”*. Farmers’ cooperation with regards to arrangement of refrigerating facility will reduce the risks associated with surplus products and will support supplying of domestic market with seasonal products for longer periods of time:

*“Tomatoes cost GEL 0.30 during high season. If refrigerating facility is provided, tomatoes will be stored for two months and will sell for higher price; same about persimmon – if it costs GEL 0.50 during the season, in two months’ time the price increases up to GEL 3. Grapes cost GE: 0.80 during the season, but in winter we don’t have grapes and we buy imported fruits”. (Marneuli)*

In Akhalkalaki and Ninotsminda the respondents talk about the problem of storage facilities. As they say, because of absence of storages, farmers try to grow fewer crops, as the surplus spoils because of poor storage. As they state, people keep their crops in the basements of different buildings; such basements fail to meet the temperature and sanitary norms. The respondents also stated that storage facilities require suppliers to load them with products. It is more feasible in case of farmers’ cooperatives.

**The following needs related to mechanization were identified:**

**Mechanization service is increased in proportion of the territorial distance** – this problem is very critical for Tetrtskharo Municipality. Because of absence of mechanization center, farmers are forced to pay for machine fuel/gas from Marneuli to Tetrtskharo.

*“We pay GEL 70 in gas; potatoes require 15 operations. Multiply 15 to 70 and you will see what the cost of mechanization service is. I pay GEL 1050 only for travel.”*

*“In Tetrtskharo, most popular culture is potato. At least five villages should have one sowing mechanism; it will save us traveling expenses. It is the reason why people abandoned land cultivation”.*

As they state in Tetrtskharo, *“Marneuli does not lend them the machines until all work in Marneuli is finished”*. Delayed sowing is less productive. As people say, *“one day of summer brings winter”*.

**Discriminative nature of mechanization service is also mentioned in Kvareli** – according to the respondents, *“Tractor goes for large areas where they get well paid”. Small farmers are left without mechanization*”. We may assume that this problem is more or less pertinent to all those regions, which are represented by large farmers and less applicable to those regions where majority are small farmers.

In almost all municipalities the respondents speak about the need of **micro-technics**; although LTD “MECHANIZATORI” provides high capacity/power tractors, small farmers are not able to use them – *“there are no micro-technics available for small farmers to use in gardens and vineyards”*.

Thus, the respondents believe that it will be useful to arrange such cooperatives/services, which will be equipped with modern standard technics and aggregates and will provide necessary services to the farmers. In addition, such service center will reduce mechanization costs and will improve the soil structure.

There are different opinions about supply of **fertilizers and chemicals**. Some respondents say that there are several companies on the market, which sell good quality pesticides and fertilizers. But they also state that they are *“expensive and because of price, the farmers use less pesticides”*. Some respondents speak about chaotic nature of service delivery and say that it is quite possible to buy high quality pesticides and fertilizers, but *“there are lots of counterfeit materials and sale of vegetable chemicals should be controlled.”* (Tetrtskharo)

The farmers also state that *“high quality fertilizers and seeds may not work”*. **Because of changed climate conditions it is necessary to raise farmers’ awareness about new species, their care, chemical treatment and irrigation schedules, because** *“the farmers know nothing about agro-schedules, and if they tend to their land plots in a traditional manner, they should not expect better results”*.

It must also be mentioned that for many years there is no soil examination practice available. Fertilizers are not introduced according to actual soil need. Naturally, it deteriorates quality of crops. Thus, **in all municipalities, the respondents speak about the need to examine and diagnose soil structure,** which will reflect in application of correct measures by the farmers and in better crops: *“farmers believe that nitrogen grows crops. In reality, the soil needs phosphorus. Farmers don’t know about the type of fertilizer they need to introduce into the soil”*. (Gurjaani)

*“Besides the need for so called NPK analysis for proper selection of fertilizers in all municipalities, such soil examination laboratories are inevitable if we plan to grow specific cultures, especially bio products.”* (Tetrtskharo)

Besides examination of the soil structure, the respondents also speak about the need to divide agricultural land into **regions/zones**. According to the respondents, division into regions/zones according to changed climate conditions and soil structure will facilitate growth of highly productive cultures. Zoning and **planning** must be done together, which includes advance determination of total crops to be yielded for domestic and foreign markets.

