



FRUIT & VEGETABLE PROCESSING INDUSTRY ANALYSIS

The Kyrgyz Republic
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by "SENTI" Financial Company

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ATTACHMENTS

- Attachment 1. List of fruit and vegetable processing enterprises.
- Attachment 2. Decree No. 782 of the Government of the Kyrgyz Republic of December 10, 2001.
- Attachment 3. List of investigated trade outlets.

PREAMBLE

Establishment of the fruit & vegetable processing industry of Kyrgyzstan, save for the several recently formed companies, dates back to the Soviet era. The excessive operating capacity and outdated equipment and technology, which are the case with a majority of the currently existing outfits, prevent them from putting out products, which would stand competition on both international and local markets. In the times of the Soviet Union, the better portion of the processed fruits and vegetables would be shipped to the other republics, while the collapse of the USSR resulted in a sharp decline in the export of this line of produce and also brought the industry output down to 20% of its former level. Shrinkage of the production potential still continues and is accompanied by obsolescence of the existing equipment, which eventually becomes worthless, a slow-down in the rate of acquisition of new material assets and also a pile-up of the companies' accounts payable.

The examples of a sound and effective management are an exception, rather than the rule, in the industry. While many companies have gone into private hands a long time ago, they are still unable to successfully market their produce due to these produce having lost its appeal for the traditional customer groups over the recent 10-year period. An increase in the export of agricultural primary products is concurred by a decrease in the export of processed products, and a rise in the import of the latter. Despite the fact that Kyrgyzstan does have the capacity to export processed, ready-for-use, goods, the scenario of Kyrgyzstan becoming a mere supplier of raw material is not totally unfeasible.

Thus, it is our opinion that a slight rise in the processing industry output, which is due to increase in the amount of agricultural produce, should be construed as stabilization at its lowest level and is not a signature of a drastic change in the overall situation. The current state of affairs is not sustainable and it can be expected that development of the industry in point will take either of the two routes: a sluggish existence or a dynamic and ever-accelerating development.

The above circumstances call for an independent in-depth assessment of the processing industry status and also require that reasons for the current problems are found out and a realistic outlook for further development of the fruit and vegetable processing industry is worked out.

Goals and objectives

Goal:

Carry out an in-depth analysis of the current state of affairs in the fruit & vegetable processing industry and access perspectives for its further development.

Objectives:

1. Assess the current state of affairs in the fruit & vegetable processing industry, subject to the macroeconomic, managerial, operating, infrastructure-related and financial factors.
2. Assess the degree of integration of the fruit & vegetable processing industry with the related economic sectors and industries, and also work out options for proceeding with this integration.
3. Determine the investment potential of the fruit & vegetable processing industry and assess perspectives for its further development.
4. Determine the most expedient ways and areas for application of future investments.
5. Assess of the industry risks.

6. Assess the fruit & vegetable processing industry's ability to compete in the international market.
7. Investigate the cyclic development of the fruit & vegetable processing industry.
8. Investigate possible scenarios for the fruit & vegetable processing industry development and the input base for work-out of the industrial strategy.

Methodology

When collecting and processing the data input for this analysis, the following methods have been used:

1. Collecting opinion from the personnel of the fruit & vegetable processing operations (this would be performed through an in-depth interview).
2. Audit of the Bishkek-based points of sale.
3. Gathering information from open sources (the mass media, findings of review and analysis of the peer and related industries from the Russian Federation and Ukraine).
4. Study of the findings of monitoring of the fruit & vegetable processing operations performed in the framework of such international projects as the World Bank, the MAWR Potential Development Project and the Asian Bank of Development).
5. Investigation of the official statistical data provided by the KR National Committee for Statistics (NCS) as per our formal request and also the data sourced from the annual statistical releases of NSC.
6. Collection of opinion from the executive staff of a number of state bodies and departments.
7. Analytical processing of all available material, random sampling of questionnaires and reconciliation of the available information with the data from alternate sources.

The polling and audit as referred to above have been conducted by the *SIAR-Bishkek* social & marketing research outfit as per commission from the *SENTI* Commercial Credit Company (SENTI).

This study covers 28 companies from 6 provinces of the Kyrgyz Republic, with the respondents being the chief executive officers of these outfits.

The questionnaire covered the following areas of the corporate operation:

1. Production.
2. Buildings and facilities.
3. Equipment.
4. Operating process.
5. Quality.
6. Primary material base.
7. Capital investment.
8. Management.
9. Marketing.
10. Finance.

Fruit & Vegetable Processing Industry Analysis

In order to obtain an idea of the goods range, pricing and consumption of the processed fruits and vegetables, an audit of a total of thirty five (35) Bishkek-based points of sale has been conducted.

The audit as referred to above was purposed to:

1. Establish the available range of fruit & vegetable canned goods.
2. Establish the breakdown of the available goods range (locally sourced goods/goods brought from overseas).
3. Investigate the pricing.
4. Determine the reasons for the points of sale choosing to purchase canned fruits and vegetables or decline from purchase of such goods.
5. Investigate the demand for canned fruits and vegetables (daily and weekly sales).
6. Find out the image that locally produced goods had among the customers.

SENTI would like to thank the *SIAR-Bishkek* social & marketing research outfit for the polls that it has conducted and the valuable information is supplied to SENTI.

We thank Emil Sultakeev from Asian Bank of Development and Buadjar Abdykadyrova, a consultant with the *Pragma-Osh* outfit, for the assistance they have provided in collecting the necessary input data. We wish to thank the officers, who have been our contact persons at the Ministry of Agriculture, Water Management and Processing Industry, the Kyrgyzstandart and the Ministry of Industry & Foreign Trade, for the answers they provided to our questions and also for the information support.

We thank all the people at the companies that we have contacted in the course of this study who provided us with the necessary input.

And we would also like to give our special thanks to the *Helvetas-Kyrgyzstan* Swiss Association of International Cooperation and our personal thanks to Eugene Ryazanov, Manager of the Private Initiative Support Project for the opportunity to complete this work.

INDUSTRY CHARACTERISTICS

Economic parameters

Market size	<p>Currently, an assessment of the actual size of the internal market can only be done based on the information about the companies' output (saleable goods), the aggregate share of the companies' sales on the internal market and statistical information about the volume of canned fruits and vegetables import. While a precise assessment is impossible, our estimates indicate that even <u>in the most pessimistic scenario</u> the capacity of the internal market for canned fruits and vegetables (less the wine-makers' produce) currently makes up about \$3 million per year (it must be noted that this estimate should probably go to the upper side of \$3 million).</p> <p><u>Outside markets:</u> according to the <i>Konservprom</i> Association, the capacity of the counterpart sector of the Russian market runs currently to about \$800 million per year. There are no data available on the Kazakh market, but it is our estimate that its capacity makes up a minimum of \$50 million per year.</p>
Increase in the market size	<p>Increase in the market size is attributed, in the first place, to increase in the purchasing power of the country population. The Russian market has the highest growth rate (a minimum of 8%), while the internal market shows the lowest growth rate. Yet another factor that prompts market growth is a gradual back-off from the practice of consuming home-made canned products (this is particularly true of the people with a medium-level income and high-level-income).</p> <p>The market growth potential is still very high. According to the Institute of Sound Food (Russian Federation), the standard amount of canned food consumption makes up a minimum of 100 conditional cans per capita. For Russia, this index has hardly reached 20%, while in Kyrgyzstan this figure makes up a maximum of 8-10%.</p>
Number of companies in the industry	35-40
Entry/exit barriers	These are quite insubstantial. The start-up capital makes up several tens of thousand dollars.
"Experience curve" effect	This is on the rise. Several years from now, this industry may well start to experience a shortage of skilled operating personnel (technologists, engineers, etc).
Finished products	These are quite standardized. It is just in a number of cases (<i>Smak</i> tomato paste, <i>Paks</i> juices) that customers demonstrate loyalty to specific product brands. In general, the customers are able to easily switch between products from different manufacturers.

Vertical integration	This is quite insubstantial. A tendency is on the rise for a "downward" integration, which is achieved through participation of the processing companies in the production of primary materials.
Horizontal integration.	This is currently represented mostly by experience exchange between the companies. There is a number of examples when a group of peer outfits would provide a joint servicing of a major-sized commission.
Technology modifications	Operating risks borne by the majority of companies are on the rise as the recent years have seen substantial modifications in the processing technology. More than 70% of equipment in the industry is outdated. The level of technology employed bears a certain weight on the degree of utilization of the available operating capacities.
Utilization/excess or deficit of operating capacity	There is a significant underutilization of the available operating capacities. In 2002 a total of 40% of the available operating capacities were in use (it must be borne in mind that the processing equipment is only used for an average of 5-6 months during a single year. While the respondents provided no information on their respective financial status, the current underutilization utilization of the available capacities will certainly result in increase in the operating costs and will impair the profitability. The factor of utilization of the capital assets bears decisive weight on the effectiveness of use of other resources and also on the amount of operating costs in the food industry.
Economy of scale	Considering the above, the economy of scale can be substantial, granted that the available operating capacities are utilized in full. A more precise assessment is impossible as this would require information regarding the conditionally fixed costs and the break-even points.
Profitability	As stated above, there are no accurate data available to us concerning the operations of the fruit & vegetable processing industry. The most recent data released by the KR National Committee for Statistics (2001) indicate that the specific weight of the unit costs in the overall revenue received by companies in the <i>food industry</i> makes up 95%.

Driving forces

An important objective of our analysis lies in determining and validating the list of key factors, which bear weight, and will continue to do so, on the pace of development of the fruit & vegetable processing industry within the immediate future period. We conclude that the most illustrative example can be provided by investigation of the driving forces that are behind the development of the processed fruits and vegetables market of the Russian Federation, which is traditionally viewed as the principal market place for the local producers. We have identified a group of four main factors of influence, inclusive of:

Long-term rates of market growth

Based on the opinions of the Russian experts, which could be sourced from a wide range of analytical reviews, articles and interviews, we were able to establish that the majority of the market experts had an optimistic outlook on the development of consumer demand in Russia and also

emphasized that it was the rise in the consumer demand that had served as one of the principal catalysts of a rapid upsurge of the domestic fruit & vegetable processing industry. It is expected that the Russian market turnover will be experiencing an annual augmentation of a minimum of \$30-50 million just on the account of an increase in the consumer demand. It is also our opinion that Kazakhstan will stand as yet another large-sized market place, which will need serious consideration.

This factor is one of those principal players, which determine the investment appeal of the fruit & vegetable processing industry.

Shifts in the consumer demand

It must be noted that the following factors will play a significant role in changing the consumer demand:

1. Even a slight increase in the real personal income will have the effect of re-directing the consumer's demand toward more expensive products.
2. As a consequence of Item 1 above, the highest growth rate in the canned fruit & vegetable products market is recorded for the goods, which are typically referred to as the "premium" products (these are the deli-class canned fruits and vegetables prepared as per a unique recipe and marketed at a fairly high price) put to the market under well-known brands.
3. In general, consumers tend to very quickly form a loyalty to some specific brand and the market for "faceless", and unappealing, canned products has downsized to the minimum.
4. The middle class expands not only by virtue of increase in the personal income, but will also do so as a result of upgrade in the customer's attitude toward the personal time management that encourages the purchase of ready-made canned goods, rather than wasting time for preparation of home-made products.
5. The manufacturers become more proficient in supplying the market with new lines of canned goods. The current tendency for annual replacement of about 20-30% of the range of goods offered for sale must be treated as a temporary phenomenon, which is the result of the manufacturers trying to locate the most appealing market niches. On the other hand, a wide range of goods offered for sale in the shops provides the customer with an ample choice that makes it quite difficult to resist the temptation to buy something.

New competition

The advent of new competition is to be attributed to acceleration in the growth rate of the large-size Russian market. Many Russian companies, which were on the verge of bankruptcy just five years ago, have overcome the crisis and now continue to systematically increase their output and profitability. According to information available to us, at least two new outfits are preparing to enter the Kyrgyz market for canned fruit & vegetable goods within the immediate future period. The competition in this sector is expected to be on the rise in the long run as well. To this end, it is our opinion that the competitive edge will be the privilege of those companies, which are not only able to achieve an increase in the output, but do also manage to engineer a *qualitative* breakthrough, while striving toward a set of clear-cut priorities for operating on both the local and overseas markets, cooperating with carefully selected long-term partners and working to increase the effectiveness of strategic and operating management.

Globalization

Yet another result of the market growth, the step-up of the competition and the shift in the consumer preferences is the tendency toward globalization of the business and the markets. Figuratively speaking, an increase in the amount of money circulating in the market will have the effect of stimulating the “appetite” of proprietors and investors, who tend to invest an ever-increasing amount of funds not only in their own operation, but also in the involvement of free resources available from other businesses, production of raw material, promotion of the product brands and expansion of the distribution networks. The recent 2-year period saw new developments in the above trend as, apart from the brands originating from the densest zone of concentration of the Russian capital of Moscow, there are now a host of fresh brands, which have been parented in the other regions of Russia and have by this time won the loyalty of customers all over the Russian Federation. We trust that this stepped-up competition will lead to further globalization through amalgamation or formation of strategic alliances between the processing companies.

According to experts from a Russia-based *Konservprom* Association, the *large-sized and medium-sized* companies take up an 88%-portion of the total Russian market for canned fruits and vegetables.

A group of other factors that bear weight on the development of the industry in point (these have somewhat lesser effect than the above factors and actually are derivatives of same) includes the following:

Technologic developments

The recent 10-year period has been witness to major-scale technologic developments. These included not only the manufacturers making choice in favor of highly-productive and resource-saving equipment that allows to increase its annual utilization, but also availing themselves of the state-of-the-art information technologies covering the complete business cycle (i.e. from shipment through sale). This area also shows qualitative reformation, as while in the past it was an established practice for the manufacturers to introduce new information technologies in their operation as a tribute to the current vogue, the today's primary objective in implementing the modern technology lies with increasing profitability per a unit of the invested capital.

Innovations in the area of marketing

The primary reasons that have come to be the cause of innovations in the area of marketing are:

- as the product that is put on the market should stand out from the other products of similar class, this requires that certain effort must be taken in order to form an “exclusive” image of the given product, this being accompanied by a price differentiation intended to cover all the available market segments, from the “cheapest” ones through the most expensive;
- it is necessary to make use of the maximum possible range of highly-effective selling techniques.

All these considerations prompt the manufacturers to seek the optimum balance between the sales strategy, establishment and development of new brands and the goods promotion techniques. A structurization of the consumer demand has resulted in a rapid expansion of the foodstuff-specific retail networks. These networks have a double effect of significantly expanding the companies' access to the distribution system and of also making the manufacturers to continuously upgrade the quality of their produce and take action to ensure sustainable production and timely delivery of their goods.

In our view, all the factors as listed above, save for the high growth rates, are present in the Kyrgyz market as well, albeit in a much smaller extent.

Key factors of corporate success

The expansion of the primary target market *theoretically* provides ground for further development of the Kyrgyz fruit & vegetable processing industry. To this end, it must be borne in mind that this scenario will only come to life if the companies are able to satisfy certain prerequisite conditions. These conditions must serve as a framework for the companies selecting a suitable strategy, which would take account of the outlook for the market development and enable the given business to manage to take up its own niche and also seek out an opportunity for implementing this strategy without compromising both the interests of the company and those of the national economy.

Based upon the results of analysis of performance of the companies included in our sample and the conclusions regarding the economic parameters of the industry in question, we have been able to define three key factors, which can guarantee successful operation of the Kyrgyz processing industry in the circumstances as they are now:

1. Maximum possible concentration of available resources

There are two alternative basic strategies for corporate development, inclusive of:

Strategy No.1: this one provides for funneling a complete pool of available resources toward the manufacture of unique products with high consumer characteristics. The range of goods in this case should be narrow, but well thought-out and balanced. The manufacturer must make it a point to work out and maintain unique recipes and technology.

Strategy No. 2 this strategy provides for the expansion of business through establishment of a vertically integrated holding company, which is capable of ensuring an intensive build-up of its capital assets and attracting sizable resources to support sustainable development of the corporation. The operation should experience periodic upgrades to ensure that it makes use of the state-of-the-art technology. Continuous work should be done in the area of development of new lines of product and expansion of the goods range.

Strategy No.1 is less ambitious as opposed to Strategy No.2: a small amount of produce put out by the company during the initial stage of implementation of this strategy may result in the export being unprofitable. Still, the company will be able to establish itself on the internal market and to easily sell out the entire stock of the goods it produces. The job of expansion of the company size, and the place it takes up in the market, can be done in a gradual manner.

Strategy No.2 is intended to enable the manufacturer to successfully compete in both the local and the overseas markets for canned fruit and vegetable products.

Both Strategy No.1 and No.5 are designed to engineer development of a business, which would present an attractive option for interested investors.

2. High degree of “downward” integration

Analysis of the market development trends confirms that those companies that are a tandem of a processing operation and the suppliers of raw agricultural product achieve the highest effectiveness of the production process. It is the case with any country, which boasts a well-developed processing industry, that a minimum of 50% of the harvested product is processed by the local food industry. In Kyrgyzstan this figure is not in excess of 15-20%. The task of achieving high rates of processing of the agricultural produce, while ensuring due quality, required output, timely delivery of the finished product and also exercising adequate control of the product pricing, will only be possible if there is a tight business relationship between the processing industry and suppliers of the primary product. The logic here is that the processing industry must draw upon its own supply of raw material, with the eventual objective lying in the development of the processing sector and not in the increase of agricultural produce output.

3. Access to distribution networks

One of the areas that greatly hamper the operations of the Kyrgyz producers lies in the ineffective distribution systems (refer to “Marketing” section). It is typical of many companies to complain about the problem of low sales, while forgetting about the fact that it is up to them to do their share in resolving this problem, and/or overestimating the qualitative parameters of their produce. Further, the fact of the manufacturers being anxious to stay on the safe side declining to sell on credit (which results in the rigidity of pricing) is in no way conducive of high sales.

It is our opinion that the practice of prepayment has become a rare exception, rather than the rule of business in the circumstances of the current market. To this end, it is highly important for the companies to not only do business with a reliable partner, but to also apply a suitable package of available marketing techniques.

In order for the companies to be able to successfully distribute their produce, the following three options should be considered:

1. Establishing business relationships with large-size wholesale outfits from overseas that enjoy adequate access to the retail networks. While we have been supportive of (and continue to be) formation of the “KirRosExpo” Kyrgyz-Russian Firm in the framework of the Helvetas-Kyrgyzstan Project, still, we do recommend that alternative options be also considered. The said alternative options may lie in setting-up business relations with large/medium-sized firms which have been operating for a continued period of time in one of the regional Russian and Kazakh markets, have access to the local retail networks and are in possession of own financial resources that will come handy in providing the Kyrgyz goods with partial marketing support during the initial stage of product promotion. It must be noted that selection of this option will require additional financial outlays.
2. Establishing cooperative relations with local and overseas retail networks. Marketing of the whole amount of the goods put out currently by the local producers can be easily effected by just 3 or 4 companies of the type as referred to above.
3. Pursuing the practice of “upward” integration realized through the establishment of in-house distribution systems or participation in the corporate capital (in this case, a manufacturer would participate in the capital of a trade firm and/or vice versa).

Situational analysis

A situational analysis should take account of the internal corporate environment components and also outside circumstances, which determine whether the given company will be able to avail itself of the key factors of success. The analysis findings are of a generalized nature and have been arrived at based on the principle that reads: “be more pessimistic when evaluating the shortcomings and be less optimistic when it comes to the merits”. We believe that this approach conforms to the principles of common sense and makes the analyst to pay closer attention to the areas that may later prove to impede the company development.

Internal factors

It is our assessment that, unfortunately, an average Kyrgyz company (meaning an outfit engaged in the processing of fruits and vegetables) has no command of adequate internal environment components that would enable it to successfully compete on both the local and external markets.

We believe that one of the strongest assets that the local companies have is the fairly high quality of many product lines. While this is a very important factor, it, however, cannot ensure sustainable development of a company if there are no other factors to aid this process. The high quality of goods is the result of a better portion of the local companies still boasting a good pool of competent operating personnel. The availability of skilled human resources is to be also designated as one of the strong assets possessed by the local producers.

However, the areas of concern are present in each and every line of corporate operations, inclusive of the management, marketing, finance and production. We find that the list of principal areas of concern is to include the following:

1. Slow pace of distribution and promotion.
2. Lack of working capital.
3. Low amount of own funds invested in the production, this being due to low profitability of the business.
4. Nontransparent nature of the companies' operations¹.
5. There is no long-term development strategy in place.
6. Ineffective planning (marketing, finance).
7. Lack of strategic planners and analysts required to ensure comprehensive development and implementation of wanted modifications.
8. Insufficient capitalization and low market value (this is just a *hypothetic* statement as it can be neither validated nor rejected).
9. Misbalance of management, this being manifested in the ability to provide quite an effective management of the operating process that is counteracted by the low effectiveness of administration in other business areas.

Outsides factors: threats

1. Competition: the accelerated development of the Russian companies has the effect of not only closing up certain opportunities for Kyrgyz companies in the Russian market, but also threatening to take up a share of the local market through the increase in export of Russian goods to Kyrgyzstan.

2. Suppliers: there is a possibility that the suppliers will be unable to provide the processing industry with the required amount of high-quality raw material.

3. Authorities: many entrepreneurs indicate that an expansion of their business and transfer of same to a transparent mode of operation intended to attract the wanted financial

¹ about 50% of the companies included in our sample have provided no financial information, while the other half failed to provide complete information. When preparing the questionnaire, we were afraid that it was this very area in which we would be unable to collect all information we wanted. We are aware of the fact that the companies' unwillingness to provide financial information to outside parties is due to the adverse environment that they have to operate in and may have been caused by fear of falling under an "excessive" scrutiny on the part of the fiscal authorities. On the other hand, the said unwillingness does no good to the companies themselves as the investment appeal of a business is in many ways determined by its transparency, including that in the area of the corporate finance

resources may give rise to a risk of having to put up with an excessive pressure from the “state administration bodies”.

Outside factors: opportunities

1. Neutralization of the factor of competition: attraction of foreign private capital (inclusive of the Russian one) to come in the form of direct investment.
2. Neutralization of the factor of raw material supplies: investments in the development of agriculture and agricultural technologies.
3. In our opinion, the minimum potential of the market is as follows: the Kyrgyz producers will be able to achieve, over the next 5 years, a 1.5-fold increase in the sales on the local market and a 5-6-fold increase in the export of canned fruits and vegetables. The State could also contribute to achieving the said targets by granting certain privileges to the processing operations. For example, these privileges might include (a) exempting from income tax the portion of taxable income, which is used for capital investment, and (b) exempting the import of fixed assets from VAT.
4. A major area of concern for the local companies lies in borrowing, which is greatly impeded by high interest rates and excessive requirements placed by credit companies on the collateral. To this end, we recommend that all parties concerned should be involved in:
 - working out the procedures for subsidization of interest rates (these procedures providing for (i) the borrower being required to only pay back the interest less the subsidy, (ii) the subsidy being paid by a third party directly to the lender, (iii) the subsidization only applying to projects which deal with infrastructure development – operating capacities and related costs required to acquire non-tangible assets);
 - establishing mutual trust funds with membership being composed of companies, local authorities and investment institutions, such funds being purposed to provide guarantee to the lender for the missing portion of the required collateral (in this case, the borrower will pay an insurance premium to the fund for the guarantee it provides).
5. On December 10, 2001, the KR Government enacted a Decree “On actions purposed to develop the food & processing industry and the system of procurement and marketing of agricultural produce for 2001-2005”. While successful implementation of certain measures listed under the said Decree would provide a tangible support for the development of processing operations, the monitoring we have done in order to see the status of compliance with this Decree showed that practically all measures provided for under this document have failed.