*“Last year I sowed 10 hectares of potatoes and sold for GEL 0.33 from the field, because I had no storage facility. I took last year’s experience into account and did not sow this year; but this year, price of potato in the same area was GEL 1.50 from the field”.* (Marneuli)

*“I understand that the market is chaotically changing and pricing principle is applied, but the price of products grown by the farmer must be safeguarded”* (Gardabani).

Though, the respondents also state that planning and zoning goes beyond specific location, and therefore – beyond resources and competence of the support to be provided by non-government organization to cooperatives. Zoning/planning of agricultural cultures must be coordinated by the Ministry of Agriculture and its regional services. Because of critical nature of these two problems, it is necessary to pay attention to them during the discussion. In addition, state authority must also introduce the position of the agronomist, which is an important stakeholder on local council level, who will on the other hand, provide government authorities with information about the current state of affairs of the villages, and on the other hand, provide consultation to the population on issues such as agricultural schedule/calendar, modern technologies and new medicines; such information, if provided by private companies, is less credible and trusted by the farmers, as they perceive it as advertisement of such product.

The respondents from the municipalities with surplus production (Gurjaani, Gori, Marneuli) talk about so called state policy on sales. *“Kakheti grows 200 000 tons of peaches; 100 000 persons work on it and selling involves additional 50 000 people; how can this issue be resolved by cooperatives?”*

*“There must be a high capacity processing factory, which will serve the region. This resource is not available within the scope of cooperatives. .*

Though, many respondents speak about current state of affairs, and large processing factories buying farmers’ yield for low price. *“It is an insurmountable obstacle; in order to sell the*

*product, a farmer must agree to low price, which demotivates the farmers to work in the field of agriculture”. (Gurjaani)*

**Thus, most of the respondents agree that it is necessary to integrate primary agricultural production and small processing factories via facilitation of multifunctional agricultural cooperatives.** In the course of the survey, in almost all municipalities the potential of establishment of micro-enterprises has been identified; such micro enterprises would be working for local markets and would compete with imported products in terms of quality and diversity. As it was stated in Kvemo Karti, local fruit species do not meet the international standards and are designated for industrial processing. Therefore, there is high potential for local utilization of this culture and for canning.

In those municipalities, which have potential of providing primary products for domestic or export markets (Gurjaani, Kvareli, Gardabani, Marneuli, Vani, Samtredia), the respondents speak about the need to produce finished, marketable products: *“On the one hand, we have sales issue, and on the other hand – even if sales problem is resolved one day, we are not ready for it. We, at minimum, need packaging.”*(Gurjaani)

Thus, for sale of primary products, the issue of local production of containers/packaging arises:

*“Peaches cannot be transported in regular crates; they need special crates, which are unavailable”.* (Gurjaani)

## **Bee-keeping**

In Chiatura and Samtredia Municipalities, bee-keeping is quite developed in highland zones. According to the respondents, large quantities of honey are produced, but honey is produced in a chaotic manner and all bee-keepers achieved is *“to sell honey on the highway”*. In order to export the product, bee-keeping industry must undergo systemic changes; in particular, they need high-tech and modern laboratory, which would issue certificates according to composition and quality of honey, and they need to give the product the finished, marketable look. Some respondents believe that the above cannot be provided within the scope of farmers’ cooperative support program, as *“honey still sells well and the bee-keepers will not agree on cooperation”, “they may enroll into the union, if somebody comes and establishes the*

*laboratory*”. Though, they also say that establishment of the laboratory and giving the honey an exportable look relates to big investment.

Though, in Akhalkalaki, the possibility for bee-keepers cooperation has been identified, with regards to transportation of bees from the plain to highland zone.

## **Fish breeding**

According to the respondents, production of small fry is in high demand in Marneuli. *“200-300 millions of small fries are annually exported from Georgia. It is a cluster, which could develop for export.”*

In addition, best natural conditions for trout breeding is discussed in Sachkhere, in particular in Perevi, Jruchi and Chelvani gorges. Village Mokhva has the experience of trout farming.

There are around 20 operating ponds in Vani and villages: Tsikesulo, Shuamta, Tobanieri, Amaghleba and Salkhino. Farmers are interested in establishing small fry nursery.

As the respondent of Akhalkalaki state, fish breeding is a source of income for major part of population. There are farmers’ initiative groups who deal with not just primary fish breeding but also with processing. Though, as there are no State regulations regarding ownership of water reservoirs and management of potable water, fish-breeding is considered as “illegal activity”.

## **Access to agro loans**

Respondents pay attention to several important issues related to lack of availability of agro loans for farmers. The following reasons are listed:

- Small agricultural farms are problematic for the banks to issue loans, because of low liquidity. The problem is aggravated by absence of agro insurance;
- Land, as marketable good, has low price; in addition, rural lands are not registered. Thus, the land cannot be used as collateral for loans. It makes even more difficult for the farmer to get the loan;
- There is a discrepancy between farmer’s business plan and bank’s credit program; it is on the one hand caused by low level of farmers’ knowledge in preparation of such

business projects, and on the other hand – by the banks' requirements/agro credit programs without consideration of agricultural reality;

- The conditions offered by the bank increase the prime cost of the product and put the farmers in non-competitive condition; *“it does not matter how good the farmer's product is; the farmer depends on the bank and cannot sell the product for market price.”*
- In addition, loan amount is computed at the moment the loan is withdrawn, without considering any reasonable time required for receipt/production of the product;
- The yield is not adequately insured – *“in credit component, 100 % responsibility is assumed by the borrower and in insurance component – the insurance company disclaims all responsibility. In case of 100% damage/loss, they compensate 25-30%, and the price they calculate is lower than the established price. But, insurance payment is added to credit and is entered into the same financial institution.”* Though, the respondents also state that development of agro insurance sector is impossible until the time agro sector establishes itself as business.

As per the respondents, in case of farmers' cooperatives, relations with banks and insurance companies will be much easier, because in such case farmers' group assumes solidary responsibility with their property and financial contribution.

## Challenges of Farmers' Cooperative

Number of issues, which related to predisposition of farmers towards farmers' cooperatives, were identified during the discussion. The reason is farmers' economic-rational motivation in the context of current condition of agriculture and social-psychological factors related to mutual trust among farmers, forms of traditional cooperation, farmers' past experience of collective farming and etc. According to the respondents, farmers' cooperative is an economic unit of a village, which needs to mobilize local resources, must have financial and administrative management skills and must provide members of farmers' cooperatives with quality service, according to the needs of the farmers. In the course of the survey, we met and heard about unsuccessful cooperatives, which, despite their optimistic start, failed to attract members, as economic interest and loyalty was very low among the members.

*“In the beginning there were 50 members, but now we are less than 20; in the beginning they were interested as we had a grant but then they lost the desire. We also failed to offer what they needed”.*

With regards to the initial stage of farmers’ cooperatives the respondents pointed out the circumstances that represent risk factors for establishment and enhancement of cooperatives. In particular, establishment and enhancement of farmers’ cooperatives has the following restrictions:

**Land, as traditional/family ownership** – *“Land is the subject of dispute among Georgians; if a farmer joins the cooperative with his land, he feels that the land is no longer his personal property;”*. According to the respondents, farmers will always be satisfied with little income, rather than with risky venture about the land, especially when their memory is fed with the experience of soviet collective farming.

**Organizational management skill** – according to the respondents, a cooperative is an independent, profit-oriented unit. Therefore, management of a cooperative, same as any other type of organization, requires a group of managers with business skills, IT and communication skills, which will consolidate the members of farmers’ cooperatives around common cause and increase their loyalty towards farmers’ cooperatives by offering them necessary services.

Though, a cooperative based on democratic principles requires not only a group of skilled managers, but also the informed/educated members of farmers’ cooperatives. Otherwise, there is a risk that management will use the resources of cooperative members for their reasons, according to their priorities and at their discretion.