Status of compliance with KR Government Decree No.782 of December 10, 2001

The full text of this Decree appears in Attachment No.2.

Department, person in charge	Task	Status
Ministry of Agriculture Person in charge: Alymkan Mansurovna Mansurova, Principal Official, Department of Procurement and Marketing of Agricultural Produce. Phone: 22-06-10	1. Assist in the formation of vertically integrated food supply holding companies and corporations, and financial & industrial groups.	Acting in the framework of this task, a number of proposals have been submitted to Russian and Kazakhstan concerning the would-be integration in the area in point. A series of meetings with the counterpart Ministries of the above countries have been held. While the appropriate action plans have been accepted in a formal manner, no further action followed. <i>"The time has not yet come, we need to wait until the right moment comes"</i> [Note: all statements that appear in cursive in this table are quotations of opinion as stated by the respondents]. All meetings were held at the government level and were also attended by representatives from the Ministries of Interior, Transportation, Public Health and Finance.
	2. Administer long-term leasing of arable land lots to food supply and processing companies (the pool of land lots for lease being available from the land re-distribution fund).	The land would be leased out based on a long-term arrangement and subject to the company's ability to efficiently work the leased land.
	3. Prepare business plans for processing operations.	Earlier in the year, a Consulting Services Center and a Center for Trade & Marketing have been established as affiliates of the Ministry of Agriculture. The mission of the Consulting Services Center lies in advising the applying entrepreneurs about <i>"how to turn an idea into life"</i> . The Center will assist the applicants with preparation of the package of documents to be enclosed with the loan application (the Center officers will provide assistance to the applicant until the loan is actually received). The mission of the Center for Trade & Marketing will lie in providing expert advice to the applicants concerning the "what" and "when" should be done, "where and at what price to sell" and also explaining provisions of the Customs and Tax Codes, etc. Since the start of the project, a total of 131 new food supply and processing companies have been established (the capital is composed of both the own funds and foreign investments, these latter making up a bigger part of the aggregate as compared to the former. The total amount of capital makes up 54 million soms. 45 companies, which have been at a standstill until the start of the project, are now fully functional). Over January-October of 2002, the amount of funds invested in 9,600 operations made an aggregate of 574 million soms. The project operated with involvement of no foreign consultants due to the lack of complementary funds. Further, the Department boasts a complement of highly competent specialists in various areas of expertise. The funding for the project is provided by the Kyrgyz Agricultural Financial Corporation (KAFC).

Fruit & Vegetable Processing Industry Analysis

While working on Item 3 of the Table above, we forwarded an inquiry to K AFC. The reply we received from Ms. B. Jeenbaeva, K AFC Executive Director, provided the following information:

- the specific weight of borrowed funds that were invested in the processing operations in 2002 made 7.1%, with these funds constituting 7.7% of the total amount of loans made in 2002;
- a total of 12 canned food companies have been on the K AFC's customer list for a number of years, with an aggregate of the outstanding debt making up 22.7 million soms, inclusive of 16.7 million soms that were outstanding in 2002.

Department, person in charge	Task	Status
Ministry of Agriculture	4. Develop a program providing for the manufacture of equipment and spare parts. 5. Assist the applicants in purchasing the required equipment.	A two-day workshop has been held with the attendance of farmers and representatives from a number of engineering plants (<i>Envod, Oremi, Dastan, BOEMZ, Ulan, Motor Vehicle Assembly Plant, Janar</i>). No follow-up monitoring has been done. The Ministry of Agriculture is of the opinion that its mission lies with just bringing the prospective partners together and then letting them on their own. There is no possibility of any further assistance coming from the Ministry as the State budget provides no allocation to this end.
	6. Incorporate into the bill drafting plan a Bill "On ensuring due quality and safety of food products".	Work on development of this Bill has been suspended due to the lack of funds. Further, a new Bill dealing with main technical settlement (2003) is currently under review (this Bill has been prepared by a group of lawmakers composed of Laboda, Otorbaev, Davlesov, Estebesov working in conjunction with the Ministry of Agriculture)>
	7. Bring in concert the pertinent standards (the Alimentarius Code, Agreement on Dealing with Technical Barriers – World Trade Organization).	"A list of documents has been developed. A sizable work has been done".
	8. Provide testing ground for all entities responsible for ensuring due quality and safety of food products before the end of 2002.	In progress.
	9. Submit a proposal to introduce zero-rate customs levies on primary products, auxiliary materials and spare parts.	The customs tariffs were reviewed in 2002 and the farming entities were granted certain privileges.
	10. Organize agricultural produce procurement cooperatives.	A total of 111 cooperatives have been organized in the country since the start of the project.
	11. Establish regional commodity exchanges.	Establishment of commodity exchanges is impossible due to the lack of funds.

Fruit & Vegetable Processing Industry Analysis

Department, person in charge	Task	Status
Institute of Agrarian Economy Person in charge: Jyldyz Ozgorosheva, Senior Research Assistant (she is no longer employed with the Institute). Phone: 66-22-20	Establishment of advanced training courses under the Ministry of Agriculture in 2002.	<p>In fall of 2002 a one-day advanced training workshop was held with assistance from Pragma Corporation. The workshop was attended by representatives from 6 processing companies.</p> <p>Advanced training courses are scheduled to be held in the course of 2003. The problem lies in the lack of funds and the trainers.</p>

We have been unable to obtain information from the rest of the total of 13 ministries and departments appearing on the Decree's list (some of these would indicate that they had a huge backlog of work related to the preparation of annual reports, while the others could not be of help due to the fact that they just were unaware of the existence of the Decree [e.g. - State Register]).

In the process of contacting the ministries and departments we were able to notice that the majority of the contact persons showed negative attitude toward the Decree in point. The principal areas of disagreement lay in the declarative nature of the action plan, which had been developed by the Ministry of Agriculture and the Government without consultation with other departments concerned; according to our contact persons, no comment or proposal which had been put forth by the ministries and departments would be taken under consideration by the action plan designers.

The weakest point of the Decree is the not well-thought-out structure of the action plan. The Decree has been enacted following the conference held by the KR President on the subject of the current state of affairs in the processing industry and the criticism he leveled against the state officials who were responsible for engineering development of this industry. The task group assigned to working out the action plan failed to give proper consideration to a whole number of items. Thus, no budget was provided for implementation of the measures listed under the Decree and no specific plan was developed for bringing these measures to life, which, therefore, rendered them the status of bare slogans. The departments acted in a disconcerted manner with each and every one of them trying to put the responsibility for doing the job on the Ministry of Agriculture or the local administration. For its part, it is the position of the Ministry that it will be unable to comply with certain provisions of the Decree due to there being no properly functional legislature governing the operations of the processing industry and also due to the lack of funds in the state budget. Officials from Kyrgyzstandart said that the Decree could not be complied with because it had the nature of a bare statement and had actually been formulated without "No objection" from the ministries and departments involved.

PRODUCTION

The quite sizable operating capacities, which have been created back in the times of the planned economy and been intended to provide mass production of canned fruit and vegetable goods, now stand idle. The system of production and sale of canned fruits and vegetables that had been in operation some 15 years ago was unique, as many major operations were not required to have a finished goods warehouse – the produce coming off the plant line would be immediately shipped off to the customer, with an 80%-plus portion of the entire output being exported to other regions of the Soviet Union (mostly to Siberia).

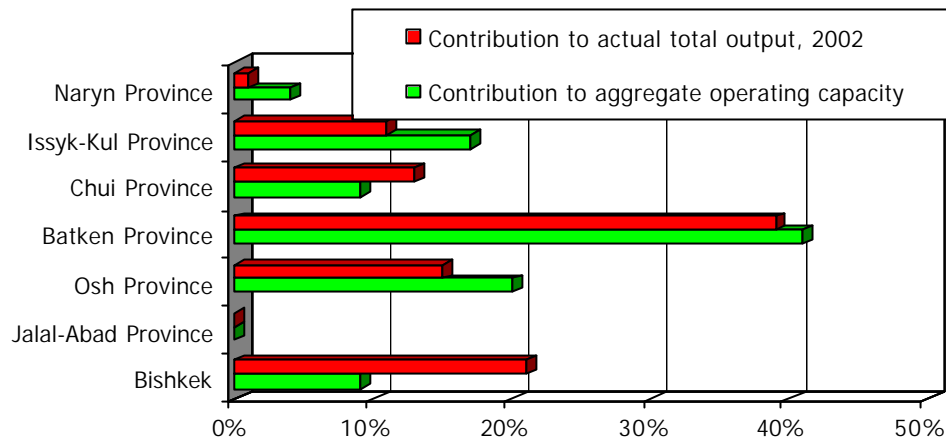
The collapse of the USSR and the ensuing economic crisis and downfall of the ruble that previously served as the common currency for all the Soviet republics had resulted in a destruction of the existing economic ties. The privatization of the middle of the 1990s had the effect of completely breaking down the system of Kyrgyzstan-based *Konservprom* (Russian for “Canned goods industry”) and provided ground for the formation of about 30 independent outfits with varying operating capacities, product range and advantages of geographic location.

Table 1. Goods output and actual capacities – year 2002

Province	Goods output, thousand soms	Actual capacity, thousand soms	Utilization of available capacities
Bishkek	49 898,0	63 415,3	79%
Jalal-Abad Province	1 200,0	1 664,0	72%
Osh Province	36 062,8	145 770,0	25%
Batken Province	93 886,0	300 847,4	31%
Chui Province	30 988,5	67 677,7	46%
Issyk-Kul Province	27 641,8	126 570,8	22%
Naryn Province	1 672,50	28 750,0	6%
Total	241 349,6	734 695,2	40%

It is evident from the Table above that the most significant portion of the available operating capacities of the processing industry is concentrated in the Batken Province. In 2002 the processing operations of the Batken Province put out an amount of canned goods that dwarfed that produced in the other provinces of Kyrgyzstan, and made up 90 million-plus soms, which ran to just 31% of the available capacity (average estimates). The highest utilization of the available production capacities had been achieved in Bishkek and the Jalal-Abad Province (however, it must be borne in mind that the operating capacity of the Jalal-Abad-based operations is quite small).

Diagram 1. Contribution to the aggregate production capacity and actual production – province-by-province breakdown.



As is evident from the Diagram above, there is a certain mismatch between the available production capacities and the actual amount of goods produced in 2002. The highest degree of misbalance is typical of the Bishkek-based and the Chui Province-based operations. Thus, while the Bishkek-based companies command just an 8%-portion of the total industry capacities (in monetary equivalent), these were able to put out 21% of the aggregate industry produce of 2002. The processing operations of the Osh, Issyk-Kul and Naryn Provinces demonstrate the highest degree of underutilization of their respective production capacity.

Equipment and technology

Operating capacities of many an existing processing company have been commissioned into service back in the times of the Soviet Union. The equipment upgrade process discontinued during the initial period following the collapse of the USSR, but then again picked up momentum. As a result, new plant equipment that the companies purchased during the recent 7-8-year currently makes up about 40% of the total equipment pool.

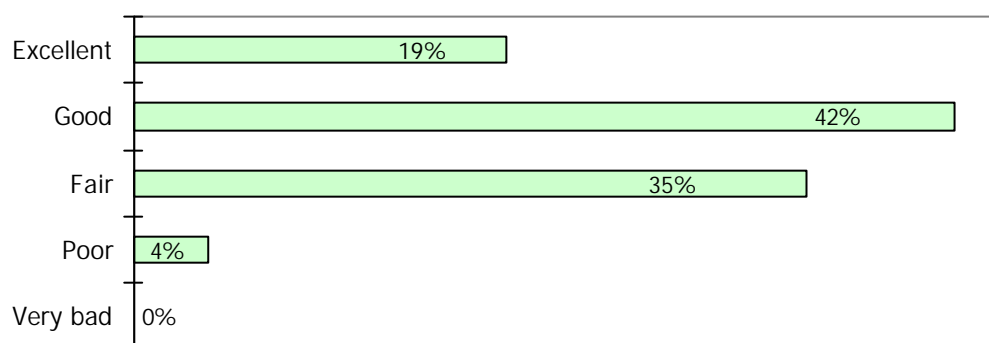
About 56% of the new equipment that was installed at the processing operations in 1991-2002 had been sourced from Russia. The equipment that had been sourced from other CIS countries and Kyrgyzstan over the same period makes up 14% and 9%, respectively. A 12%-portion of the aggregate equipment pool is of the Hungarian origin. The share of equipment of Italian, Polish, Chinese and Ukrainian making is very small.

Analysis of a total of 123 types of equipment that is currently installed at the processing operations found that the average year of making was 1989, while the average data of putting it into service was 1991. The most recent models of equipment are installed at the Bishkek, Naryn Province and Batken Province-based operations (this mostly dates back to 1990s), while the companies from other provinces are mostly complete with equipment that dates back to 1980s. The latest year of equipment making is 2002 with the oldest equipment dating back to 1960.

Table 2. Average year of equipment manufacture and commissioning into service

Province	Year of manufacture	Year of commissioning
Bishkek	1990	1995
Jalal-Abad Province	1980	1985
Osh Province	1987	1993
Naryn Province	1992	1994
Chui Province	1986	1987
Batken Province	1991	1992
Issyk-Kul Province	1984	1983
Average	1989	1991
New equipment	2000	2002
Old equipment	1960	1960

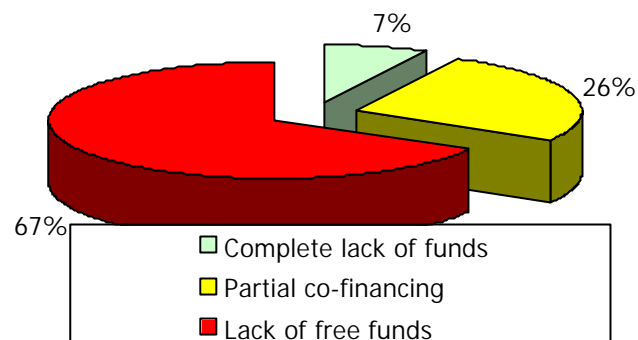
The companies own a 85%-portion of the total equipment pool with 11% and 4% being on a lease or the property of the State, respectively. Depending on the circumstances, the equipment is operated from 1 to 12 months per year, with the average duration being 5-6 months.

Diagram 2. Assessment of equipment serviceability

While a substantial portion of the plant equipment in the industry is of the Soviet making, a better portion of the processing companies continue to assess their technical capabilities as being at a sufficiently high level. Many outfits are in possession of excessive operating capacities whose economic value runs to zero due to these capacities being neither involved in the production process nor leased out to other parties.

Along with this, more than one third of the companies (67%) indicated that they had no funds to cover the cost of acquisition of new equipment, while 7% of the polled companies said they experienced a great want of money to finance the purchase of equipment. Nearly 50% of the companies in the processing industry require consultative and information assistance in seeking out material suppliers and equipment manufacturers. 21% of the polled entities could use the advice of a professional technologist. About one third of the companies in the sample are able to independently source and select equipment that best suits their specific operational requirements.

Diagram 3. Availability of funds for upgrade of the existing equipment pool



Buildings and facilities

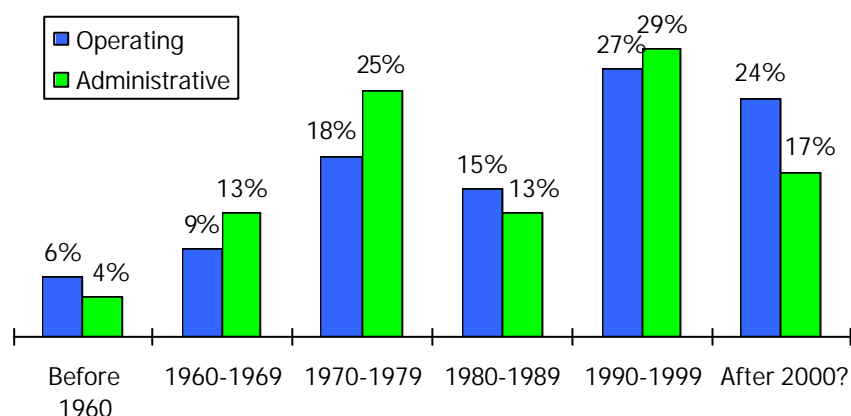
The larger portion of the companies has their own operating and administrative buildings and facilities. 6 companies have affiliates and representative offices, which are mostly housed in rented space.

Table 3. Ownership of operating and administrative buildings and facilities

Operating buildings and facilities		Administrative buildings and facilities	
Own	83%	Own	68%
On lease	14%	On lease	18%
State property	4%	No administrative buildings & facilities	14%

6 companies from the Chui and Batken Provinces indicated that they experienced a shortage of operating areas. 7 companies (out of these, 4 are from Bishkek and the Chui Province) lease out free space, which gives them from 3% to 10% of the total annual income.

Diagram 4. Operating and administrative buildings & facilities - time of commissioning into service.



As is evident from Diagram 4 above, the companies are in possession of relatively modern operating facilities (more than 50% of these have been commissioned into service after 1990).

However, the respondents indicated that 82% of the operating areas were in need of repair, inclusive of 11% that required complete refurbishment. About the same can be said about buildings and facilities of the administrative designation (while 24% of the polled companies stated that their administrative offices were in excellent condition, an equal number of companies indicated that their offices required complete refurbishment).

Industry produce

Currently, there is no clear-cut categorization of the processing industry produce. According to the records available from the Soviet-time files, the processing industry used to put out about 300 lines of canned fruit & vegetable products, working as per the government-order system. Many kinds of produce, which would previously be produced in compliance with the individual GOSTs (State Standards), are now off of the production list. We have done an analysis of the processing industry produce that was broken down into 8 groups:

1. Fruit juices.
2. Jams, fruit paste, fruit sauces.
3. Tomato paste and sauce.
4. Tomato juice.
5. Canned vegetables (marinades, pickles, mixed pickles).
6. Compotes.
7. Dried fruits and spices.
8. Wines and primary products for wine-making.

Table 4. Goods map – Year 2002.²

Goods group	Manufacturer	Location	Actual utilization of available operating capacities
Fruit juices	<i>Ekonprodukt</i>	Issyk-Kul Province	36.7% ³
	<i>Promservis</i>	Issyk-Kul Province	
	<i>Yntymak</i>	Issyk-Kul Province	
	<i>Jemish</i>	Issyk-Kul Province	
	<i>Kuntuu</i>	Chui Province	
	<i>Dessert</i>	Chui Province	
	<i>Kyrgyzstan</i>	Osh Province	
	<i>Tort-Kulsky</i>	Batken Province	
	<i>Temir-Too</i>	Naryn Province	
Jams, fruit paste, fruit sauces, fruit additives	<i>Osh fruit&vegetable processing plant</i>	Osh Province	7.9%
	<i>Rakhmonberdy</i>	Osh Province	
	<i>Kyrgyzstan</i>	Osh Province	
	<i>Yangi-Bakhor</i>	Osh Province	
	<i>Yntymak</i>	Issyk-Kul Province	
	<i>Promservis</i>	Issyk-Kul Province	
	<i>Temir-Too</i>	Naryn Province	
	<i>Jashylcha</i>	Chui Province	
Tomato paste and sauce	<i>Dessert</i>	Chui Province	40%
	<i>Tokmak canned goods plant</i>	Chui Province	
	<i>Yntymak</i>	Issyk-Kul Province	
	<i>Temir-Too</i>	Naryn Province	
	<i>Mamyr</i>	Osh Province	
	<i>Rakhmonberdi</i>	Osh Province	
	<i>Yrys</i>	Jalal-Abad Province	
	<i>Baerokos</i>	Jalal-Abad Province	
Tomato juice	<i>Jashylcha</i>	Chui Province	see "Fruit juices"

² Data of Year 2002

³ including tomato juice

Fruit & Vegetable Processing Industry Analysis

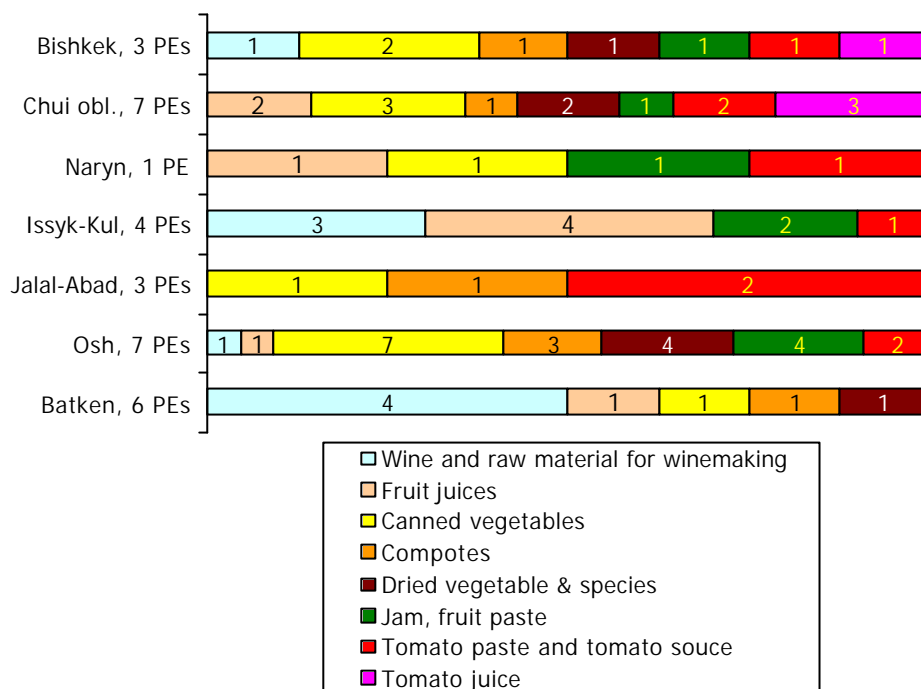
Goods group	Manufacturer	Location	Actual utilization of available operating capacities
	<i>Kuntuu</i>	Chui Province	
	<i>Dessert</i>	Chui Province	
	<i>Sokoev</i>	Bishkek	
Canned vegetables (marinades, pickles, mixed pickles)	<i>EIM</i>	Osh Province	18.5% (pickles) 46.6% (marinades)
	<i>Kara-Shoro</i>	Osh Province	
	<i>Kyrgyzstan</i>	Osh Province	
	<i>Mamyr</i>	Osh Province	
	<i>Osh canned goods plant</i>	Osh Province	
	<i>Rakhmonberdi</i>	Osh Province	
	<i>Yangi-Bakhor</i>	Chui Province	
	<i>Dessert</i>	Chui Province	
	<i>Kuntuu</i>	Chui Province	
	<i>Jashylcha</i>	Chui Province	
	<i>Ak-Aryk</i>	Batken Province	
	<i>Yrys</i>	Jalal-Abad Province	
	<i>Temir-Too</i>	Naryn Province	
	<i>Sokoev</i>	Bishkek	
Compotes	<i>Dessert</i>	Chui Province	19.6%
	<i>Kyrgyzstan</i>	Osh Province	
	<i>Mamyr</i>	Osh Province	
	<i>Rakhmonberdy</i>	Osh Province	
	<i>Ak-Aryk</i>	Batken Province	
	<i>Yrys</i>	Jalal-Abad Province	
Dried fruits and vegetables, spices	<i>Nuristan</i>	Bishkek	50%
	<i>Monada</i>	Chui Province	
	<i>Ivtok</i>	Chui Province	
	<i>Noigut</i>	Batken Province	
Wines and primary products for wine-making	<i>Arbet & Co</i>	Batken Province	24.4%
	<i>Bakhus</i>	Batken Province	
	<i>Beshkent wine-yard</i>	Batken Province	
	<i>Tort-Kulsky</i>	Batken Province	
	<i>Yntymak</i>	Issyk-Kul Province	
	<i>Ekonprodukt</i>	Issyk-Kul Province	
	<i>Kara-Shoro</i>	Osh Province	
	<i>Jemish</i>	Issyk-Kul Province	

Not a single company out of the sample was found to be producing a complete 7-line package of goods. The most diversified operations are the *Dessert* (5 product lines), *Kyrgyzstan*, *Pakhmonberdy*, *Temir-Too* and *Yntymak* (4 product lines).

4 companies put out 3 product lines, 8 companies put out 2 product lines and 11 companies operate a single-product line.

The majority of the companies (14) are engaged in the production of canned vegetables (pickles and marinades). 9 companies produce fruit juices. 8 operations do the canning of jams, fruit paste and sauces, tomato paste, wine and raw products for wine-making.

Diagram 5. Production map.



Based on Diagram 5 above, it is possible to single out several provinces that are specialized in certain product lines. Thus, three fourth of the Issyk-Kul Processing Enterprises (PEs) are engaged in the production of fruit juices. 100% of the Osh Processing Enterprises make canned vegetable products. Two third of the Batken-based companies are wine-makers, while the biggest producers of dried vegetables and fruits locate in the Chui Province (these include the Bishkek-based operation). The highest degree of diversification is typical of the Osh Province, Chui Province and Bishkek-based operations, which produce 7 out of the 8 product groups as listed above.

The most complete range of products is produced in the Chui Province and Bishkek.

The highest operating load falls to the production lines specializing in the making of dried vegetables, fruits and spices, this being due to the fact that:

1. The companies, which specialize in this area of processing, have the lowest degree of diversification and are thus able to achieve the maximum concentration of the available resources.
2. The entire output goes to export. The companies have long-standing customers and use the established distribution channels.
3. The companies of this type are able to operate for longer periods of time over the calendar year.
4. The companies of this type are able to cooperate effectively with the primary product suppliers.

Comparison of data pertaining to the product categories with the data from the "Marketing" section makes it evident that the highest degree of utilization of the available operating capacities is typical of the companies that put out produce, which is in high demands on the market, including the internal one (juices, tomato paste, canned vegetables).

Certainly, utilization of the available operating capacities is a function of a number of factors, which are as follows:

1. The degree to which the given company selects to diversify its product range. Either a slight or a strong degree of diversification of the product range will result in underutilization of the available operating capacities. Duration of the processing season will also bear heavy weight on utilization of the operating capacities.
2. Inadequate distribution and promotion channels.
3. Inconsistency of raw material supplies. This may be due to poor business relations with the primary product suppliers, climactic conditions, crop productivity, mismatch of demand for and supply of a certain raw material, inconsistent supply of glass cans and packing material.
4. Financial capabilities. This is a multifaceted factor, which is affected by the level of profitability of the given operation, the dynamics of cash flow and also the access to complementary working capital in such an amount and at such a time as is required under the given circumstances.

Out of the group in consideration, a wide range of juices is only available from the *Promservis* company (15 names), with the remaining operations putting out from 1 to three types of juice only. The highest volume of juice production falls to the apple juice, which was the line of specialization of 7 companies (out of a total of 29) in 2002. 6 companies make tomato juice and 4 operations put out apricot juice.

The polled companies produce about 10 types of jam – from the traditional apple jam through the rare fig-tree jam. However, the data available to us show that the range of jams produced at any given operation includes a maximum of 2-3 types. An extended range of jams is only produced at two operations – *Promservis* and *Temir-Too*.

The bulk of canned vegetable products falls to pickled cucumbers, tomatoes, squash and mixed pickles.

The range of compotes that were in production in 2002 included 7 different types. The leading position in this area was held by the *Rakhmonberdy* company, which turned out to be the only processing outfit that produced the complete range of compotes. The other companies were only producing from 1 to 3 types of compote.

A special status is enjoyed by the operations that engage in drying, which is the only line of processing activity for 4 companies out of our sample. The most active lines are the drying of fennel, sweet pepper and onion. The Chui Province-based companies put out 5-6 types of dried vegetable and green products. The *Monada* company boasts the widest product range that includes a total of 6 different products.

Out of the 8 winemaking operations, 3 companies are engaged in the making of alcohol products using fruits and grapes as raw material (“Arbet & Co”, “Beshkent Wine-Yard”, “Bakhus”). Due to the *Helvetas*’s policy ruling out provision of assistance to the companies, which are engaged in the production of alcohol, this analysis covers the winemaking sub-industry in general terms only.

Also, refer to Attachment 1 – “List of the fruit & vegetable processing companies of the Kyrgyz Republic”.

Production process

The recent 10-year period saw a substantial decline in the duration of active production season at the bigger part of the processing operations of Kyrgyzstan. While the seasonal nature of this line of

production activity has always been a significant factor, the processing companies of the past would be able to accumulate a sizable stock of raw material for subsequent use during the off-season period. In this way, the operation, which was at the pick of its productivity at the time of harvesting, would be provided with a feed until the spring of the next year. Currently, a host of various factors as described above is the cause of the processing companies being only able to operate for an average of 3-4 months per year (i.e. from July through November). Further, the production cycle (which is the span between the feed of primary product and the moment the finished product comes off the production line) is also very short and may at some operations run to just half a day.

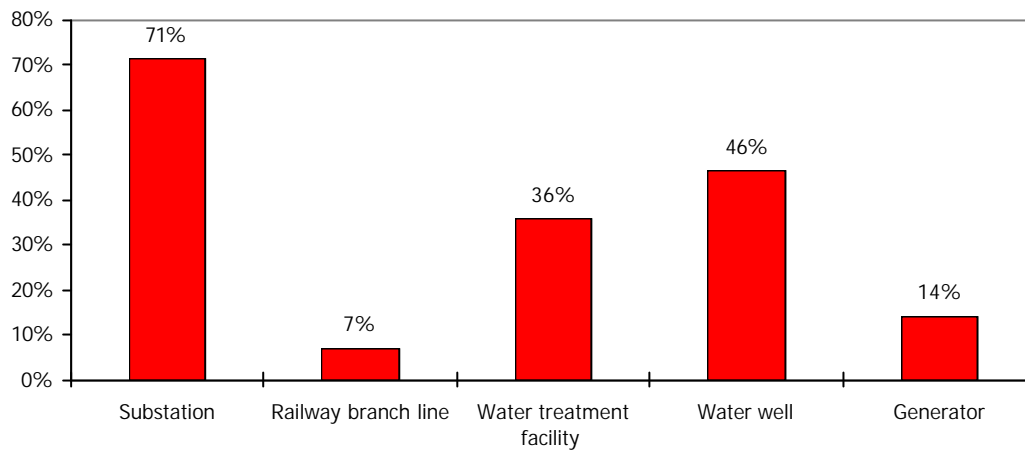
During the harvesting season, 56% of the processing companies will operate on a two-shifts-per-day basis. 37% of the operations will operate on a single-shift-per-day basis. Just 7% of the total will work in three shifts per day. 93% of the companies use manual labor. According to the processing companies' own estimates, the use of manual labor makes an average of 47%. At three operations manual labor is used in the performance of 80%-100% of the jobs.

The companies from our sample can be divided into **two groups**:

- the better portion of the companies from our sample (23%) is engaged in the **production of canned fruits and vegetables and winemaking**. At these operations, the pick of production activity falls to late summer and autumn. Initial portions of the company revenue will come in autumn and continue through winter, with the last proceeds from the sale of previous-year produce arriving in early spring. This pattern of revenue receipts results in the companies experiencing a perceptible shortage of cash from middle May through late September, which is the very period that claims increased amounts of readily available money as the companies need to participate (to various degree) in the funding of field works.
- 4 companies are engaged in the preparation of **dried vegetables and herbs**. This number is too low for us to be able to make out any reliable pattern. However, these companies are in a better position as the production process runs on a round-the-year basis and the cash shortage period spans from September through December.

21% of the companies experience no problems in the area of power supply. 15 (36%) companies have to put up with inconsistent electricity supply (it must be noted that 9 out of these 15 companies are located in the Batken and Jalal-Abad Provinces. 7 companies (out of these, 4 are from the Batken Province) are hindered by inadequate water supply. 6 companies experience heating problems (out of these, 5 are from the Osh and Batken Provinces). In terms of adequacy of the power supply, the least well-to-do are the provinces of Osh and Batken, while the most well-off is the Chui Province.

Diagram 6. Availability of engineering communications to the processing operations



According to the management of the companies from our sample, the most significant factors that bear weight on smoothness of the production process are the inconsistency of raw material and glass cans supply and also a lack of the working capital.

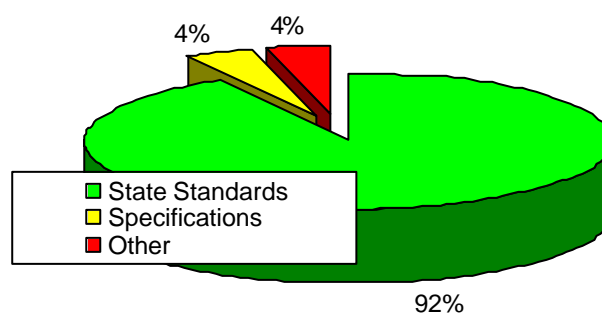
Table 5. Problems affecting the production process

	Affect substantially	Negative effect depends on the circumstances	No negative impact
Interruptions in glass cans supply	48%	30%	22%
Interruptions in raw material supply	41%	26%	33%
Lack of working capital	31%	46%	23%
Interruptions in electricity supply	21%	32%	46%
Interruptions in water supply	11%	26%	63%
Equipment downtime	7%	64%	29%
Work discipline violations	4%	8%	88%

Quality control

The better portion of the goods (92%) is produced in compliance with the current GOSTs (State Standards), with the remaining portion of the produce being made as per the specifications (4%) and other standards (4%).

Diagram 7. Quality standards



When checking the quality of their produce, many companies are guided by the current GOSTs, specifications and other standards. To this end, random sampling will typically be done with the samples then being subject to laboratory, chemical & biological and technical testing. The availability of quality certificates and that of licenses were on the list of parameters that the companies use as assurance of quality of their produce. The questionnaires also indicated the consumer's role (one of the companies draws upon the assessment that would-be customers give of the quality of their produce at trade exhibitions; on one occasion the high demand was named).

The customers' opinion about the quality of produce was found to be under monitoring at 11 companies. According to these companies, there are three main parameters, which will be typically used by consumers as reference points when determining the product quality, inclusive of the taste, packing and acceptable pricing (also refer to "Marketing" section).

51% of the companies maintain an in-house system of product quality control, such a system being also based upon relevant technical norms and standards. 11 companies were found to have no clear-cut system of quality control. Our study found that only one company had on its manning table a quality control officer.

6 companies believe that the quality of a finished product is a function of quality of the raw material, and do thus make it a point to increase control of the primary product quality. Only two companies maintain an in-house system of quality control management. 2 companies indicated that the quality and competence of the personnel did also bear weight on the quality of the finished product.

Only one company recognized the importance of **quality management**.

According to the polled companies, the list of reasons for the poor product quality includes low-quality raw material (33%), inadequate electricity supply (22%), equipment downtime (18%) and other problems related to financing, personnel and climactic conditions (10%).

Conclusion

The state of affairs as concerns the companies' operating activity can be considered as quite sound (if we are to use such reference points as the utilization of available operating capacities and the technologic capabilities), particularly in the light of the poor harvest of 2002.

However, if we are to assess the production activity from the point of view of such related areas as provision of operating supplies, finance and marketing, a conclusion can be made about the existence of a number of problems as set out below:

1. Comparison of a range of facts about the developments in the sales markets (refer to "Marketing" and "Capital investments" sections) enabled us to conclude that the amount of funds, which are actually required to meet the operating needs of the processing industry, is significantly above the estimates presented by the companies themselves. However, as was stated above, 67% of the companies are unable to cover the cost of acquisition of capital assets. 81% of the companies are planning to buy new equipment, while 30% are counting on investments from would-be partners.
2. In our view, the processing industry is hampered by a low concentration of operating capacities. Out of our sample of 28 companies, there is a very small group of outfits that can be deemed as large-size operations as seen in the context of Kyrgyzstan. A big enterprise is more appealing to a major investor than a smaller one. A big operation commands a better maneuverability in terms of obtaining an adequate supply of other resources (raw material, packing, workforce) and also in terms of ensuring sustainable sales of its produce.
3. As many processing companies are shutdown for the better part of the year, this also deducts from their investment appeal. In our opinion, the principal causes of this problem lie

- with the product range, operating stock and working capital management at the processing outfits.
4. Many companies comply with the established GOSTs when making their produce. While these GOSTs do ensure satisfactorily high standards, the GOSTs have the effect of limiting, to a certain extent, the company's freedom in developing new product lines. Nearly half of the polled companies have no in-house system of quality standards and quality control, which puts in doubt the ability of such operations to set going the production of new product lines of a consistently high quality.
 5. The issue of establishing a system, which would provide for the adequate supply of glass cans, has been raised on a number of occasions by representatives from the processing companies at the meetings of the task group established in the framework of the *Helvetas-Kyrgyzstan* project. As a result of these meetings, a list of would-be suppliers of glass cans was established and the feasibility of joint procurements of glass packing was also investigated. The poll showed that the problem as described above continues to greatly hamper the operations of local companies.

A success of the production activity depends, in the first place, on the effectiveness of the marketing function. If the companies succeed in shifting the emphasis of management toward marketing, they will be able, if not to resolve many operating problems, then to at least get an initial impetus toward their resolution (refer to "Marketing" section).

Yet another cause of many operational problems is, in the traditional opinion of the business community, the lack of the working capital and funds needed to cover the cost of acquisition of fixed assets (refer to the "Capital investments" section).

In order to further the development of production activity of the companies in question, we propose that the following actions should be done:

1. Organize guest visits of Kyrgyz processing companies' representatives to Russian (Ukrainian) operations of similar profile.

The Russian companies may perceive their Kyrgyz counterparts as competition and thus decline to participate in "exchange programs". Still, we believe that an attempt at establishing a contact must be made.

2. Establish business contacts with the Russian Research Institute for Canned Products and Dried Vegetables Industry under the Russian Academy of Agricultural Sciences (RRICP).

RRICP. 78, Shkolnaya St., Vidnoye town, Lenin Region, Moscow Province, Russian Federation, 142703. Phone: (095) 541 08 77, 541 88 22, 317 07 26. Fax: 317 07 26. In 2004, RRICP will celebrate its 70th anniversary. RRICP does research in the area of canned products industry, primarily in thermal canning, fruit and vegetable drying, production of frozen food and packing of finished produce. Apart from the main line of activity, which is the actual implementation of research products, RRICP also has in its structure the departments of standardization and certification of canned fruit and vegetable products. RRICP is open for any business contacts that involve provision of professional advice in the area of food processing.

In March 2002, RRICP, acting in conjunction with the International Industrial Academy (see "Management" section) held a conference dedicated to the subject of "Modern technologies and product range in the fruit & vegetable processing industry". The option of approaching the administration of RRICP with a proposal that a similar conference be held for the benefit of the Kyrgyz companies is open.

3. An alternative to organizing a conference as indicated above would be to try to provide the Kyrgyz companies with the following reference material available from RRICP:

- "Description of vegetable raw material for canned food industry" by E. Ya. Megerdichev, a department head with RRICP. This work indicates that while the quality of primary material

- is governed by normative documents (GOSTs and specifications) whose number runs to several hundred pieces. At the same time, the technologic requirements, which should apply to raw fruit & vegetable raw material and be a function of the type of processing and the product range, are not specified in the normative documents. However, the knowledge of such requirements in the business of processing is indispensable as the properties of a primary product determine its consumption per unit of finished product and the quality of same. It is this information that constitutes the subject matter of the work in point.
- "Modern equipment usable in the production of semi-finished fruit & vegetable products with aseptic pre-packing provided by use of polymeric and combined materials" by G. R. Nariniyants, head of canning technology department of RRICP.
 - "New technique for calculating the cost of production of canned fruits and vegetables" by N. I. Tomilova, RRICP. This work is a report on the results of research performed by RRICP in the framework of a project initiated in connection with Russia joining WTO and intended to develop relevant proposals and recommendations for processing operations.
 - "Packing in the processing industry" by G. I. Robsman, Head of Product Packing Department, RRICP.
 - "The microbiological control of canned products quality as the basic prerequisite for ensuring safety of canned products" by B. I. Golod, Head of Microbiology Department, RRICP.
 - "Highly effective technologies and technical means of production of rapid-frozen vegetables, potato, berries and fruits" by N. S. Shishkin, Head of Refrigerated Processing Department, RRICP. The consumer demand for rapid-frozen products is on a continuous rise. This type of goods has joined the highly profitable commodities category in many countries of the world. The ever-increasing volume of import of rapid-frozen goods speaks of the very low level of development of this sector of the Russian processing industry. To this end, it can be said that there is every reason for initiating an active development of this production sector.
 - "Technology and technique of production of dried fruits and vegetable" by V. B. Pento, Deputy Director of RRICP. This work gives a through consideration to the technologic specifics of production of dry mashed potato and also such a product of intermediate drying as a rapid-frozen potato. The author says that if a would-be operation be complete with Russian equipment and be housed in a building made of pre-fabricated structures, then the start-up capital will make up about 50 million rubles, inclusive of 30 million rubles required to cover the cost of primary product for one operating season (10 tons of potato). According to the author's estimates, the investments as stated above can pay for themselves during a single season (205 days).

4. Resume investigating the feasibility of a horizontal integration of the processing operations. Investigation of this option should involve determining the specific list of factors and conditions, which would make it economically advisable for the processing companies to participate in a joint purchase of glass cans. If realistic estimates do indicate that such integration is more expedient as compared to independent procurement, then the success of a joint undertaking will depend on the selection of a right structure or person who would administer each and every step of the procurement process (gathering information on the current requirements, confirmation of the requirements stated earlier in the process [e.g. through a prior agreement], sourcing of funds for the purchase of glassware, establishment of procedures for procurement, delivery and redistribution). Further, there can exist opportunities for integration in the area of procurement of other supplies (electricity, fuel, labels, packing).

We indicated above that one of the major impediments to development of the production potential of the processing industry lies in low degree of concentration of the available resources.

There are several options for changing the existing state of affairs.

1. Develop procedures for amalgamation of processing operations.

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The processing industry has no practical experience in dealing with the amalgamation-type transactions. Consequently, a majority of opinions about such a deal can be negative and it is very important to show, even though on a theoretical example, the possible benefits that may result from merger of a number of processing outfits. The option of a merger could be brought to the companies' attention with specification of would-be advantages and downsides.

2. During a workshop that was held on October 9-12, 2002 at the Aurora Sanatorium, a proposal was made concerning the establishment of a national brand for the produce of the local processing industry. Many workshop participants favored the name that would read as Dary Issyk-Kulya (Russian for "The gifts of Issyk-Kul").

Work that should be done in this direction is quite sizable. The key role in ensuring success of a prospective trademark will be played by the owner of this trademark, whose function will be assigned to:

- the to-be-established association of processing companies;
- one of the Kyrgyz fruit & vegetable processing outfits;
- a trade firm.

In our opinion, in order to prevent a possible conflict of interests, the function of the owner of the said trademark should be assigned to a company from one of the related industries (a trade firm or an operation that has a record of successful performance in an area of the food industry, which is not processing).

3. Yet another option would be to help the Kyrgyz operations to approach companies who are the owners of established canned product trademarks with a proposal that the Kyrgyz party should be granted the right to produce goods marketable under these trademarks.

This step would also serve as complementary instrument in figuring out the actual business appeal of the Kyrgyz companies and to also determine if these companies meet the requirements that may be put on them by potential franchisers.

4. Vertical integration (refer to Figure 1).

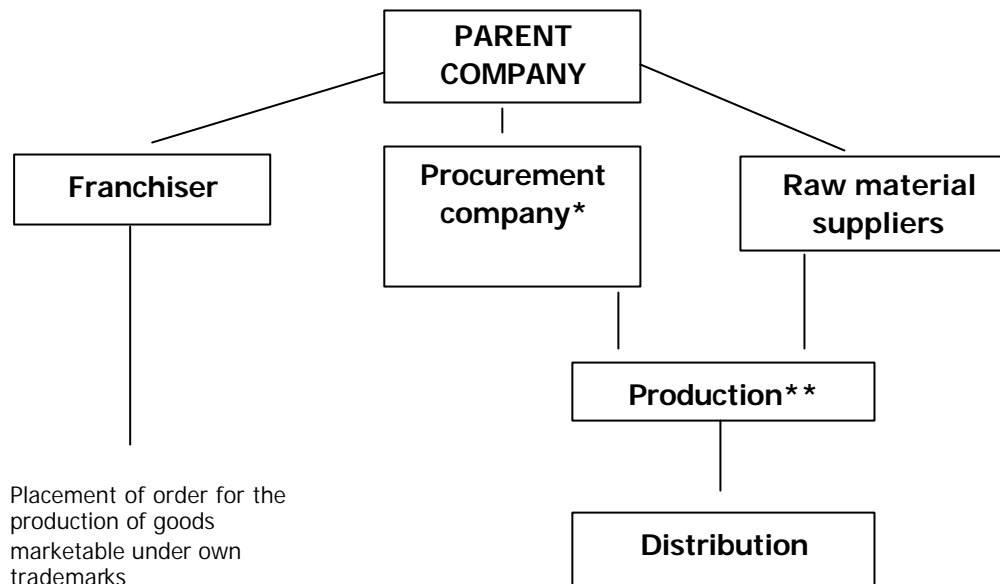
This option may involve elements of all the three options as described above and can be both the largest in scale and also the most complicated and multifaceted as compared to the other ones. In our opinion, this option can be realized through the formation of "soft" holding companies (these will involve cooperation on a contractual basis with the coordinator's function being assigned to one of the participants) or "hard" holding companies (these will require concentration of the control functions in the hands of the parent company). Yet another possibility would involve the establishment of a mixed outfit with a "hard" holding company forming the basis of the structure and the complementary elements functioning on a contractual basis (e.g. franchising). The multifaceted nature of this option allows for the formation of regional holding companies, slightly diversified outfits (these can specialize, for example, in the production of tomato paste) or highly diversified operations.

The principal stages of establishing a holding company in the processing industry will involve:

1. Designation of the parent company.
2. Selection of the goods promotion strategy.
3. "Forward"-type integration, which requires that the manufacturer has a clear vision of and adequate information on the target markets and also calls for establishment of a distribution system.
4. Establishment of a brand (brands). Development of the sales program and production plan.
5. "Backward"-type integration, which calls for establishment of a system of raw product supply to meet the production plans of the holding company.

At the initial stage of the holding company operations, the parent company can ensure due utilization of the available operating capacities by placing orders for the production of certain goods.