**Fulfilment of the requirements under the law on cooperatives** – *“it should have a board; i.e. should they get salaries? In the beginning it will not be possible, until the time it becomes stronger.”*

*“Farmers’ cooperative – it is the organization that needs an accountant, manager and the director.”*

*“The statue of Farmers’ Cooperative is developed by the agency. If the cooperative assumes it, it will not be possible to draft it without the lawyer. They will require legal consultation in many aspects.”*

**Economic assessment of the property** – *“my peach tree is three years old and yours – 1 year old; therefore, the yield collected in my one hectare of land is twice as much as thee yield collected in your two hectares. How should we calculate it?* As the respondents believe, property assessment will be carried out by internal audit or by invited expert, as decided by the members of the cooperative. The respondents think that different assets with different values may become subject of disputes among the farmers.

**Motivation and effort of member farmers** – it is important to properly evaluate different assets of different value, but it is also important to consider equal motivation and effort of member farmers. *“I have a vineyard – 3 hectares and collect 30 tons of grapes. My neighbor has 5 hectares and collects 1.5 tons. Do you think I can join the cooperative? Of course, no. Finding men like me will be quite difficult; maybe a couple in Manavi; others were given vineyards full of grapes. They cut them out; they never stepped into the vineyard.”* (Sagarejo). Thus, one more problem related to establishment of cooperatives is lack of trust and different opinions among the farmers, which is enhanced by nonfunctional stimulation and is expressed in their desire to live at the expense of others, while others work and the profit would be evenly distributed.

**Number of the members of farmers’ cooperatives** – according to the respondents, it will be difficult to find the farmers who share their attitudes. They recall examples when failure of farmers’ cooperatives was caused by high number of members. That is why they believe that initially, for realistic effect, it will be better to establish small farmers’ cooperatives. Successful precedents are very important at the beginning of the program. *“Minimum 20 persons; with advance notification – it is risky form me. 20 persons together, at the initial stage we will not get the profit that I may be interested in; 20 is too many; the best number is 5; it is difficult to find 20 men with same ideas”*. Though, they also note that small cooperatives also face the risk of nepotism; but small cooperatives don’t have sufficient capital and investment opportunities, which is important for economic growth of the cooperatives.

**Disaggregated lands** – according to the respondents, farmers’ cooperation means consolidation of dissected lands and increase of economic profitability; but under current circumstances, because of land configuration and disaggregation, it will be difficult to consolidate the farmers

– “How can I consolidate with someone; some have land 3-4 kilometers away; others – 5 kilometers away, third has the land 10 kilometers away. The idea behind farmers’ cooperation is to consolidate the lands so that the tractor ploughs one big territory”.

During the discussion many farmers spoke about the problem of land acquisition. “In order to buy land, first you need to take care of primary registration; the government needs to put the land into its register and then the Ministry of Economy must sell it to you. It is not that easy”.

In the context of support to farmers’ cooperatives, all respondents believe that land inventory is very important for the sake of sustainability and expansion of farmers’ cooperatives; on the one hand, such inventory will collect information about the types of land categories per designation and ownership, and on the other hand – farmers will more easily find and consolidate fragmented lands.

As it is established by the findings of the survey, different municipalities have different opinions about the idea and readiness of establishing farmers’ cooperatives. In those municipalities, where there is less experience of farming, more informative work is required in order to raise farmers’ awareness about the principles of operation of farmers’ cooperatives. Though, it must also be mentioned that Akhalkalaki Municipality is identified with higher level of readiness, which is the result of work carried out by different NGOs, including Mercy Corps:

*“Here it is easy to work with farmers on cooperation, because they know what cooperative means and they have seen many examples”.*

*“The cooperatives were established. They continue to operate successfully, as informal unions, as legal status would require payment of taxes”.*

During the survey, it was mentioned that it would be effective if non-governmental organizations allow farmers to learn about the practice of farmers’ cooperatives in other countries. “We may deliver endless consultations but the most useful thing to do is to let the farmer go and work in the environment of farmers’ cooperatives. There are countries with successful cooperative practices and it would be good if they go and see with their own eyes, how others work.”