Figure 1. Vertically integrated holding company



Objectives:

Medium-term objective: secure strategic advantages in the areas of procurement and sales.

Long-term objective: secure leading positions in the food industry.

* provides supply of missing raw material, packing, fuel, spare parts, fertilizers, etc.

** several companies (franchisees or private companies).

SOURCE OF RAW MATERIALS

In October 2002, the *Helvetas* Private Initiative Support Project held a workshop for representatives of the executive staff of Kyrgyz processing operations and those Russian companies, which showed interest in establishing business relationships with the former. In the course of this workshop, delegates from the Kyrgyz companies indicated that in order for them to be able to increase export to Russia, they would need to be provided with a larger amount of raw materials. The Kyrgyz executive also said that they had certain difficulty in cooperating with the farmers.

Later, in February of 2003, *Helvetas* organized a workshop for the executive staff of Kyrgyz processing companies and representatives from local farms. The purpose of this workshop lay in development a joint action program intended to provide the processing operations with a sustainable source of raw materials. In the course of the workshop, the participants reviewed five models of co-operation between the farmers and the processing outfits. Two out of the said five models are already in operation at the *Nuristan* and the *Agroplast* JSC. When working on this study, the area of our interest lay in finding out the reasons for the local processing companies

experiencing a shortage of raw materials, which in turn results in a substantial decrease in the duration of operating period over each given year.

Utilization of available operating capacities

Analysis of the information on utilization of the available operating capacities (this information was provided by the processing companies) indicated that there was a substantial variance in the degree of utilization achieved at each given operation. Thus, 12 companies (which is 45% of the total) were found to utilize their capacities for 50%-plus, while at some operations this index would make up 12%, and was even as low as 2.5%.

Utilization of available operating capacities at the Bishkek-based companies makes up an average of 54% (Chui Province – 61%, Jalal-Abad Province – 71%, Osh Province – 34.8%, Batken Province – 58.94%, Issyk-Kul Province – 20%, Naryn Province – 5%).

Very important is the companies' own assessment of the potential for increase of their output. We would put the question in the following way: "What is the amount of raw material required in order for the available operating capacities of your operation to be utilized in full?" Naturally, there was a variance in the respondents' estimates (from 1.2 times to 30 times the current supply). The overall production capacity of the Kyrgyz companies can allow for processing of an amount of raw material that is 5 times greater than that processed in 2002.

The cost of raw materials makes up an average of 34% of the production cost in the processing industry. (We note that the majority of the polled companies declined to supply us with financial data, which means that the above figure is just an approximation).

Quality requirements

14 companies determine the quality of primary product through tasting and laboratory testing. The other companies do a visual examination of raw material and also draw upon the suppliers providing the quality certificates.

Talking about the quality of primary products, 61% of the polled companies indicated that it was of a medium level. At the same time, the quality of raw material produced by use of the companies' in-house resources was assessed as being high. The quality of imported raw material was rated as being low.

Table 6. Quality of raw material

	High quality	Medium quality	Low quality
Raw material produced by use of in-house resources	8	8	0
Raw material sourced from local suppliers	4	14	0
Imported raw material	1	2	1
Total	13	24	1

Zones of concentration of raw material suppliers

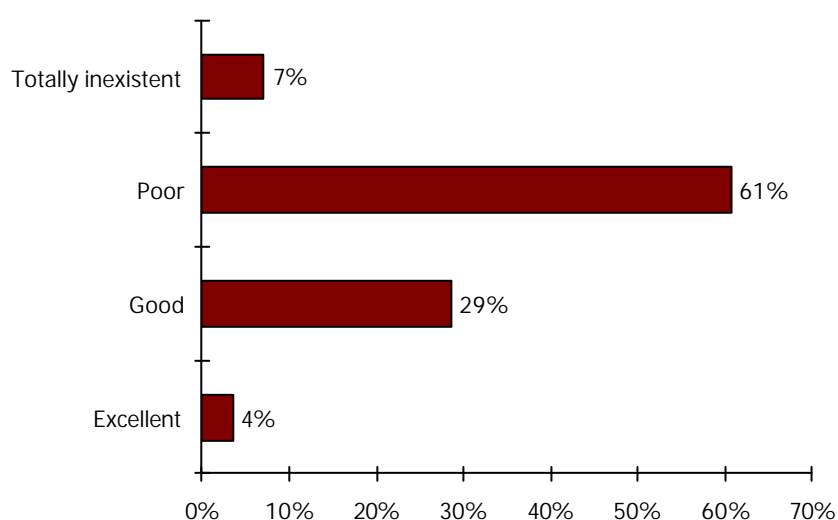
The data available to us indicate that 74% of the processing companies source raw materials from the local suppliers, 22% have their own source of primary products with the remaining 4% sourcing raw material from abroad. The most part of the locally sourced raw material comes from households and small farms (cooperatives). For the time being, this is a natural state of affairs considering that the number of big farms has gone down substantially. However, this gives rise to such problems as the processing companies' inability to source sufficient amount of raw material and also the variance in grades and quality of same.

The 5 companies, which locate in the south of Kyrgyzstan, source raw materials from Uzbekistan.

The average distance between a raw material supplier and a processing operation makes up 133 km, with the maximum and minimum spans running to 850 km and 5 km, respectively.

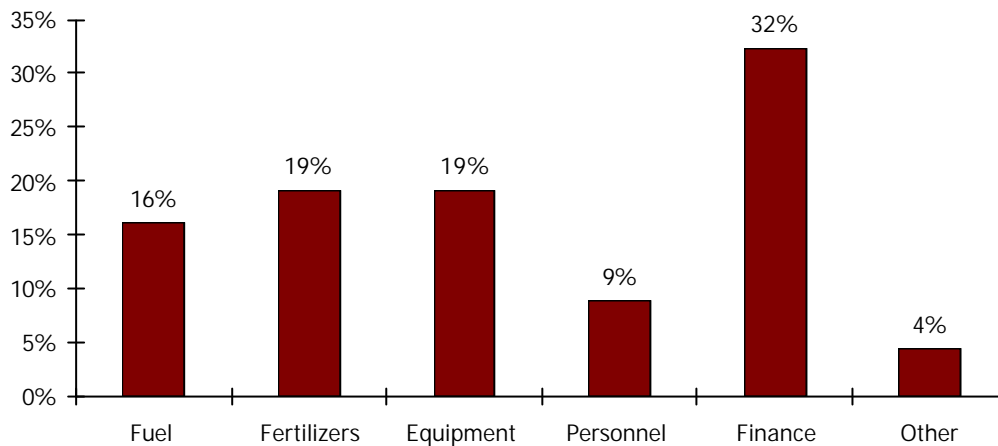
Suppliers' logistics base

In the course of our poll, the companies gave assessment to the suppliers' logistics base. Nearly two third of the companies (61%) assessed it as being in poor condition, while 7% of the respondents stated that the suppliers' logistics base was totally non-existent. According to 29% of the respondents, the said base was in good condition and only one company assessed it as being in excellent state.

Diagram 8. Suppliers' logistics base

According to the respondents, the main problems experienced by the raw material suppliers lay in the lack of funds, equipment and fertilizers.

Diagram 9. Main problems experienced by raw material suppliers (according to management of the local processing companies)



Nature of relationships between processing companies and raw material suppliers

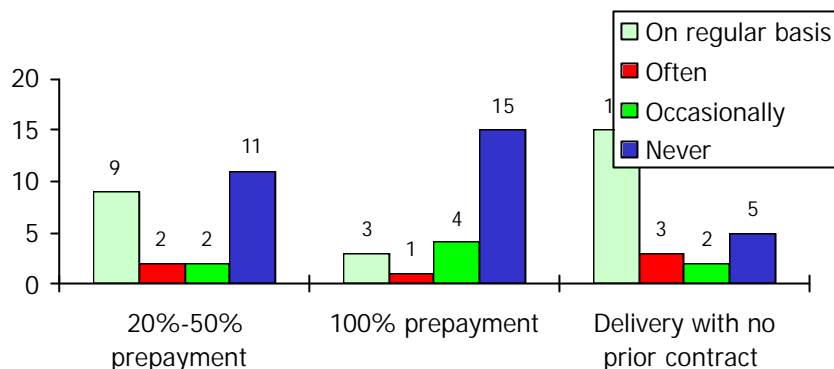
The poll results indicate that an **average age** of business relationships between a processing operation and its suppliers runs to 8 years, with the maximum and minimum ages making up 40 years and 1 year, respectively. Only 4% of the respondents indicated that they were not satisfied with the business they did with their current suppliers. 62% of the respondents held their suppliers as reliable business partners. Along with this, 87% of the respondents believe that they would be able to easily find an alternative source of raw material, should it become necessary. Only 3% of the respondents indicated that they would be in for substantial trouble if they should lose their current suppliers.

A serious area of concern is the financial relationships between the processing companies and their suppliers. When administering our poll, we would ask the respondents to estimate the frequency with which they would resort to the following forms of financial relationships:

1. Prepayment to suppliers of 20%-50% of the total cost of primary product.
2. Prepayment of 100% of the total cost of primary product.
3. Suppliers bring raw material without prior agreement and the company pay according to the actual amount of received raw product.
4. A processing company will provide loans in order for the prospective suppliers to be able to cover the cost of fuel and fertilizers, on the condition that these loans will be repaid in the form of raw material.
5. Operation of the “processing outfit + farmers” cooperative outfits in which the suppliers constitute a part of the joint business.
6. Conclusion of advance contracts calling for obligatory provision of raw material supplies with there being no prepayment.

Virtually all respondents indicated that they would resort to the following three types of financial relationships (refer to Diagram 10 below):

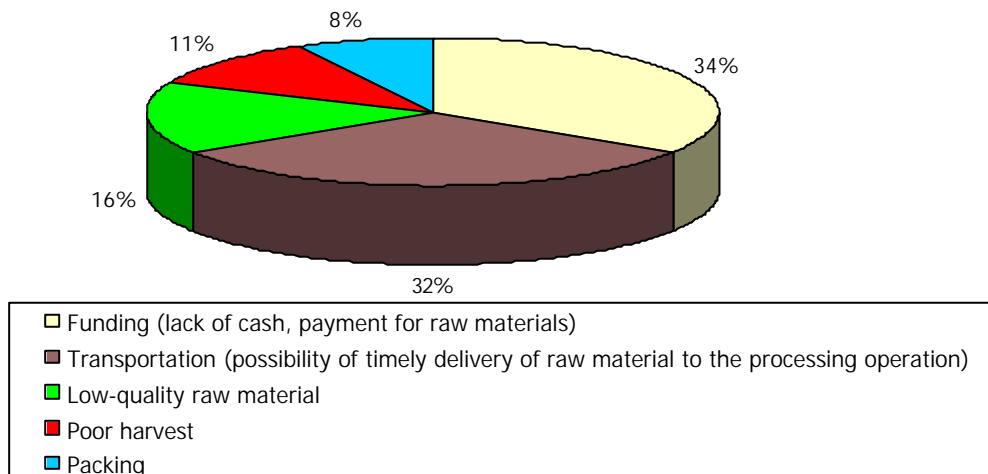
Diagram 10. Existing forms of financial relationships between processing companies and their suppliers



62% of the respondents said that they never provided 100% prepayment for anticipated delivery of raw material. The same number of companies indicated that they would regularly buy raw material with there being no prior arrangement.

In the course of this study we also made an attempt to determine the list of **main problems existing in the area of relationships between the processing companies and their suppliers.**

Diagram 11. Main problems in the area of relationships between processing companies and their suppliers



According to our respondents, the list of problems as indicated above also included inconsistency of raw material supplies, weather conditions, fluctuation in the cost of primary products, lack of funds experienced by the farmers, irresponsibility on the part of the farmers, remoteness of the suppliers, inexistence of contractual relationships. Presence of each of these problems was confirmed by one or two companies.

The list of possible solutions to the aforesaid problems included:

- purchase of land lots in order to grow own produce;
- more careful selection of business partners among the suppliers;
- establishment of cooperative relations between processing companies and farmers;

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- improvement of the contractual relationships.

The respondents also named a number of financial solutions to the above problems, including an increase in the working capital, provision of a 50% prepayment to suppliers and giving financial assistance to same.

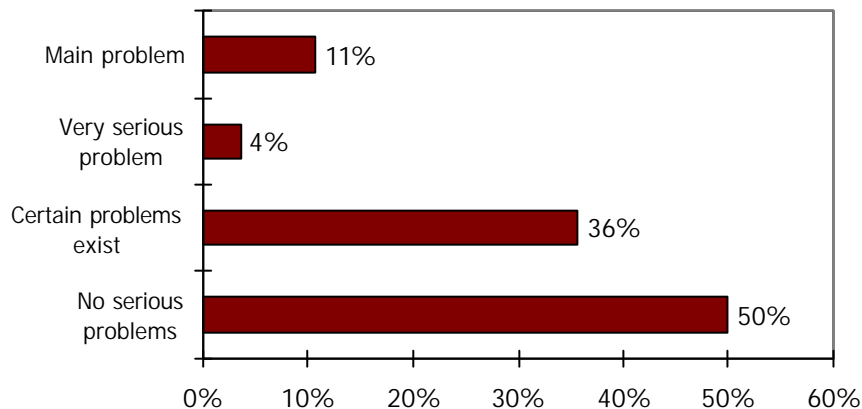
Conclusion

The respondents were asked a question that read as “How would you assess the status of the raw material base (with the natural & climactic conditions being left out of the equation?”.

This question could be answered in four alternative ways:

- a) No serious problems exist.
- b) There are some problems in dealing with the suppliers.
- c) The raw material base is in a very poor condition.
- d) This is the main problem that we face in our business.

Diagram 12. General assessment of the raw material base status



It should be noted that our respondents provided similar assessment when answering to other questions (just 7% of the managers assign the top priority to the task of improving the status of the raw material base).

Does it make sense for *Helvetas* and the Task Group for the Processing Industry (and, possibly, the Processing Operations' Association) proceed with the search for a solution to this problem?

It is our opinion that the project should continue its operations. The most important task of the moment lies in establishing the procedures for cooperation and implementation of the project at the processing operations. This job must be done because of instability, and even great unpredictability, of the raw material market performance. It comes naturally that if both parties are mutually satisfied with the terms of business they do together, the farmers will find it profitable to cooperate with the processing companies as in this way a farmer is blessed with access to an assured sales market. It is also clear that if a raw material supplier should see more profitable alternatives, he may well choose to proceed with these profitable options, and will thus put his customer in a hard situation. Yet another factor of instability is the failure on the part of the farmer and the processing company to sit together and determine which type of raw material is actually needed, and in which quantity. Further, the raw material market is affected to a great extent by the climactic conditions.

The operating cycle of a processing company can be put down as follows: procurement (financial resources, raw materials, packing, power supply) - production - sales. The most weak (in terms of exposure to outside risks) point of this chain is the raw material supply.

1. The high degree of instability and a poor organization of the raw material market operations result in the raw material supply experiencing changes on a yearly basis. It is possible that at the time of our poll the situations as regards the raw material supply looked good or, alternatively, bad *due to existence of more serious problems faced by the processing operations*. Still, it is clear that today we have no such thing as a civilized market of raw materials. It is also evident that even if a processing company does invest in development of its own source of raw material supply, the real return on this investment will be not coming before 2 or 3 years.

«We know that one of the local processing plants source its raw material supply from a group of Korean farmers whose farming grounds locate at the south of Russia. Our correspondent asked if doing business with Koreans was more preferable than working with the locals. The reply was that «While our fellow countrymen make it a habit to lament about the lack of money, still, they will sneer at a job opportunity if you should offer them one...».

By "Plodoovoshniye Konservy" Industrial review, Ukraine.

"Biznes" newspaper, ? 33, August 14, 2001.

2. As we stated above, the cost of raw material in the overall structure of production costs in the processing industry makes up 34%. The cost of primary products is the largest component of the production costs and it is this component that needs close attention of the management. Along with this, the majority of processing companies are almost unable to exercise *proper* control over this cost component. The key aspect here is the profitability. Even a slight decrease in the operating costs may yield an increase in the profitability that otherwise could only be achievable through a substantial rise in the sales.

3. Yet another substantial factor is the need to ensure that the processing operations are supplied with raw material of consistently high quality. This can only be achieved through the consolidation of land parcels and farming entities, adherence to a single agricultural selection policy by each and every producer of raw materials and total improvement of the agricultural techniques.

It is our opinion that the most effective long-term option would lie in a vertical integration of processing operations with suppliers of agricultural produce ("downward" integration). The ways for accomplishing a vertical integration will vary along with the circumstances present in each specific case and will need to be subject to a thorough work-out. It is an integration realized through the processing operations investing in the agriculture and participation of raw material producers in a single business involving the production and sale of both the agricultural produce and the products of processing that will provide ground for a dynamic development of the farmers and the processing industry.

Establishment (or rather restoration) of procurement co-operatives can also serve the purpose of integration as said above. Processing companies could participate in the financing and management of such co-operatives.

Yet another option lies in the establishment (or, again, restoration) of machine & technology stations (MTSs) in the areas are potentially major suppliers of raw material. The farmers could be allowed to pay for the use of leased equipment by supplying the lessor with raw material.

CAPITAL INVESTMENTS

One of the main objectives of this study lay in assessment of the current status of the processing industry and also the amount of wanted capital investments.

As indicated above (refer to the "Production" section), in year 2002 the utilization of available operating capacity made an average of 40%. Naturally, this utilization parameter has a substantial effect on the status of the raw material base and the financial capabilities of the processing operations.

However, even granted that the problems as specified above are resolved and the available operating capacities are utilized in full, the companies will still need to make capital investments in new plant equipment. The quantity of new equipment that has been installed at the processing operations over the recent 7-8-year period makes up 40%. The demand and supply changes in the target markets and also development of the production technologies will make the companies to face, within the next 23 years, the need to do a substantial upgrade of the existing operating capacities. We estimate that in order for the processing operation to be able to successfully compete in the target markets, they will have to replace a minimum of 70% of the existing equipment pool.

The required capital investments will have to go beyond the production and technological scope. Installation of new plant equipment will require reconstruction of the existing operating buildings and facilities. Accomplishment of many objectives related to the management of various aspects of the business will require investments in the state-of-the-art information technologies, which are nearly inexistent in the processing industry of today.

Sizable investments will have to be made in the intangible assets, inclusive of the investment design, development of new trademarks and improvement of the operational management.

Further, the processing industry will be able to go forward at a brisk pace, granted that the raw material base also develops dynamically. In order for this to be achieved, investments will need to be made in the agricultural technology, equipment and transportation.

The poll showed that the overwhelming majority of the processing companies (86%) were planning to make capital investments within the next 3-year period. Along with this,

- the respondents would only talk about investment in new plant equipment;
- a number of companies are unable to give even a tentative estimate of the amount of would-be investments;
- those companies, which did have a clear idea of the amount of their would-be investments, were only planning to invest in complementary and missing equipment or replacement of selected links in the processing chain.

The respondents estimated that the amount of investments expected to be made within the next 3 year period would run to US\$1.5-1.8 million. However, it is our opinion that the actual requirements are **a minimum** of 2.5 times above the aforesaid estimate. According to Russian sources ("Finansovaya Gazeta", "Vremya Novostey", the *Konservprom* Association), the amount of investments made by three Russian companies of *Mezhgazinvest*, *Khozyain* and *Dontabak* over the recent 3-year period has made in excess of US\$25 million. And these three companies constitute just a tiny portion of the 1,000-plus pool of big, medium and small processing businesses, which are the main competition of the Kyrgyz manufacturers in their primary target market that is the Russian Federation.

March, 2002

The *Donskoy Tabak* company has completed an upgrade of production lines at the *Bagaevsky* plant (Rostov Province), which is one of the biggest canned food operations in the southern region of Russia. The cost of equipment, which has

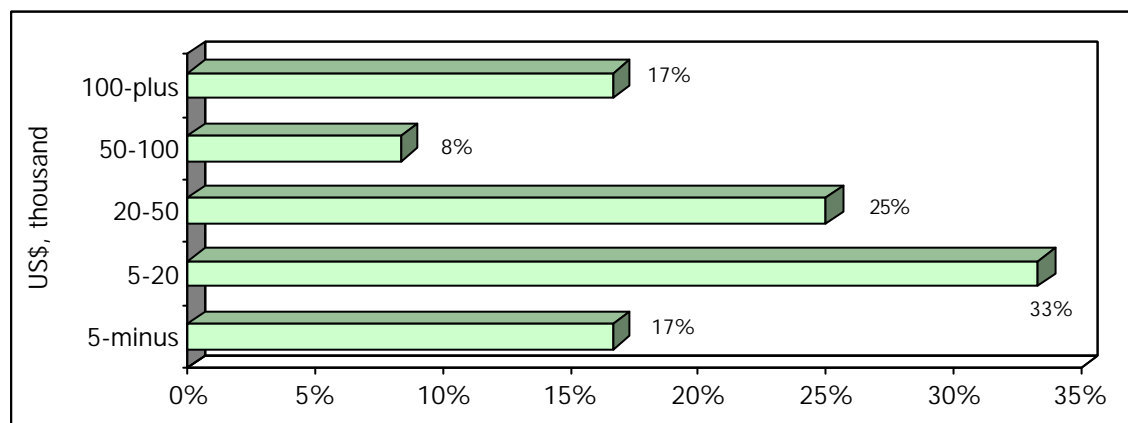
been sourced from Italy, run to USD10 million-plus. It is most curious that the plants, which locate not far from this *Bagaevsky* operation, are also "overstuffed" with multimillion-dollar investments. The processing industry insiders say that production of the canned foods is one of the most profitable and rapidly growing businesses in Russia. According to the top executives of a number of processing plants, the funds turnover period in the industry makes an average of 6-9 months, with the profitability reaching 40-60%. If a processing operation manages to construct a closed production cycle (this is to include a source of raw material supply), the profitability will go even higher. To cut a long story short, we better cite here a statement by the director of one of the canned food factories who said that "the oil industry can now drop any hope that they will ever be able to outpace us" .

By «*Vremya Novostey*».

Capital investment rates

The recent 5-year period saw 46% of the polled companies making capital investment in the plant equipment. 50% of the realized capital investments run to US\$20,000-minus.

Diagram 13. Capital investment in plant equipment - years 1998-2002

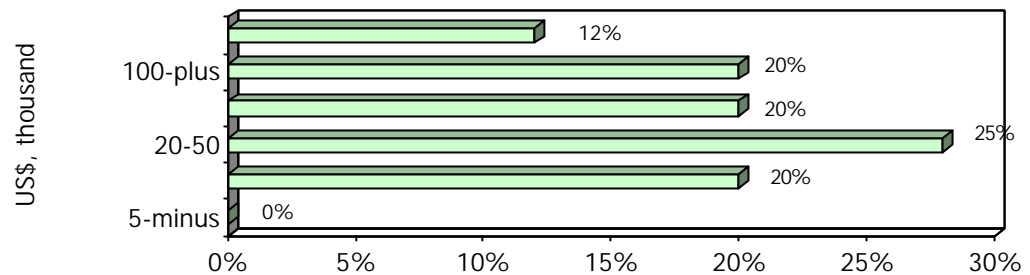


Recoupment of capital investment

10% of the companies have already recouped their capital investments, with 43% and 38% of them expecting that they will be able to recoup the invested funds within the next 3-year and 5-year periods, respectively.

81% of the companies plan to invest in new plant equipment within the next three-year period. The rates of would-be investments are far above those that have been made before: just 20% of the companies anticipate that they will stay within the US\$20,000 limit. Three companies have not yet made even a tentative estimate of their would-be investments.

Diagram 14. Capital investments planned for the next 3-year period



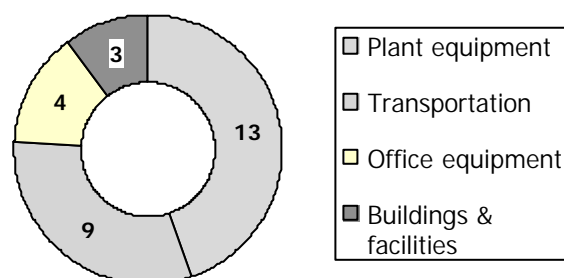
More than half of the companies (54%) expect to import plant equipment from CIS countries. 21% of the operations are planning to source equipment from the Western Europe and the USA. Two companies plan to buy plant equipment from local producers.

However, about one third of the companies are not clear about the prospective source of investments. 52% of the respondents count on their own capital and investments from new business partners (22% and 30%, respectively). It was only one company that named private lenders as a potential source of investment funds (one company counted on a banking loan, with the other one planning to rely on assistance from other companies). Two operations plan to resort to equipment leasing available under the leasing programs.

Speaking about the recent 5-year period, the breakdown of sources of the investment funds looks a bit different. Thus, 52% of the companies used their own capital. The private and banking loans served as the source of investment funds for 19% and 13% of the companies, respectively. Only one operation (3%) had enough business appeal to attract investment from its partners. Two companies (2%) obtained financing available in the framework of State-operated programs.

Structure of capital investments

Diagram 15. Capital investments breakdown (number of companies)



Experience in the area of sourcing investment funds

38% of the companies are of the opinion that attraction of investment funds is no big deal. However, this is quite an unrealistic assessment of the companies' own abilities as 67% of the respondents did indicate before that they had no funds to cover the cost of purchase of new plant equipment (refer to "Production" section). The rest of the respondents named a number of problems that can be ranged in the following way (when administering the poll, we would suggest that the respondents do not provide a comprehensive account and, instead, give some comments on the subject in point):

1. High interest rates on banking loans.

Many respondents believe that the value of credit resources possessed by a company should be calculated based on a differentiated approach subject to the nature of the given business. The respondents also indicated that there was not much understanding on the part of the financing organizations.

Yet another aspect of the problem in point typically lies in the low profitability of processing operations. Unfortunately, we are not able to tell for sure if this is really the case as many respondents declined to provide us with a good portion of information on their financial status.

2. Economic and political instability.

The companies from the southern regions of Kyrgyzstan indicated that development of their business was hampered by the continuing "possibility of reopening of the military hostilities".

3. High taxes and resulting arrears due to the state budget.

The companies have a hard time paying VAT and deductibles to the Social Security Fund. It is our opinion that the high rate of the Social Fund deductibles creates quite a heavy burden on the processing operations, particularly if seen from the point of view of the need to attract and retain a competent personnel.

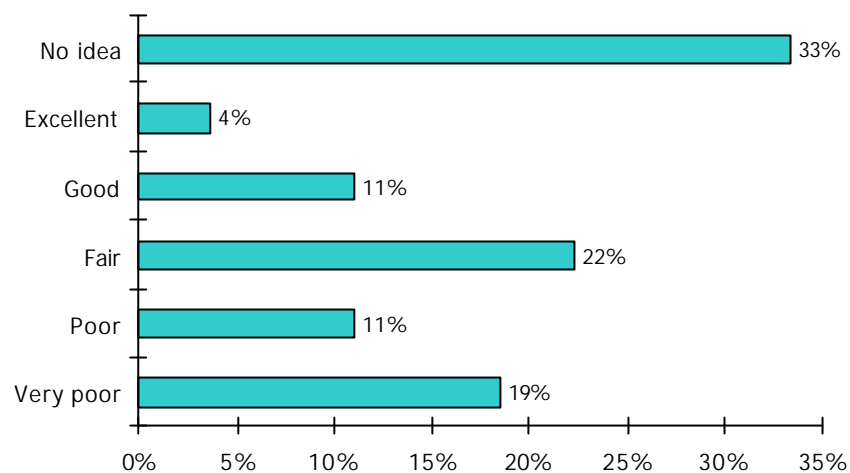
4. **Lack of information and experience in preparing a business plan** (the situation is further complicated by the commercial credit organizations requiring that a business plan must be submitted in foreign-language format).

This problem is the least important out of the list as referred to above. There are many organizations that specialize in the preparation of business plans. Further, the companies' access to competent advice in the area of business planning and also the services in the area of development of business plans is restricted due to the following impediments:

- many respondents fail to realize that the actual cost of business planning services is at least 50% higher than their own estimate;
- many companies are unable to provide prepayment of even half the cost of business planning services indicating that there is no guarantee that the funds will actually be coming.

50% of the respondents named the Kyrgyz Agricultural Financial Corporation as the source they would most probably turn to for credit funding. The *Doskredobank*, the Kyrgyz Investment & Credit Bank, the *Kyrgyzstan* joint stock commercial bank and the *Promstoribank* were named one time each. It must be noted that many respondents were not clear about which credit organization's terms best suited their needs.

Diagram 16. Assessment of performance of credit organizations



Conclusion

Over the entire 2-year period of our cooperation with the *Helvetas-Kyrgyzstan* Project and also in the course of study of the poll results, we were able to see but just a few examples of processing companies working to increase their investment appeal. It is very hard to reconcile the positions of the majority of the processing operations as referred to both in this section and the *Management*, *Marketing* and *Finance* sections with the concept achieving an increase in their value.

For the reader's consideration we propose the following actions whose intention it is to improve the investment appeal of the processing industry:

1. Organize a contest of business plans for processing operations. Initiate preparation of business projects, which would be aimed not only at providing a processing operation with new plant equipment, but - for the most part - at implementing a long-term strategy of business development, expansion (modification, development) of the product range and also at attracting direct investment. The contest can be administered in two stages, Stage I involving preparation of business projects by the contestants and submission of these projects to review by an independent committee composed of experts from financing organizations, consulting firms, international projects, trade firms and distribution outfits. Following expert examination of a certain number of business projects, an information workshop will be held, the agenda of such a workshop being dedicated to discussion of general downsides and weak areas of the submitted business projects, the risks involved and the possible financing models and options. Stage II would involve making refinements to the business projects with the contestant companies requesting assistance from duly qualified experts and subsequent submission of the final project version to assessment by commercial credit organizations and potential investors. These business projects should contemplate original ideas for production of new types of goods.

2. Establish a database of investment projects (in a dedicated Internet site and in a hardcopy version) and disseminate same along the communication channels available to the embassies and trading missions of the Kyrgyz Republic in the federal provinces of the Russian Federation, the processing companies' business partners and consulting firms as well as through direct business contacts with the Russian companies. Information on investment projects can also be posted up at the existing Internet databases.

3. Organize an information workshop for the processing companies' executive staff, this workshop being dedicated to the subject of "Investment appeal of a processing operation. The component parts and ways for augmenting investment appeal.

4. Organize an international conference dedicated to the subject of "The fruit & vegetable processing industry of the Kyrgyz Republic is an area of high investment appeal".

5. Upgrade and print an edited version of a handbook for the benefit of users of fruit and vegetable processing equipment. This work must provide information on equipment available from the manufacturers of Kyrgyzstan, other CIS countries, Europe, China and South-Eastern Asia. The handbook would also provide information on the modern processing technologies, information on outfits specializing in the development of such technologies in the countries of CIS, equipment pricelists and pictures, technologic charts and also pictures of produce put out at other operations using the equipment included in the manual.

6. Hold negotiations with the newly established leasing companies concerning the opportunities provided by making leasing deals with the processing companies and the possible options of leasing in this area. Organize a brief information workshop dedicated to general matters pertaining to the administration of leasing deals and also the outlook for development of leasing operations in the processing industry.

Potential investment sources

Suppliers of borrowed capital

Kyrgyz Agricultural Commercial Credit Corporation. Presently, this outfit offers the best commercial credit conditions in Kyrgyzstan providing *target* assistance to the local farmers and processing operations.

Kyrgyz Investment & Credit Bank. The appealing features of this outfit lie in the relatively low interest rate and flexible terms of loan agreements it engages in. The shortcomings list includes that fact that the low interest rate only applies to loans denominated in foreign currency, with the exchange rate risk (which is quite high considering the current economic setup) being borne by the borrower. Among the downsides are also the complementary operating expenses associated with the administration of loans (loan service fee, fee for the services provided by a foreign legal firm) and the inexistence of any affiliates in the provinces.

Private lenders. These are the most appealing source of borrowed funds. Bond issuance, which is the way for coming by the "long-term" money, allows the company to get into direct contact with the supplier of financial resources in bypass of the banking system. Funds can be borrowed at the annual interest rate of 8%-12%. However, in order for the company to be able to borrow funds on economically expedient terms, it must carry out a sizable work on internal reorganization and disclosure of information to the would-be creditors. The main barriers that affect the processing companies' access to the borrowed funds market are as follows:

- nontransparent nature of operations;
- unstable financial status;
- misbalance in administering the various areas of corporate operations, which gives rise to entrepreneurial risks;
- lack of authorized capital (loan on debentures can not be in excess of the authorized capital).

Financial investors

Central Asian Fund for Small Business Development. This outfit provides financing for venture companies on the condition of direct investment in the corporate capital. The Fund has just started its operations and is, in our opinion, the most promising financial investor in Kyrgyzstan. The Fund provides direct investments running to US\$500,000-minus, subject to condition that the Fund can not own more than 49% of the authorized capital.

European Bank of Reconstruction & Development. According to many experts, EBRD has the status of the largest world-class investor. One of the main complexities that accompany obtaining a loan from EBRD is the protracted process of loan application review (an average of 9 months).

UVC Eastern Europe. It declares willingness to invest funds in projects in CIS countries including Kyrgyzstan. It sets up for control stock during the period of being in position of financial investor (up to 6 years). Total of investments – from 500,000 dollars?

iPOWER. It declares willingness to invest funds in projects in CIS countries including Kyrgyzstan. General criteria: innovation of a project, large potential market, presence of a team, high competitiveness of a project. Pay-back period – up to 4 years, capital investments – from 25,000 dollars. It may also stand out as a creditor or provide mixed financing.

Strategic investors

The most potential strategic investors for the industry may be large-sized and medium-sized companies of Russia, Kazakhstan and Ukraine those involved in production and/or foodstuff trading. In our opinion, at the initial stage the most efficient step would be to get into contact with the Konservprom Association that incorporates large Russian companies of fruit and vegetable processing industry.

“Konservprom” Association of Fruit and Vegetable Processing Companies.
6 Degtyarny Street, room #328, Moscow, Russia, 103009
Tel: (095) 209-29-21, 299-82-22
Fax: (095) 299-94-64

In addition to attraction of financial resources a Kyrgyz company may get quite a few additional benefits from the strategic investors:

- new technologies;
- additional knowledge of markets and industry;
- access to external sales markets;
- product assortment increase;
- opportunity of producing a product under a brand name recognized by the market;
- production scale growth and accordingly, cost reduction;
- various effects of reciprocal production supplement;
- ready market (if investor is a trade company or sequent link in the end product manufacture).

However, the most important point is a certainty regarding benefits for strategic investor when entering the fruit and vegetable processing industry of Kyrgyzstan. Moreover, benefits for the Russian, Kazakh, Chinese companies or benefits for the Uzbek capital can vary in some aspects. We should note again that the most potential strategic partners for Kyrgyz companies could be Russian companies.

In 2000-2001 the production volume of canned fruit and vegetables in the Russian Federation has increased in average by 50% annually (in 1999 – 980 million standard cans, in 2000 – 1,455 million cans, in 2002 it was produced more than 2 billion cans). According to preliminary estimate the growth rates in 2002 have been preserved (based on data for 9 months of 2002 2,483 million cans have been produced in Russia). The estimates of Russian economists prove that fruit and vegetable industry of Russia has the highest growth rates compared to all other food industry branches.

This rate is accompanied by achievement of high performance of production economic efficiency (40-60%). It is not a matter of coincidence when investment resources of enterprises are put into the sector that has indirect and quite distant relation to food industry (investments of the Don Tobacco Company; Rostov Helicopter Plant - senior shareholder of the Khozyain Company from Rostov that owns several fruit and vegetable processing enterprises).

Presently, the share of Russian products in the Russian market of canned fruit and vegetable products makes up about 35-40% (vs. 25% in 1997). In our opinion, Russian enterprises should be interested in preservation of both growth rates and high level of economic efficiency. In the meantime resources for this trend in Russia are limited.

For Russian processing companies the main producers of raw materials are the southern regions of the Russian Federation - Stavropol and Krasnodar Territories, Rostov oblast and part of Volgograd oblast. Lately, the major investment activity has been concentrated in these regions. However, demand for fresh fruit and vegetables processing enterprises grows in rates that outdistance supply; *demand volume is outgrowing supply*.

Other significant factors, in our opinion, are a level of power tariffs in the Russian Federation and wage increase (therefore increase of labour remuneration costs).

Thus, interest of the Russian strategic investors in fruit and vegetable processing sector of Kyrgyzstan can be based on the following factors:

1. Production development immediately in the region of raw materials base.
2. Production development in the region with low labour cost and quite qualified manpower.
3. Production development in the region with relatively inexpensive power.

Besides, traditions of the Kyrgyz processing industry are also of no small importance; relatively weak competitive environment in the sector; suitable geographic position of Kyrgyzstan.

MANAGEMENT

Since the beginning of the *Helvetas-Kyrgyzstan Project* interaction with fruit and vegetable processing sector discussions concerning key problems of the companies have been held many times. Various seminars organized for the companies working in the industry had two opposed opinions regarding the situation assessment in this area. The representatives of international organizations, financial institutions, consulting companies have mostly pointed out low efficiency of enterprises management that would refer to the main determining problem of enterprises and industry in general.

The managers of enterprises brought out problems of different nature mostly concerning sales, financing and lack of the Government's support.

Opinions of the first group of seminar participants to a certain extent can be referred as subjective. The representatives of these organizations maintain contacts with production companies as regards different areas and purposing different objectives. This allows them to have an opinion regarding peculiarities of the national business and have its efficiency assessment criteria. But it is clear that this point of view can be insufficient.

In the course of the survey we made an attempt to obtain additional information on management in the processing industry and most important for us were those goals and objectives that are considered priority in the management.

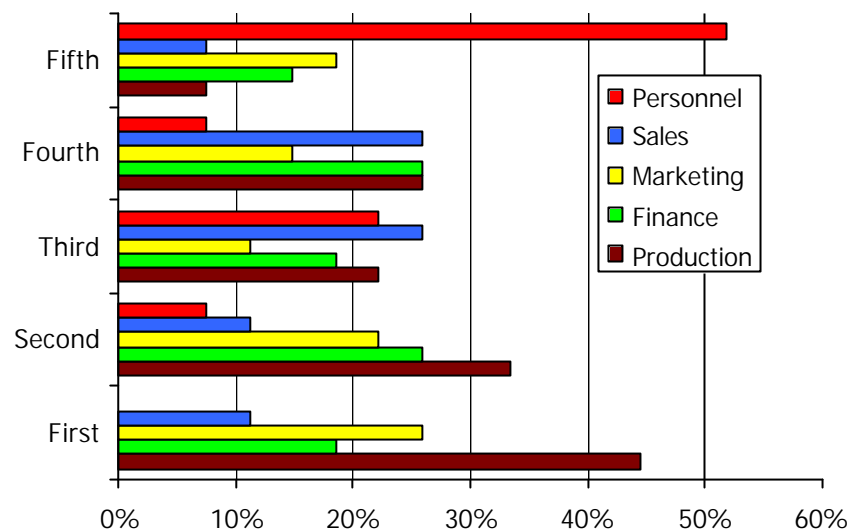
Many enterprises that have been surveyed had to go through the privatization stage in the early 90s. The tradition has been formed in those years when main owners of an enterprise would automatically assume management of business. None had ever thought then about qualification of owners as specialists in the field of enterprise management in the market economy conditions rather than experienced process men. A lack of professional managers is one of the main problems and fruit and vegetable-processing sector is not an exception. This is proved by the example what goals and objectives are set by majority of interviewed managers. The priority objectives of a professional manager are profit increase, cost reduction through resource effective management. A charter of any commercial company would include standard phrase – “The goal of a company is to make a profit”.

As the survey indicated this goal is just remained on the paper.

Goals, objectives, planning

The attempt was made in the course of survey to identify management guiding lines of enterprise managers: priority of management functions, basic goals of management, main objectives of enterprises for the years immediately ahead.

Diagram 17. Business management functions priority



According to the diagram, the first priority in management in the opinion of 44% of managers is production management. 25% of interviewed managers believe that their primary task is a marketing management function. Financial management is the first priority for 19% of respondents. 11% of managers consider that the first priority is sales management. Personnel management is not the primary function for any of the managers.

Enterprise managers have different views regarding their **primary goal for the years immediately ahead**. The majority of enterprises (46%) see as a primary goal finding solution to the problems related to **sales markets**. This includes market exploration, pursuit of customers, extension of sales markets and accessing market of Russia, other CIS countries and world market.

25% of enterprises see their primary goal in development and extension of production.

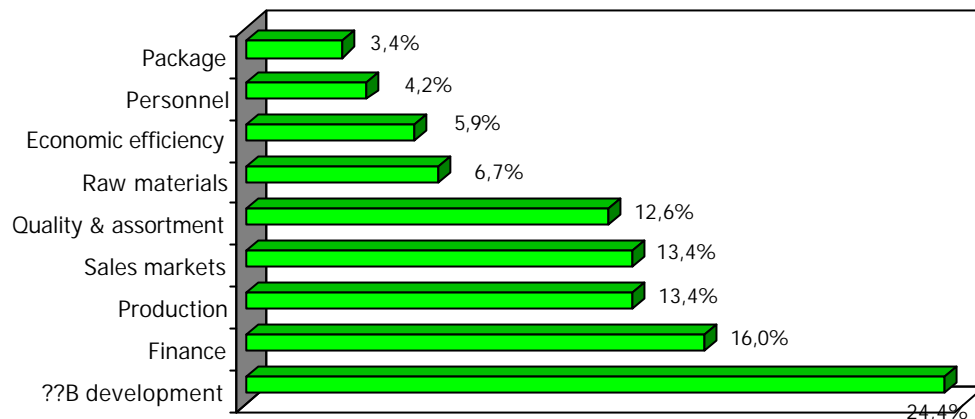
Only 14% of enterprises believe that their primary goal for this time is a product quality improvement and assortment diversification.

7% of companies strive for development of their material and technical base (MTB) and equipment modernization.

Such points as management efficiency enhancement, search of business partners and flexible policy in business have been mentioned once.

The diagram given below demonstrates the answers frequency on the question **which five objectives you consider primary** for an enterprise for the years immediately ahead.

Diagram 18. Priority of objectives in enterprise activity



Development of material and technical base

The majority of opinions on primary objectives of an enterprise had a link with a problem of a production material and technical base development. Enterprises in general have common specification of this objective. The discussion pertains to installation of new processing lines or supersession and reconstruction of existing lines. Enterprises are interested in development and implementation of new production technologies.

Consolidation of financial stability of enterprises

Enterprises as a rule examine this objective from the operational point view – search of funding sources, increase of circulating assets, funds receipt for products, offset of budget debts.

Development and extension of production

At one enterprise they mentioned “beginning of production” and “maintaining production volume on the same level” as primary objectives. Eleven enterprises see their priority objective in increasing production volume.

Sales markets

Such the objective as the market exploration and research was positioned on the fourth place in terms of priority despite the fact that earlier enterprise management bound its primary management goal with sales markets.

Quality improvement and assortment diversification

This objective appeared to be priority for 15 enterprises. For companies it means “constant work on quality; quality upgrading to the world level”. Some companies believe that they would reach the objective through implementation of modern production technologies and renewal of product package.

Raw material base

7% of enterprises consider their priority objective is to increase raw material supplies; stabilization of a situation with raw material base and its increase. Some enterprises study the opportunity of becoming independent from raw material market by establishing their own raw material base. A desire to lease land for production of raw materials also has links with this idea.

Economic efficiency increase

It is remarkable that only 6% of companies consider gaining maximum profit and increase of production economic efficiency as their priority objective.

Solution of personnel issues

This objective has been specified as supervisor training, jobs increase, creation of proper labour conditions for employees and salary increase.

Package improvement

This objective is associated with transfer to product packaging in glass jars with twist-off cover.

Planning system at the enterprises has short-term nature. Half of enterprises do not make three-year and five-year work plans.

Annual plans are developed based on agreements, contracts and orders; financial abilities; expertise from previous years; marketing research. Enterprises also adjust their plans based on future harvest prediction and current production capacities.

Three-year planning is accomplished based on marketing research and currently available production base. Medium-term planning is generally represented by predictions and indicative indices.

Five-year planning for enterprises means widening of their sales markets outside Kyrgyzstan which is based on the marketing research. These plans represent strategic approach and general perspective review.

According to enterprises there are **some factors that may impede achievement of their goals and objectives:**

- financial problems, limited nature of financial resources;
- unstable product sale; "lack of customers";
- price growth for energy supply;
- natural and climatic conditions;
- imperfection of legislation, bureaucracy and political instability.

Key managers

Respondents believe that five key managers of companies incorporate director (89%), person responsible for observation of technology (46%), chief accountant (43%), executive director (deputy director, 35%) and chief engineer (28%).

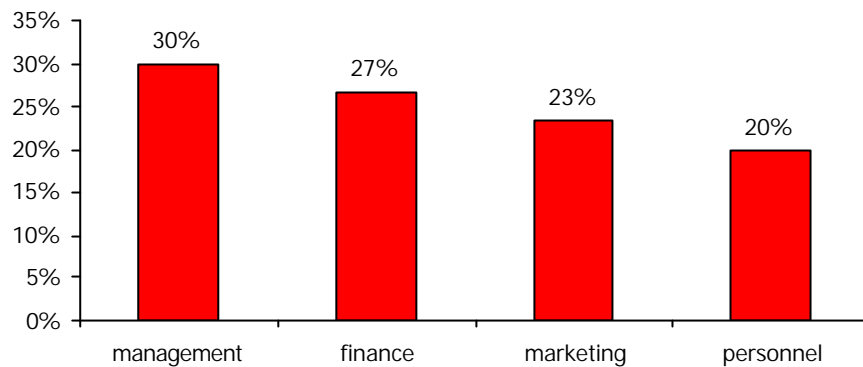
Lower percentage (one time) as a key executive staff included commercial director, financial director, sales manager, procurement officer, marketing manager, chief agronomist, electrician, shop supervisor, laboratory technician, supervisor and shift foreman.

Top management staff functions – general management and coordination, cash flow management and control.

Almost 80% of top managers have higher education (46% - higher technical, 14% - degree in economics, 7% - degree in agriculture). One of the directors is a holder of Ph.D. in agriculture.

General functions of intermediate executive staff – production process supervision, cash flow control, personnel issues. The staff members generally have higher technical or higher economical education. There are some people with higher agricultural and pedagogical education.

Diagram 19. Areas for company managers additional training



At different times additional training have been taken by the majority of company-respondents managers. Four among thirty indicated courses have been conducted outside Kyrgyzstan. Five training courses have been organized by international donor organizations and five courses have been organized by local consulting companies. Only in two cases training course costs have been paid by enterprises.

Conclusion

1. It is obvious that production constituent in an enterprise activity is high as before. Management of marketing functions (customer and market exploration, search and attraction of customers, preservation of customers) is put to the third priority position by company-respondents (in average). This is confirmed to certain extent by managers' statement of primary goal – 1/4 of them specified primary goal as a solution of production issues.

2. At the same time, there is a significant contradiction in the fact that the majority of company managers link their primary goal with sales market issues, i.e. marketing function performance.

3. Contradiction is also observed in the answers of respondents when they often named development of material and technical base as a main objective within the next few years. But only 7% of respondents mentioned it earlier as a primary management goal.

4. Identification of main objectives demonstrates that at this point enterprises most of all are concerned with production and technological aspects of their activity. In cases when discussion pertains to financial aspect, set objectives are of tactical nature.

5. This is also proved by the fact that economic efficiency increase has been specified as a company primary objective very rarely. Enterprises are interested in financing attraction and 1/3 of them reckon on resources of new partners. In our opinion all actions allowing to successfully solve this issue come to concentration of enterprise management efforts on the main and conservative concepts: profitability, profit acceleration rate and payback rate. In our opinion, one of the serious logical faults is tendency to be guided by the following principle: "First of all we should get financing and then we will have more profit". Apparently very few managers can define direct link between acceleration of profit in their business and its appeal for sources of financial resources.

6. Quite a few answers (with respect to personnel management priority, key goals, personnel development issues) lead us to conclude that 97% of company-respondents consider business management level and quality of strategic decisions that they currently have quite satisfactory.

7. The evaluations of the companies regarding factors that may hamper enterprises in reaching their goals are very peculiar. In our opinion, majority of these factors are of objective nature. Respondents believe that general obstructions for their development are in external environment of their business (prices for energy supplies, climatic conditions and legislation base). Limited nature of financial resources to some extent is also considered as external environment factor (Government makes little efforts).

8. An unsteady sale is one of the major obstructions. But for 46% of managers sales issue solution is the primary goal. There is certain emphasis placed on this being as main objective. In our opinion, in general it may be regarded as follows:

- this may be concern with respect to sales markets purchasing power (external factor), or
- this is an attempt made to lay sales problem onto another persons (no customers), or
- managers have some doubt in their competitive strength and in whether they do things right.

9. None of the respondents had presumed that the impediment to reaching the goals could be mistakes in company management.

We account that business management quality in the sector needs considerable improvement. And moreover, we believe that currently this to a greater extent is a matter of psychology and thinking but not technologies. Apparently, any efforts with respect to training and management skills teaching would not presently give great effect for majority of managers. This is a matter of perception not quality of training. The survey demonstrated that managers of the majority of enterprises have lately been trained on various management aspects. It is obvious that knowledge has been obtained but training had minor effect on *perception*.

We believe that low management qualification is a determining problem in the sector in general. In the industry characteristics we identified key factors of successful enterprise operation in fruit and vegetable processing industry of Kyrgyzstan *for the present*. Enterprise development directly depends on professionalism in business management. In the process of cooperation with the Private Initiative Project (Helvetas-Kyrgyzstan) and work on this survey we analyzed various solutions to this problem.

In our opinion there are three aspects of this problem:

1. High degree of management centralization. The survey of key executive staff has proved this – only top management of a company makes decisions. Other key staff are able to finalize only financial accounting issues or with respect to production process. Although there are managers in the companies who are responsible for marketing, personnel and financial management and probably had additional training, nevertheless they do not have influence on decisions. Here, it is not excluded that they are not willing to do this.

2. Many present managers-proprietors are the ones who have been trained in the Soviet managerial compounds and got their experience in management schools in administrative economy times. These managers place high emphasis on production process and their reliance in the Government as a source of support demonstrates that they failed to reorientate themselves to the management in the market conditions.

3. Conflict of interests. Top managers of the majority of enterprises are their main owners. In some cases this does not impede business to grow. But such cases in our opinion are often exception to the rule. Main reason of the conflict is a lack of “responsibility horizon”. Employed

manager can report to the owner on business management results and based on some performance indicators his work can be regarded successful or not. Manager-proprietor reports to nobody with respect to his work progress.

Unfortunately we do not currently see any effective methods for solving this problem. Lawmakers submitted the Law "On Joint Stock Companies" to review of the President of the Kyrgyz Republic. This form of ownership is very common in Kyrgyzstan and it continues gaining more popularity. New law (if will be signed by the President with no amendments in terms of powers of management board) will considerably restrain power of executive board of joint stock companies and expand authority of legislative board or a Board of Directors. This may encourage General Directors, Presidents and Board of Directors Chairmen of joint stock companies to abandon their positions and become members of a Board of Directors and functions of day-to-day company management will be given to another hands.

However, determining factor is the presence of conditions that could be made such redistribution of authorities effective. Presently, there are no such conditions and it will take a while to establish them.

Conclusions and recommendations

1. We believe that since the Private Initiative Project (Helvetas-Kyrgyzstan) started its cooperation with fruit and vegetable processing industry there have already occurred and still observed positive changes in company owners' and managers' thinking and approach to an assessment of their activity. We expect that the recommended actions provided in the conclusions for another patterns of analysis will facilitate continuation of this process.

2. Establish contacts for the sector with International Industrial Academy (IIA).

International Industrial Academy
20 1st Shipkovsky Street, Moscow, Russia 113093
tel: (095) 235 7147
fax: (095) 235 97-39.
E-mail: igrfop@dol.ru
Former Institute of Processing Industry.
Exists more than 30 years.
Accomplishes advanced professional training of all categories of food and processing industry workers of agroindustrial complex of Russia.
Regularly conducts international conferences, symposia and workshops, as well as for Russian enterprise pertaining to significant issues of grain market, elevator, flour-milling, baking, cereals, mixed fodder, macaroni, dairy, confectionary, fat-and-oil, brewing and other sectors of food and processing industry and agriculture.
Organizes shows of Russian product quality, seminars and presentations of companies and firms, oversea trainings at leading enterprises that produce foodstuff, raw materials, ingredients, equipment and package for food and processing industries.

3. We believe that managers of enterprises of the sector will benefit from the following activities organized by IIA in 2003.

Activities	Date
IX International scientific-and-practical conference "Development strategy of food industry"	May 13
International conference of the Konservprom Association of food-canning industry enterprises	November 10-14
IV Conference "Standardization, certification and safety of food products"	December 8-11

4. The key criteria of management efficiency assessment are growth of profitability of the enterprise and cost of business, its attractiveness for financing organizations. It is known that both investors and credit organizations pay significant attention to business management quality because qualified business management mainly determines possibility for realization of certain projects. The lower the business management quality, the higher entrepreneurial risks of the company. The average percent rates for credits existing in Kyrgyzstan to certain extent are peculiar assessment of the average level of management in the country.

In this respect it would be useful to highlight demand of credit organizations for high-quality business, high-quality business management and management of certain projects in this area. This will facilitate company's pursuit to meet this demand by adequate supply.

COMPETITIVE ENVIRONMENT

While analyzing the competitive environment we set the objective to assess for what extent the market is exposed to competition processes from the main factors (forces) that stipulate competition intensity.

Indication of competition factors

Existing producers and sellers

Factors	Factor indication in the domestic market	Factor indication in the external market (Russian Federation)
Number of enterprises and concentration of capacities	Approx. 40 enterprises varied by the capacity. There are 6 companies of large capacity. Low degree of consolidation.	There are more than 1000 enterprises accord. to RF Ministry of Agriculture. The majority of them are small-sized enterprises. 70% of production volume fall to the share of large-sized companies (more than 30).
Change of solvent demand	Product solvent demand is growing. The forecast is favorable.	Product solvent demand is growing steadily. The forecast is very favorable.
Goods standardization degree offered at the market	The enterprises-competitors are not specialized accord. to types of product. Products of the most of producers in the sector are interchangeable.	There is a product differentiation growth due to flexible commodity strategy and promotion of brands.
Costs related to a consumer switch from one producer over to another	Costs related to a consumer switch from one producer over to another are minimal; possibility of a consumer's change from one company product into another's is high.	General tendency – “switch-over costs” and consumers' devotion to certain trademarks is growing.
Market abandonment barriers (costs of enterprises related to reorientation)	Costs related to an enterprise abandonment of the concerned market mainly pertain to liquidation of considerable part of fixed assets.	Costs are too high for developing companies that invested large amounts in equipment modernization, training and retraining of personnel and development of sales network.
Barriers related to entering the market Strategies of competing firms (behavior)	Costs related to business start-up at the market of processed fruit and vegetables are not high. The product is standardized at the market. In general, passive behavior is observed.	Barriers are growing due to difficulties with gaining access to customers (see “Standardization degree and switch-over costs”) and distribution networks. Some companies have implemented or ready to implement aggressive policy of strengthening their positions through ousting or devourment of competitors.
Market attractiveness of this product	There is evidently growing demand, large potentiality and favorable forecast.	

Potential competitors

Factors	Factor indication in the domestic market	Factor indication in the external market (Russian Federation)
Difficulties related to entering the market	The size of required capital for entering the market is not very large. The effective production scale can be reached fast with small capital investments. The enterprises of the sector are not aggressive toward new companies and are not presently concerned with coordination of their activities within the sector in order to repulse expansion.	The size of required capital for entering the market is increasing. However, high market growth rates and level of business profitability facilitate flow of capital to the sector from another sectors.
Access to distribution channels	There are many trade agents in the market that have poor links with producers. Work efficiency of produces with distribution networks is low. The cooperation of new companies with existing agents or middlemen does not require significant costs. The establishment of distribution network of their own requires considerable recourses.	This is major obstruction for entering the market. Large enterprises have well-running distribution networks and are able to meet their demands for supplies.
Advantages in the sector	Here, the situation is not uniform. Some enterprises of the industry have advantages over new competitors due to access to raw material sources and, in some cases, due to geographic location.	Key players in the sector have an advantage in fixed capital that allow to have considerable reserve of cost value (savings on scales), their own raw material base, registered and recognized brands and, in many cases, advantage of their own unique formula of product.

Suppliers

Factors	Factor indication in the domestic market	Factor indication in the external market (Russian Federation)
Uniqueness of supply channel	For majority of enterprises costs related to switching over to another supplier of raw materials are not very high; 64% of enterprises-respondents accomplish procurement of raw materials on the basis of actual supplies without preliminary agreements. Differentiation of supplies pertains only to glass container glassware (enterprises have small choice of suppliers).	The influence of raw material suppliers on key players is reduced due to establishment of their own raw material base. Processors pursue possibility to control entire cycle of raw material production. Great influence on enterprises is exerted by suppliers of container glassware and energy resources.
Significance of a customer	Processing enterprises (as a whole and individually) are not the single customers (this especially concerns agro-producers of Chui Oblast).	

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Impact on costs and product differentiation	Quality of raw materials and package greatly influence product differentiation possibilities. The share of raw materials in production price structure is the largest (34%) as well as the share of costs for materials (package, 16% in average) and energy supplies (14%).	
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Customers and consumers

Factors	Factor indication in the domestic market	Factor indication in the external market (Russian Federation)
Concentration degree	This degree is high for products of final consumption. The main market is located in Bishkek City that creates more access difficulties for enterprises from another regions. Concentration degree for enterprises producing semi-finished products is lower and greater part of the market is located outside Kyrgyzstan.	The degree is low for enterprises producing all kinds of product (semi-finished or for final consumption). The number of enterprises that use produced semi-finished product for producing end product.
Ability of integration with producers	For customers in the distribution system the concentration degree is high. Insignificant	For customers in the distribution system the concentration degree is low. Some producers of end product are integrated "down" (establishment of their own processing enterprises or purchase of existing ones). Tendency of trade companies to "down" integration - processing of raw materials and production of raw materials).
Significance of product – semi-finished products	Semi-finished products produced in the sector (tomato and fruit pastes, dry fruit, vegetables and spicery) are important components in the selection of final producers' purchase.	
Significance of product – end products	Unit weight in consumer goods basket is insignificant. The product is nonessential.	During a season the product significance for consumers is growing. The reasons are high prices for fresh fruit and vegetables and increasing demand in vitamins in some geographic market segments.
Product standardization	Standardized. Low differentiation degree. Consumer based on majority items in the assortment produced in the sector has low "switch-over" costs.	High differentiation growth rates and high "switch-over" costs under end product category. Semi-finished products are less standardized, the share of imported semi-finished product market is very significant (e.g. more than 90% for tomato paste).

Product substitutes

Factors	Factor indication in the domestic market	Factor indication in the external market (Russian Federation)
Substitutes	Fresh fruit and vegetables, home canning.	
Price	Comparatively low prices and availability of goods -substitutes create price ceiling for the industry enterprises product. Enterprises producing foodstuffs prepared in home conditions to a smaller extent (e.g. nectars) have large reserve in cost value.	Key producers have far better possibility for price adjustments due to access to their own raw material base and large output volume of canned fruit and vegetables of mass demand (canned tomatoes and cucumbers, apple juice, squash caviar, etc).
Influence on market segments	The influence is considerable for consumer items. It is brought to a minimum for enterprises that produce foodstuffs from semi-finished products.	Demand for final consumption products increases during summer period. In later years there is a tendency of sales volume decrease during season's peak (late autumn-early spring). Consumers' preferences with respect to home canned fruit and vegetables distinctly go down. It is brought to a minimum for enterprises that produce foodstuffs from semi-finished products.

The competitive environment in the domestic market of fruit and vegetable canned products is clearly differs from the situation in the sales market of a Kyrgyz product (Russia). Noticeably low degree of competition among exiting enterprises in contrast to strong pressure on competitive environment of other factors (inconvenient position of suppliers for the sector, minimal barriers for new competitor entry). This may be considered differently – as indications of the industry setting down and rise of new situation that gives opportunity for growth. But in general, low competitiveness of the majority of national companies is evident, as well as low capability to extend its market share and increase a profit.

The main feature of the competitive environment in the Russian Federation is high concentration of producing capacities. About 30 large enterprises produce more than 70% of fruit and vegetable canned products, i.e. they produced approximately 1.7 billion of standard cans (57 mln. cans in average each enterprise) according to data for 9 months of 2002. The Russian market is a domestic market to a greater extent and it has higher purchasing capacity compared to the Kyrgyz market. This is the main stimulus to consolidation and establishment of large-sized food companies. In our opinion, now we can observe just the beginning of this process. This is a sign of strong competitive environment to a certain extent. But as far as the growth potentiality of the Russian market is still high, the competition level is far away from its peak yet. The growth has not yet reached some geographic segments of the market situated in the east from the central part of Russia (this in particular has been demonstrated by the workshop held in October 2002 which called the representatives of the Russian enterprises of the Siberian Region, and also the exhibition held in Novosibirsk in November last year). There are all assumptions that this will take place within three, maximum five years.

MARKETING

When fruit and vegetables processors speak about their problems, most of them acknowledge that product sales issue is a real challenge. Moreover, all managers of enterprises declare, with one accord, high quality of their products (see Diagram 24).

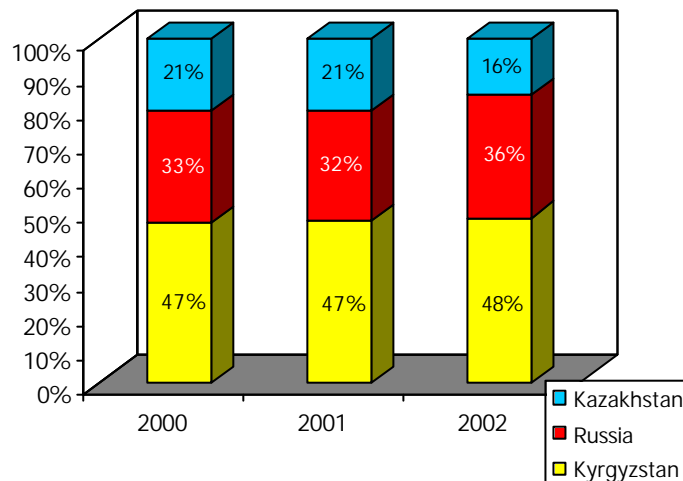
Based on our hypothesis most of fruit and vegetables can producers have never been introduced even to their product marketing fundamentals.

However, more important for us was not the search of evidence in support of this hypothesis but finding an answer to the question – what should be placed in the basis of marketing of this product so that its sales would not pose any difficulties for an enterprise?

Target markets

The products of the industry enterprises are sold in the markets of Kyrgyzstan, Russia and Kazakhstan.

Diagram 20. Shares of the geographic markets



43% of enterprises export their produce. Almost half of all sales volume falls at the domestic market of the country. Based on the diagram, in 2002 sales share in the Kazakh market has been reduced and mainly due to sales level increase in Russia. The main sales markets in Russia are Siberia (Western and Eastern) and to be more precise Novosibirsk and Omsk towns, and also Sverdlovsk and Central Russia.

The most potential sales market for companies is Russia. In addition, companies from the southern regions consider the capital of the country as a target segment. In the opinion of the enterprises, the external target markets are characterized by high purchase demand, prices acceptable to producers and sufficient market capacity.

79% of enterprises-respondents positively assess perspectives of fruit and vegetable processing industry. In their opinion the following factors can facilitate development of the industry:

- consumers' income growth, increase of their purchasing capacity;
- changes in customers' preferences toward larger consumption of natural juices;
- competition (stimulation of product quality improvement, producing volumes);
- product quality improvement, marketable and package upgrading;
- economy growth;
- raw material base development;

- entering the foreign markets (sales volume increase in the foreign markets);
- export encouragement, support of national producers in the foreign markets;
- establishment of trade representations in the largest towns of CIS countries, local product trade development in Kyrgyzstan.

Enterprises that negatively assess perspectives for the development of the product domestic market pointed the following main impeding factors:

- demand limitation and low domestic market capacity;
- low purchasing capacity of the domestic market;
- competition from inexpensive imported products;
- population preference of home canned products.

Assortment management

In the opinion of interviewed enterprises the following kinds of products are in demand:

- tomato paste;
- natural juices;
- tinned cucumbers;
- wine;
- fruit compote.

Less popular are:

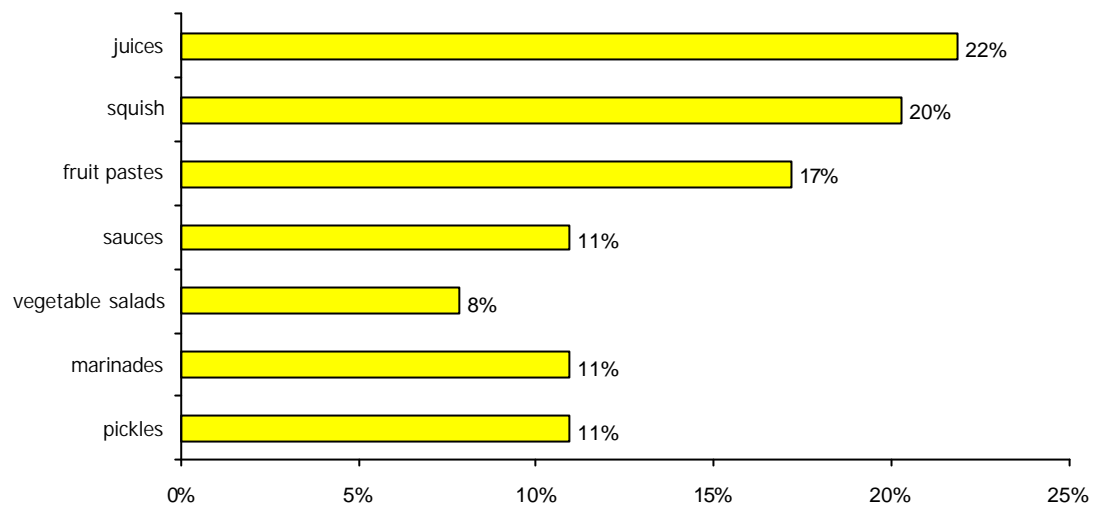
- pickles;
- jam;
- marinades;
- dried fruit;
- dried pepper.

Only two of the interviewed enterprises are not planning assortment diversification in the near future. The tendency to diversify assortment is first of all dictated by willingness to strengthen positions in the market, expand them, increase competitiveness and sales volumes. Many enterprises acknowledged consumers' demand growth. As enterprises noted they have large potential for their assortment diversification.

22% of enterprises plan to widen their assortment by increasing current juice production volume. 20% of enterprises intend to diversify the assortment of squish, jam, confiture and 17% of enterprises plan to enlarge the assortment of fruit pastes. It should be noted that the enterprises are focused more on assortment diversification of processed fruit rather than vegetables.

In the Russian Federation the rapid growth is observed in production of fruit canned products (including juices). For 9 months of 2002 fruit canned products output volume has increased by 53% compared to output volume in 2001. Currently production of fruit canned foodstuff comes to approximately 70% of total output volume of canned fruit and vegetable products in Russia.

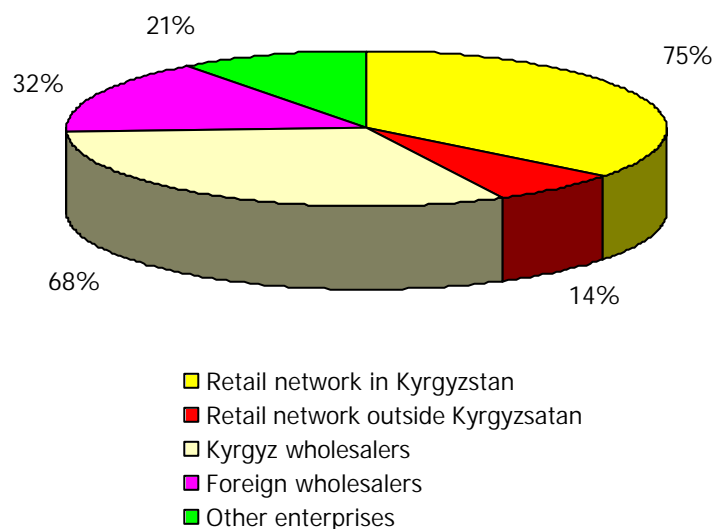
Diagram 21. Planned orientation to assortment diversification



Outlet and distribution

The major part of enterprises sells their products through retail network in Kyrgyzstan or to Kyrgyz wholesalers – 21 and 19 enterprises accordingly.

Diagram 22. Channels used for product distribution



One third of enterprises believe that the most profitable for them is distribution through retail trade network, and 14% of companies pointed better benefits from cooperation with retail shops outside Kyrgyzstan. 10% of enterprises would choose cooperation with wholesalers outside the country in the first place and 10% of enterprises prefer to sell products to other enterprises for subsequent processing. It should be noted that one fourth of enterprises could not identify the most beneficial for them a product distribution channel.

One third of enterprises do not have heavy buyers. The rest companies would establish contacts with them through advertisement (18%), friends (14%), Internet (7%), negotiations and meetings in the course of different activities (7%). But only 10% of enterprises perform active promotion of their goods by making business trips, participating in exhibitions and continuously searching new contacts.

The enterprises sell 60% of their products in average to steady customers. More than 50% of the interviewed enterprises would even go beyond this level.

Presently, 52% of enterprises would have local wholesalers as **steady customers**. More than one third (34%) of companies are working with wholesalers outside the country on regular basis and only 14% of enterprises constantly market their products through retail shops. As the data given above indicate, the current situation with distribution does not correspond to the one that would eagerly be seen by 30% of enterprises.

In spite of quite high level of interest to retail trade, 90% of enterprises have positive attitude with respect to foundation of a trade company that would deal with their product wholesales in the external market.

Motivations of consumers and market demand

In the opinion of enterprises local consumers prefer local canned fruit and vegetable products because they find them of high quality, relatively inexpensive, containing large amount of vitamins in contrast to similar imported products. There were opinions that consumers might buy local fruit and vegetable canned products by force of habit or due to discredit towards home canned products on account of their possible abnormal production technology.

In its turn, in the external markets local product is preferred due to its higher quality, ecological purity and inexpensiveness. The advantages of imported products are attractive design and convenient package. It was also noted that in the Russian market products of Russian enterprises are presented in larger assortment and volumes capable to satisfy demand.

In addition, 50% of enterprises pointed that they do not have information on demand in the target markets. 35% of companies believe that could be able to sell 70%-100% of their products in the external markets.

Competition assessment

It is noticeable that enterprises-respondents can identify no competitors in the domestic market. There were named only few companies – Kysyl-Kiya canning factory, JSC “Desert”, Agroplast (fruit and vegetable canned products), Renton Group (juices), Shabdan-Bagrati, Adis, Kant-Vino, Bakai (wine).

In the external markets enterprises from Russia, Uzbekistan, Tajikistan and Kazakhstan are considered to be competitors for local producers. Names of the enterprises were not mentioned.

Distinctive features of their products, in the opinion of enterprises, are reasonable prices, wide assortment and package. Many enterprises especially marked such advantages as no preservatives and use of ecologically pure primary products.

Price setting

The basis for price determination as the majority enterprises think is production price that combines such key elements as raw materials, power and salaries for employees. Some enterprises acknowledge the role of marketing research in the course of price policy establishment, nature of competition, prices for similar products in the market.

Enterprises believe that demand for their products has high price elasticity. Based on respondents' analysis, product price increase by 10% will cause sales volume reduction by 40% in average. And one third of enterprises account that sales volume would be decreased by more than 40%.

In the opinion of enterprises their customers are also sensitive to price reduction although to a lesser extent. Price reduction by 10% will result in sales volume increase by more than 30%.

Evaluation of product elasticity by enterprises is somewhat overstated but in our opinion they have grounds for this. The most important all produce in the industry has substitutes – fresh fruit and vegetables, home canned products. Industrial conservation does not belong to the group of essential goods.

Another reason of such evaluations is generally low diversification of the majority of enterprises and, as described below, inefficient work in the area of distribution. This leads to the fact that with small assortment and poor presentation of goods in the trade system enterprise may immediately feel price increase consequences.

81% of enterprises account that prices for their products are maintained at the level of average prices in the target markets. 50% of enterprises use flexible system of prices and would change them depending on segment or target market. Another 35% of companies consider it possible to use this practice in the future.

The majority of enterprises give a discount on their products. It is mainly provided to wholesalers and discounts make up 5%-10% in average. One enterprise gives a discount under prepayment for their product.

The primary goals that many enterprises are guided by while setting prices include product sales, costs payback and gaining of maximum income. There were also indicated drive for greater share of the market, becoming monopolists and increase of circulating assets as goals.

Many enterprises could not give precise answer to the question what is the concept of price setting strategy. Only 10% of enterprises marked that in price formation first of all they are oriented to reaching maximum sales volume, income increase and profitability. Some enterprises think that their strategy of price setting by 50%-60% is dictated by prices for energy supplies and raw materials, prices of competitors and future harvest forecasts.

Package and trademarks

The dominating part of fruit and vegetable can producers pack their products in glass jars with rofled-on closures. Only three enterprises also use European jars with twist-off caps. Holding capacity of glass jars 0.35 L to 3.0 L. Dried vegetables and greens are packed into polyethylene 15 kg bags. Glass jars and packaging materials are purchased by enterprises at the markets of Russia, Kazakhstan, Uzbekistan and Kyrgyzstan.

Estimates made by enterprises demonstrate that share of costs on glass jars with rofled-on closures is greater than costs on package like European jars. The main obstruction to switching over to European jars according to enterprises is related to a lack of funds. Apparently, it means that conditions of purchasing this glassware are less beneficial for enterprises in current situation and there's expected additional expenses related to switching over to European jars.

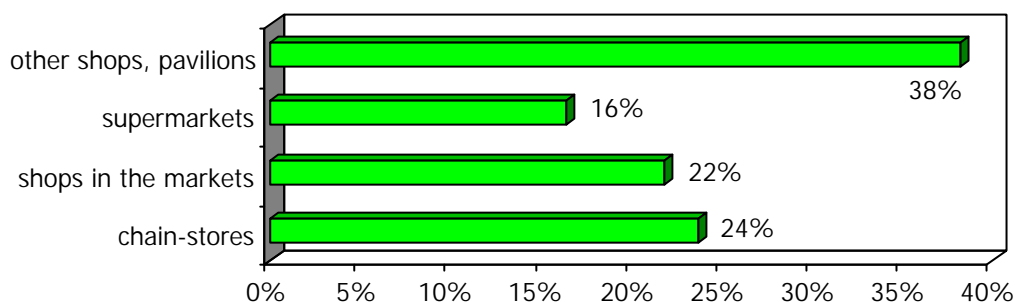
Two third of enterprises-respondents support the idea of combined purchase of the package. 28% of enterprises treat this negatively mainly due to presence of their own established supply lines of packaging materials.

More than half of enterprises (52%) speak about their own trademark. Enterprises that do not have trademarks had not dealt with it but plan to do this (majority of enterprises) or think it is not necessary explaining its unavailability by production instability and uncertainty of the market.

At the same time the presence of a trademark in the opinion of respondents first of all will allow an enterprise gain the image, become recognized, increase efficiency of advertisement campaign. This will facilitate development of new sales markets including external, and product sales volume increase. Trademark also facilitates improvement of product package design and considered by enterprises as distinctive goods quality guarantee hindering product counterfeit.

Promotion and positioning

Diagram 23. Use of forms in retail trade



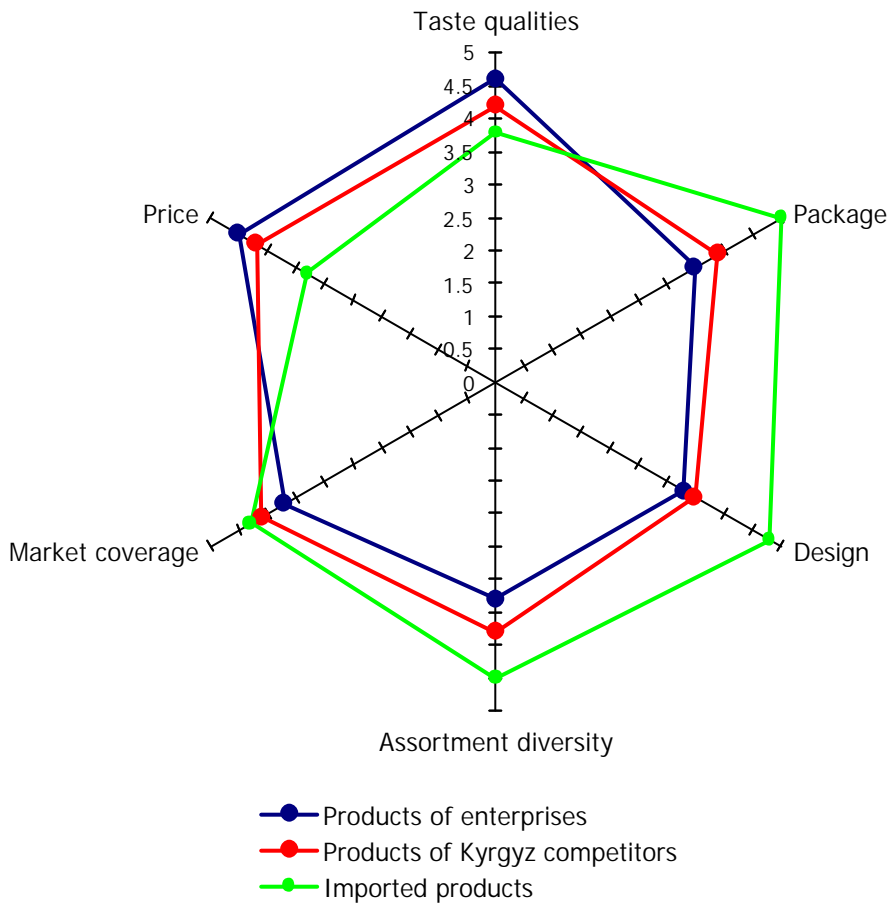
The majority of enterprises promote their products through contacts with retailers and wholesalers (43%). Only 18% of enterprises use advertisement in newspapers. 9% of enterprises give preferences to advertisement and search of clients through Internet, placing information in catalogues (Yellow Pages), advertisement on TV. Posters and leaflets are not practically used. There were also mentioned such options as presentation of product in the market and promotion through state structures.

The most effective ways of product promotion in the opinion of enterprises are direct contacts of their specialists with retailers and wholesalers (50% of answers), promotion through Internet (25%), advertisement on TV (14%). The representatives of one enterprise answered that advertisement in newspapers and participation in exhibitions⁴ are less effective.

The enterprises have also performed comparative assessment of their products, products of their Kyrgyz competitors and imported analogues on the basis of six features.

⁴ At the end of November 2002, the produce of Kyrgyz fruit and vegetable processing enterprises has been presented by the Kyrgyz-Russian Trade House "Kirrosexpo" at the exhibition in Novosibirsk. The survey of enterprises has been conducted earlier and possibly, after certain success in the course of exhibition, enterprises put higher marks with respect to efficiency of this promotion method.

Diagram 24. Comparative product assessment

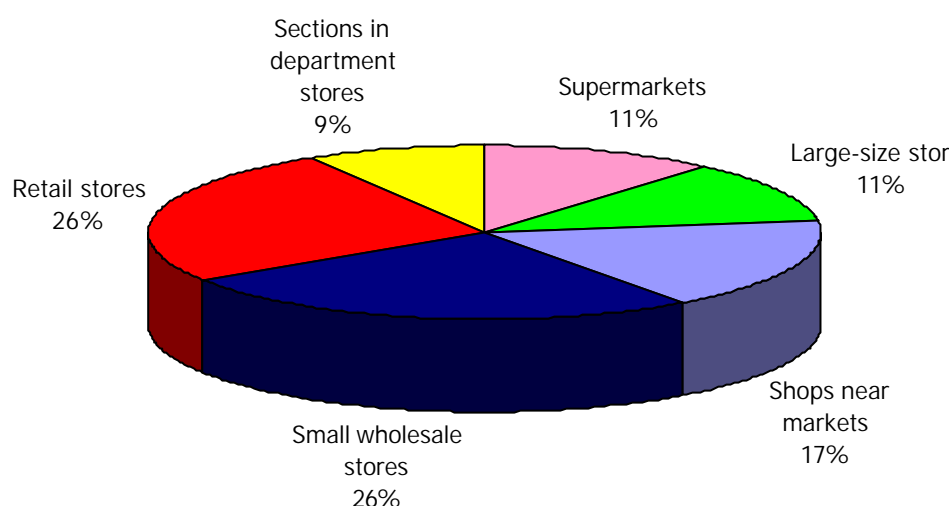


In average the majority of enterprises account that their produce has attractive price and better taste qualities compared to produce of both local competitors and imported products available in the market. As for another parameters the enterprises gave more decent evaluations. The market coverage (product available in retail trade outlets), assortment diversity, quality and convenience of package and design are the parameters in terms of which competitors have advantages according to enterprises.

Trade outlet audit data

In the course of the industry analysis our contractor surveyed 35 trade outlets in Bishkek.

Diagram 25. Structure of trade outlets surveyed



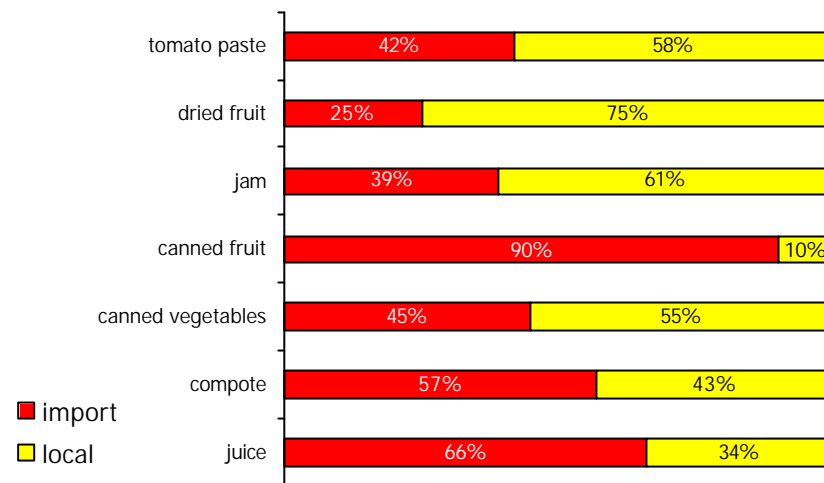
(See the list of investigated trade outlets in Attachment 3).

In these outlets one can find wide assortment of fruit and vegetable canned products. The most preferable fruit and vegetable processed products are (based on availability in trade outlets).

- fruit and tomato juices;
- conserved vegetables (marinades, pickles, mixed vegetables “assorti”);
- tomato paste and sauce, ketchups;
- compote;
- jam, fruit paste, squish, fruit sauce;
- dried vegetables, dried fruit and spicery.

The ratio of imported and local products is approximately one to one (in average approximately 52% of import based on the surveyed outlets). However, regarding many kinds of products that have high profitability and attractiveness for the market (juices, compotes, canned fruit) the ratio is inclined not in favor of local products. It can be presumed that in pursuit of profit local producers are generally behind Hungarian, Russian and other producers.

Diagram 26. Types of products (import/local structure)

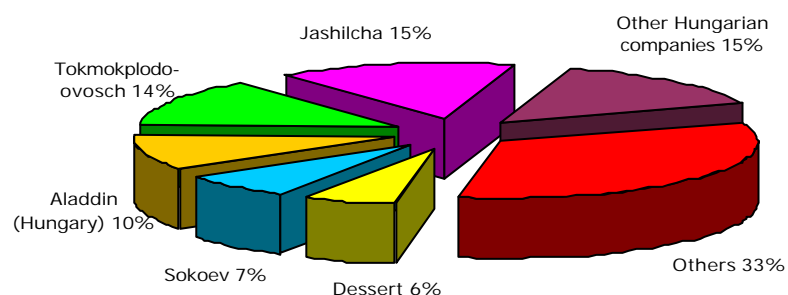


Fruit and tomato juices. Juices are available in all trade outlets. In the market of Kyrgyzstan there are more than 40 juice producers. The greater part of import is held by producers from Russia, Kazakhstan, Moldavia and Hungary. Imported juices are represented by “Da-Da” brand (16 kinds in 46% of trade outlets), “Nektar solnechny” (16 kinds in 20% of trade outlets) and “Moya semia” (11 kinds in 46% of trade outlets). According to shopkeepers, the juices that are in greatest demand are apple, peach, apricot, grapes and tomato juices.

Juices produced locally occupy about 34% of the market. Among local juice producers, the leaders with respect to availability in trade outlets and diversity of assortment (15-16 kinds) are Promservice Company (“Paks” juices, available in 37% of trade outlets) and Renton Group (“Gelios” juices, available in 34% of trade outlets).

Canned vegetables. Assortment of salads and picked mushrooms is widely offered in supermarkets and available to a lesser extent in shops near markets. The diversity of vegetable cans is stipulated by presence in trade outlets of Bishkek both local and imported products (Hungary, Russia, Kazakhstan, Moldavia, Germany, France, Iran, Turkey, China and USA).

Diagram 27. Canned vegetables on sale in trade outlets (in % with respect to outlets surveyed)



Tomato paste, sauce, ketchup. This produce is marketed by more than 40 local and foreign producers (47% - local producers of ketchup and 58% of tomato paste). According to salesmen, the most popular trademarks are Baltimor and Moya semia. Out of local producers we can mark out produce of JSC “Agroplast”, “Sokoev” Private Company and Sam Company.

Compotes. The most popular outlet for this produce is a supermarket where it is sold in wide assortment made by different producers. This produce is represented by German and Chinese producers in widest assortment. Compotes of local production are produce of JSC “Desert”, Jashilcha Ltd. and Tokmokplodoovosch Ltd.

Jam, marmalade, fruit paste. The most popular are the following kinds – apricot, blackberry and barberry jams, apple paste and plum jam. Wide assortment of jams and marmalades is presented by firms and trademarks “Ratiborg” (Russia, 12 items), “Jashilcha” (Kyrgyzstan, 7 items) and “Vita” (Moldavia, 7 items).

Produce	Share of retail outlets selling products, %	Share in retail trade, %
local juice	86	34
imported juice	97	66
local ketchup	66	47
imported ketchup	63	53
local tomato paste	57	58
imported tomato paste	49	42
local canned vegetables	54	55
imported canned vegetables	49	45
local jam	34	61
imported jam	29	39
local vegetables, dried fruit, dried spicery	31	75
imported vegetables, dried fruit, dried spicery	14	25
local compotes	17	43
imported compotes	26	57
local relish	11	30
imported relish	14	70
local canned fruit	6	10
imported canned fruit	11	90

Representatives of trade outlets have also called the most popular local producers - “Sokoev” Private Company, Tokmokplodoovosch, Jemish, Promservice, Renton Group, Ala-Too, Sam, Jashilcha.

91% of respondents (shop salesmen) noted that among indicated kinds of produce juices are in greatest demand. Then based on popularity come ketchup (34%), tomato paste (20%) and canned vegetables (14%).

Table 7. Average product sales data in trade outlets surveyed

Products	1 week
Juices, liter	89.6
Canned fruit, liter	27.9
Ketchup, 1L bottles	15.1
Tomato paste, liter	12.9
Canned vegetables, liter	11.8
Jam, liter	5.5
Compote, liter	6.0
Dried vegetables, kg	3.0
Honey, kg	1.0

Respondents (managers and shopkeepers) identified 7 major reasons why they market goods of local producers:

1. **Quality.** Fresh, natural, reliable product.
2. **Price.** Prices are more acceptable compared to imported products.
3. **Assortment.** Out of primary products local companies *can* produce quite wide assortment of products.
4. **Shelf life.** Local products are very unlikely to have expired shelf life.
5. **Demand.** Many respondents marked that local produce is in greater demand than imported one.
6. Long-time, **steady relationships and work experience** with local producers.
7. **Ecology.** Local produce is positioned in the market as ecologically pure without preservatives.

Main **advantages** of local produce in the opinion of local retail tradesmen are as follows:

1. Natural and fresh produce with minimum addition of preservatives.
2. Potential for production of goods in larger assortment from local fruit and vegetables.
3. Reasonable, low prices.

In addition, respondents have also identified quite few disadvantages in marketing activity of local producers:

1. Unawareness of consumers of Kyrgyz producers and local products. Lack of advertisement.
2. Documents are often not duly executed. Sometimes goods are not certified.
3. Products occur to be of low quality (jars “blow up”)
4. Incomplete information about products and producer on labels.
5. Low quality of package. Inconvenient, bulky and heavy glass jars are used.
6. Irregular delivery of goods.
7. Lack of contact of producers with consumers. Enterprises are unaware of their opinions and preferences.
8. Low-quality or unsold products cannot be returned to producers.
9. Not all producers give goods in credit.

In fact all these conditions result in that retailers are often appear to be uninterested in local product sale.

Foreign-trade transactions ⁸

Investigated groups of products

In the course of analysis of export and import transactions we surveyed supply data of the following groups of products.

Types of products	Export	Import
Apricot dried	+	+
Prunes dried	+	+
Apples dried	+	+
Canned cucumbers and gherkin	+	+
Canned tomato	+	+
Vegetable blends	+	+
Jam, marmalade, jelly	+	+
Conserved cherries and sweet cherries	+	-
Conserved fruit and eatable parts of plants	+	+
Citrus juices (including pineapple)	+	+
Tomato juice	+	+
Grape juice (including must)	+	+
Apple juice	+	+
Juices from other fruit and vegetables, juice blends	+	+
Sweet corn, canned ⁹	+	-
Grapes dried	+	+
Onions dried	+	+
Ketchup and other tomato sauces	-	+
Other dried fruit	-	+
Spicery	-	+
Blends of fruit and other eatable part of plants	-	+

General information

Volume of foreign-trade transactions in fruit and vegetables processing industry for the period from 1997 to 2001¹⁰ totaled to US\$11.3 mln. (0.19% of the total volume of foreign-trade transactions in the Kyrgyz Republic). For this period export volume surplus vs. import volume made up 1.4 mln. dollars (22.35%).

Volume of foreign-trade transactions in 2001 totaled to US\$2.7 mln. that is by more than three times greater than volume of 1997.

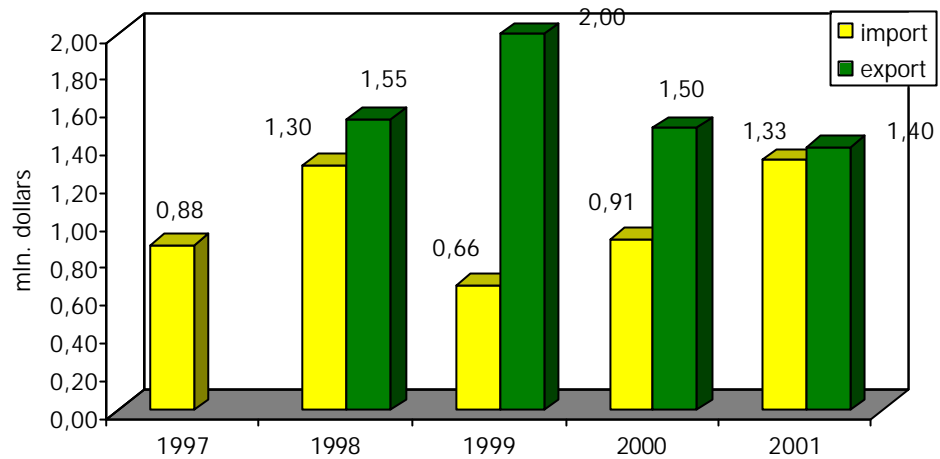
⁸ According to data of National Statistic Committee for all periods

⁹ Export to Afghanistan (2000, 2001) and Tajikistan (2001). Data on import of this produce have not been received.

¹⁰ No export data for 1997

* According to data of KR Balance of Payments, KR National Bank, for all periods

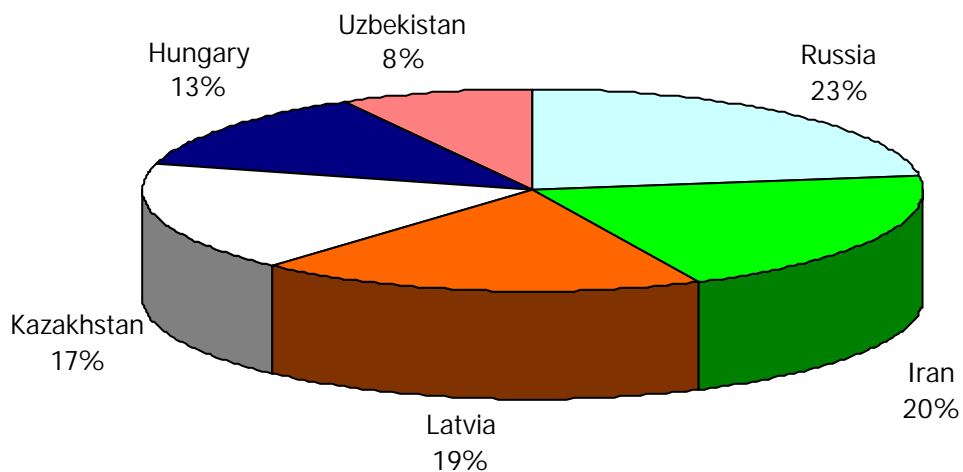
Diagram 28. Fruit and vegetable produce foreign trade volume



Import

Russia (17%), Iran (15%), Latvia (≈14%), Kazakhstan (≈13%), Hungary (9.5%) and Uzbekistan (6%) have the largest ratio among all countries which export products to Kyrgyzstan. All the rest countries play insignificant role in import of fruit and vegetable processed products.

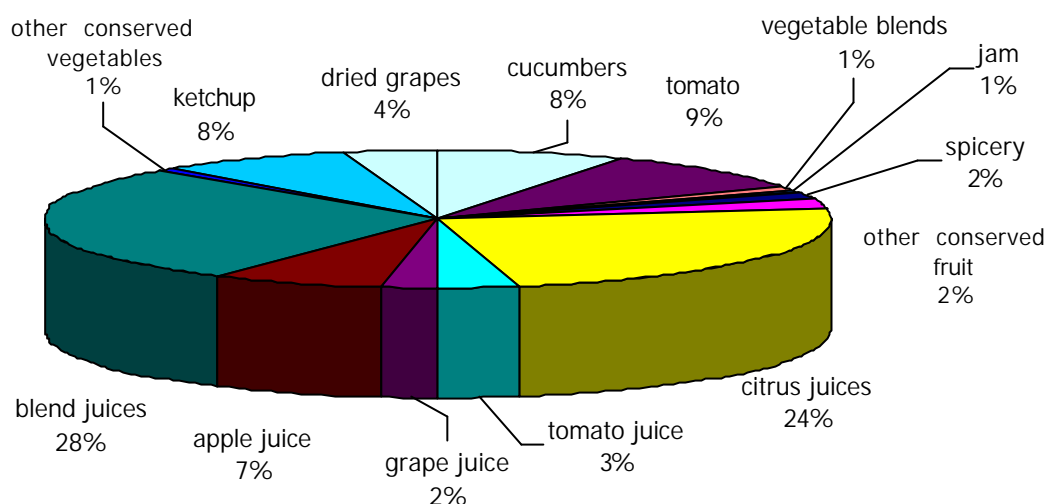
Diagram 29. Main countries exporting fruit and vegetable processed products to Kyrgyzstan (1997-2001)



For the period from 1997 to 2001 the greatest share of import is occupied by blend juices (28.1%), citrus juices (including pineapple juice, 24.3%), conserved tomato (9.3%). All other products is imported in small lots.

The total of 10,348.3 tons of processed fruit and vegetables have been imported to the amount of US\$4,958,730 (0.33 % of total import volume for the period under review).

Diagram 30. Products import distribution (1997-2001)



In 1997 import of citrus juices made up 47.7%. 45% of total supply volume fall to the share of Latvia, 21% – Hungary. Conserved cucumbers and gherkin made up 38.6% of total imported fruit and vegetable products, 59% of supplies fall to the share of Iran.

In 1998 juices are also dominated – blend juices (28%) and 53% of supplies came from Latvia, citrus juices (21%) and 58% of supplies fall to the share of Latvia. Conserved tomato are also in demand (15.8%) that are mainly brought from Iran (85%). 50% of imported ketchup and other tomato sauces also fall to the share of Iran (14% of total import).

In 1999 juice products were in the first place again with respect to import volume. 25% came to import of blend juices, where Kazakhstan played leading role (27%). 16.5% fell to the share of citrus juices that are mainly supplied from Hungary (32%). 18% of import fell at conserved tomato, where Iran again had greatest share (72%).

In 2000 there were no changes in produce import structure. 48.7% of all imported fruit and vegetable products included blend juices mainly brought from Kazakhstan (55.4%); 13.6% fell at citrus juices from Hungary (29%) and Russia (24%); 7.5% came to apple juice imported by Russia (36%); 9.3% - canned tomato, where the greatest share fell to supplies from Iran (84%).

In 2001 blend juices occupied the largest import share (44%) that came from Moldova (50%) and Slovenia (25%). 32.2% fell to the share of citrus juices (predominant supplies from Russia, 64%) and 22% to apple juice mainly brought from Russia (65%). The import of ketchup and other tomato sauces amounted to 10.7%, where Russian producers have dominated over other suppliers (90% of annual volume of supplies).

Export

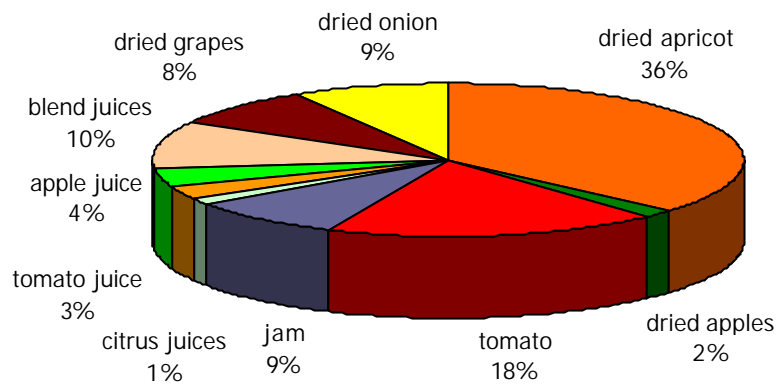
The situation with the export as one knows is more interesting in terms of produce marketing and sales, and therefore to be reviewed in details.

From 1998 to 2001 Kyrgyzstan has totally exported 19,191.1 tones of fruit and vegetable products to the total amount of US\$6,385,852. The largest export volume fall to the share of dried apricot

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(35.4%), canned tomato (17.6%), blend juices (10%), jam (8.4%) and the rest product shares in export volume are small.

Diagram 31. Products export distribution (1998-2001)



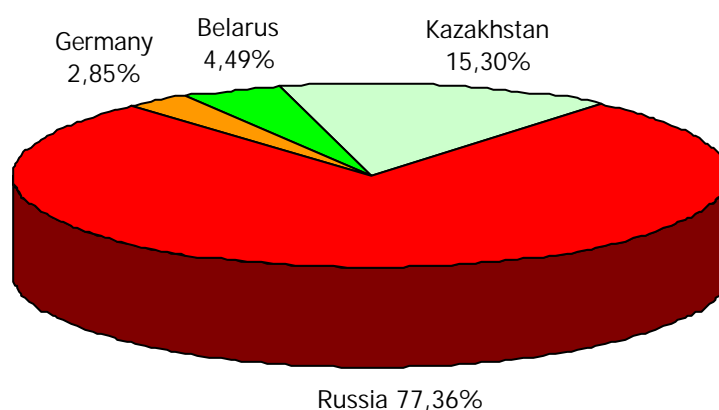
This export structure has been observed for the period 1998-1999. For example, **in 1998** the largest share in fruit and vegetable product export fell at dried apricots (38.5%), canned tomato - 7.4%, dried grapes – 7.2% and jam - 4.2%.

In 1999 dried apricot export volume totaled to 36% and the export share of canned tomato has increased and reached 9.3%, dried onions – 7.4% and dried grapes - 7.2%.

From 2000 changes could be observed in products export structure. The main share fell to canned tomato (17%), dried apricot (12.7%), jam (12.2%), dried grapes (5.8%). **In 2001** the export of blend juices (20.5%) had the highest ratio, then canned tomato (19%), dried onion (8.8%), citrus juices (3.3%).

The major customer of a Kyrgyz fruit and vegetable produce is Russia (approx. 75% of total volume for the last four years).

Diagram 32. Main counties importing fruit and vegetable produce from Kyrgyzstan (1998-2001)



Fruit and vegetable produce has also been exported to Turkmenistan, Uzbekistan, Mongolia, Afghanistan, USA and China. However, the shares of these countries in the total export volume make up less than 1% for the last four years.

Below is a comparative review of export volumes and shares of exporting countries for main salable products in dynamics.

Dried apricot

Exporting country	1998		1999		2000		2001	
	Amount, \$US	% of total export volume	Amount, \$US	% of total export volume	Amount, \$US	% of total export volume	Amount \$US	% of total export volume
Belarus	10,600	2%	9,060	2%	2,650	1%	4,652	14%
Russia	437,030	93%	551,887	96%	134,754	60%	3,325	10%
Ukraine	14,100	3%	10,337	2%	-	-	14,162	43%
100% of total produce export volume	470,810		573,949		226,023		32,985	

In **1998** the shares of Belarus, Russia and Ukraine made up 2%, 93% and 3% accordingly. In **1999** the share of Belarus has remained at the same level but the volume has decreased by 15%. The share of Russia has increased by 3% and the volume has also increased by 21%. The share of Ukraine has decreased by 1% and reduction in volume totaled to 27%. In **2000** export of products has considerably dropped (2.5 times) compared to the previous year. The volume of export to Belarus has decreased by 30% and the share – by 1%. Russia has decreased both share (by 36%) and volume (by 76%) compared to 1999. In **2001** there has been a drop by more than 7 times in money terms compared to 2000.

Canned tomato

Exporting country	1998		1999		2000		2001	
	Amount, \$US	% of total export volume	Amount, \$US	% of total export volume	Amount, \$US	% of total export volume	Amount, \$US	% of total export volume
Russia	176,840	80%	365,547	95%	388,065	86%	79,219	22%
Kazakhstan	13,280	6%	9,616	3%	29,675	7%	114,182	32%
100% of total produce export volume	220,200		384,407		451,234		360,981	

Total volume of supplies in 1999 has increased compared to 1998. Russia has increased purchases by 106%. In **2000** total volume of export has increased by 15% and 67% of increase in export fall to the share of Kazakhstan (in money terms the gain totaled to US\$20,000). In **2001** total volume of tomato export has dropped by 21% while Kazakhstan has significantly increased purchases (by 284%), but Russia had a reduction by 79%.

Blend juices

Exporting country	1998		1999		2000		2001	
	Amount, \$US	% of total export volume	Amount, \$US	% of total export volume	Exporting country	Amount, \$US	% of total export volume	Amount, \$US
Russia	32,430	79%	19,831	15%	0,678	1%	-	-
Kazakhstan	8,800	21%	111,994	83%	88,994	99%	297,486	96%
100% of total produce export volume	41,230		135,022		89,954		310,262	

If export of tomato is more or less stable, dried apricot export has been reduced, export of juice blends has demonstrated significant growth in 2001 compared to all previous years. There is a very high probability that this information is based on reexport of imported products (e.g. Vimm-Bill-Dann Company). For our inquiry the marketing department of the Vim-Bil-Dann Company in Central Asia gave a response that the company does not trace further direction of their produce sold in wholesale lots. Thus, specialists of the company account that reexport is very probable.

The nature of export structure is demonstrative: in 1998 the share of Russia is prevalent and volume is insignificant. From 1999 the share of Russia reduced, the volume of supplies to Russia dropped, but the total volume of export increased owing to growth of supplies to Kazakhstan (in money terms the growth has come to 12 times). In 2001 the product export to Russia has stopped.

Jam

Exporting country	1998		1999		2000		2001	
	Amount, \$US	% of total export volume	Amount, \$US	% of total export volume	Exporting country	Amount, \$US	% of total export volume	Amount, \$US
Russia	217,730	88%	108,230	92%	152,410	97%	8,571	49%
Kazakhstan	28,370	11%	7,129	6%	4,320	3%	8,399	48%
100% of total produce export volume	247,300		118,211		156,730		17,425	

The situation with export of jam was stable until 2001 when Russia reduced purchases by 94%. Although the share of Russia in total export volume has remained at quite high level, total export volume rapidly dropped as purchases of Kazakhstan have increased only by US\$4,000.

Conclusion

In our opinion, one of the most important conclusions of the analysis for this pattern is growing negative tendencies in foreign trade of this sector. The largest sales volume in external markets during the last years fell at dried apricot and tomato products group (tomato paste). According to data on export of these kinds of products Kyrgyzstan is starting to lose its markets. Unfortunately, we do not have export data for 2002 but we are concerned about rapid reduction of dried apricot sales in 2001 and decrease in volumes of tomato purchased by Russia over the same year.

General situation:

1. There is an export reduction for all salable product groups except for blend juices.
2. The greatest export volume (more than 70%) falls at products for subsequent processing, rather than consumptive use. The amount of added value established outside Kyrgyzstan for the last four years is estimated at few million dollars.
3. Foreign trade in the sector making up in average 1.5 million dollars a year has pronounced orientation to large market (Russia).

We believe such situation is influenced by the following factors:

1. Demand in traditional external markets is being structured, i.e. acquires clear shape. Customers focus more on stability and supply volumes along with price and quality characteristics. Occasional small exports to different customers in different regions becomes a thing of the past. The majority of Kyrgyz producers can hardly meet these new demands of the markets yet.
2. The enterprises find it more difficult to promote consumer items in Russian and Kazakh markets as brand policy of competitors shapes consumers' preferences to certain trademarks.
3. Weak potentiality of enterprises in establishing contacts in the external markets, capability to explore these markets and select potential partners and clients. Enterprises are ineffective in communications; many of them which are located in the regions of Kyrgyzstan do not have access to modern means of electronic communication.
4. Small (in terms of external market) production volumes of most enterprises make it expensive to transit their produce through Kazakhstan.
5. Steady and high rates of fruit and vegetable processing industry development in Russia reduce competitiveness of Kyrgyz companies in the Russian market. This factor will be of greater significance during the nearest years.

There are certainly commodity positions where Kyrgyzstan has extreme difficulties to compete with strong and well known in domestic and external markets brands. First of all this pertains to juice produce (supplies of blend juices and citrus juices by Vimm-Bill-Dann Company and from 2002 juices of Nidan Foods Company (Moya semia, Champion, Da!, Distributor in Kyrgyzstan – Forester Company)). But juice imports may considerably decrease within the next few years when “Vinn-Bill-Dann Company Central Asia” will start production of juices in aseptic package in Kyrgyzstan.

Import volume of tomato products (canned tomato, tomato juice, ketchups) is a matter of concern. Kyrgyzstan which is famous for tomato quality is able to displace a considerable share of imported tomato products from the local market.

According to official data in 2001 Kyrgyzstan has imported tomato products (ketchups, juice, conserves) to the amount of US\$209,350. However, import of canned tomato is reduced and import of juices and ketchups is increased. Import of blend juices and citrus juices in 2001 amounted to US\$730,500.

Thus, taking only given commodity positions, the import decrease even by 30% may result for Kyrgyz producers in the annual cumulative sales increment of approximately US\$300,000.

In our opinion, the domestic market of fruit and vegetable canned products also tends to grow though to a lesser extent compared to the Russian market (one of indicators – growth rates of retail turnover exceeding growth rates of Consumer Price Indices. However, the capacity of the domestic market is really small. In case of major loss of positions, the enterprises of the industry in their

current status may face serious difficulties; possibly, the main problem would not be sales reduction but insignificant size of the domestic market that would be an obstruction to effective price competition with imported items.

Another problem of objective nature is concentration of the market within the capital of the country. The main sales market is based in Bishkek including market for fruit and vegetable canned products and if the market grows it would firstly grow here. This makes access to the market difficult for regional enterprises (primarily for southern regions).

In addition, there are objective problems of Kyrgyz enterprises in the domestic market:

1. First of all we should note underestimation of the domestic market capabilities by many enterprises. Kyrgyz enterprises giving no consideration of local consumers thus lose 300,000 – 1.5 mln. dollars every year. Considering additional expenses which enterprises incur while working in the external market, this figure may be even higher. Besides, local market can be seen as “test field” for probation of trademarks, distribution technologies, promotion and evaluation of consumers’ preferences, that is for acquiring the experience that can be invaluable for product export.

2. We should note unawareness of local consumers of Kyrgyz products regarded by retailers of Bishkek as the main disadvantage. Consumers are prepared to product differentiation and with greater pleasure will purchase brand commodity rather than Kyrgyz products which are ignored in shop shelves. Unfortunately, very few Kyrgyz companies meet the market demand for brand products.

3. It is surprising that only 10% of enterprises actively promote their own products. Possibly, many enterprises are satisfied with their present position. But it should be noted that if a company (conditionally) makes a profit in the amount of 20,000 dollars and loses an opportunity to earn 80,000 dollars more, this is in no way can be regarded as successful business.

4. Out of nine problems in the work with products of local producers identified by retail trade representatives, one third to certain extent concern product quality. We would like to underline once again that Kyrgyz fruit and vegetable processing companies can make output of a very high quality, but if such quality is unstable this causes serious problems for producers. Another part of a quality issue concerns obsolete package and its low appeal.

5. Inefficient work of local producers with distribution channels. In general, Kyrgyz products are represented in much lower number of retail outlets compared to imported products. Here, in our opinion, reasons have been named by retailers – no documents, refusal to accept low quality products, refusal to provide goods in credit and irregularity of supplies. We should note the following data: out of 9 enterprises-respondents producing fruit and tomato juices only Promservice Company’s produce is noticeable in retail network. Among 14 enterprises producing canned vegetables only 4 sell their products in more than 5% of trade outlets in Bishkek. It is remarkable that one third of enterprises view the retail distribution channel as the most profitable one.

What are the key areas that producers should focus on? It is obvious that for enterprise working in the foodstuff market, the marketing is not just a separate element of activity which is engaged only when product is ready for sale. Marketing for such enterprise is a global goal that can be reached through considering all processes in business management. In our opinion, fruit and vegetable processing enterprises must focus on three fundamental factors.

1. Distribution

Presently, product sale of enterprises is of a chaotic nature. The final sale point for majority products is retail trade and according to the survey of retail trade outlet representatives they are often unaware of both local producers and their products. This is a problem of enterprises rather than retail traders. Currently, the majority of trade companies is passive in produce and supplier

search efforts – assortment is generally stabilized, purchase channels are steady, they have an idea about turnover of certain commodity groups. As far as changes are necessary primarily for producers, in order to attract retail traders enterprises must make all efforts to achieve this. Therefore, the cause of this problem, in our opinion, is inefficient work of trade agents of enterprises or their sales partners.

In this situation the following activities will be useful:

- support of trade company development initiatives (e.g. under the *Helvetas-Kyrgyzstan Project* a “Kirosexpo” Kyrgyz-Russian Trade House and “A.S. Trade” Company have been established) for promotion of Kyrgyz fruit and vegetable produce to the external markets. Presently, the project activity is focused on establishment of a Guarantee Fund for trade companies with the purpose of export encouragement. In our opinion, the project activities should also concentrate on support of such organizations in their business efficiency enhancement (training, arrangement of experience exchange with trade companies in target markets, development of strategies, information support, legal support, etc.);
- summarizing of enterprises’ experience in their work with retail and wholesale traders, analysis of interaction conditions of partners;
- search and establishment of contacts with wholesale companies and companies that have retail trade chains in Novosibirsk, Ekaterinburg, Omsk and Cheliabinsk;
- search of companies or individuals that have effective systems of foodstuff distribution in Kyrgyzstan. According to information available, currently Forester Company has the most effective distribution system in Kyrgyzstan. However, at this stage companies may have some other alternatives that can be useful;
- enterprises should be more active in terms of advertisement campaign performance. At the initial stage it would be adequate to organize efficient presentation of goods in retail trade outlets including product tasting;
- information support of the sector. As it was previously indicated, the majority of enterprises at present time are short of new information technologies that hinder both effective information exchange and product promotion. Firstly, enterprises should realize this and assign minimal resources to gain access to modern electronic communication systems. Secondly, under the *Helvetas-Kyrgyzstan Project* it has to be proposed to create Internet Site dedicated to this industrial sector of Kyrgyzstan. Internet Site should be owned by private (trade company, information center) or public organization (Association of Enterprises which is being established). Internet Site should provide information on the sector, products, price review, information and contact information of enterprises. When the problem of modern technologies will be solved, this resource may become for them one of the most important information channels. At the initial stage the primary objective is dissemination of marketing information in target markets, and therefore certain funds should be provided for its promotion in the network.

These efforts are primarily targeted to building of a chain “producer-wholesaler-retail outlet” that would function actively and efficiently as much as possible. The analysis of expertise in foodstuff distribution that we carried out in the course of data collection on Russian and Ukrainian producers and tradesmen of fruit and vegetable canned products demonstrated that maximum effect is reached through developed product logistics and limited number of distributors. If a trade company has exclusive rights for product sales in certain region, sales volume can be increased by 2-3 times for a short period of time.

There is no doubt that it is difficult to establish effective sale mechanisms for a couple of years especially as while establishing such mechanisms enterprises should simultaneously work on trade policy, brand promotion and management.

2. Goods promotion policy and assortment management

As it was already mentioned, enterprises of the industry are poorly diversified. This is not a serious problem if a company identified certain niche in the market and directed all resources to strongly position itself in this niche. We have already noted that in this case success can be determined by small product assortment which has unique distinctions, by steadily high quality and practically feasible production.

However, such approach, in our opinion, is more like an exception. The best approach to choose is carefully balanced assortment which could combine in optimal proportions mass consumption products of highest demand and less liquid products that have special consuming characteristics and high share of profit in price. Here, the more assortment extends to all commodity groups (see Production Section), the more effective would be a company's business. Trade companies of any level (wholesale and retail) would better benefit with respect to standard products from cooperation with a small number of enterprises providing maximum wide assortment rather than buy separate commodity items from a large number of enterprises.

It should be understood that one of the most important factors of successful business of a trade company is continuous availability of essential goods in stock or shop shelves. Gaps in assortment would impair business reputation of a serious trader. And here, the situation is aggravated because farmers do not provide harvest forecast, while canned stuff producers do not have information as to where, who and what will grow, and therefore there are no exact plans regarding the output.

In fact, there are two problems to be solved:

- each enterprise should strongly focus on its goods promotion policy and assortment management based on survey data obtained in the domestic (information is partially provided in this analysis) and external markets. Data on the external market can be received in the course of research presently conducted in Siberia and Northern Kazakhstan by the Kirrosexpo Company;
- establishment of information interaction of fruit and vegetable producers and processors. The ideal situation is when processing enterprises provide the suppliers with information on raw material requirements in advance (based on assortment plan) and jointly plan sowing campaign.

3. Brands

Fruit and vegetable canned products is kind of foodstuff where brand has influence on competitiveness.

Here, good name, logo and registered trademark are only minor things that have to be done with respect to brand. Brand is an element that gives globalize nature to marketing functions of an enterprise as for strengthening brand product in the market enterprise should ensure stable commodity quality, stable production volume, wide assortment, adequate distribution, price policy, etc.

In the Production Section we have already mentioned about national brand creation perspectives. In theory, each enterprise can have its own brand. On the other hand, would many enterprises be able to manage it efficiently? It is obvious that advantages both in brand policy and assortment management and distribution will be scored by the largest enterprises.

Companies that within the next two or three years could create solid structures of raw material growth, its processing and sale (vertically integrated holding company) would have good opportunities in the external markets. In the domestic market small enterprises would find it almost impossible to compete with such companies.

INDUSTRY DEVELOPMENT SCENARIOS. CONCLUSIONS AND RECOMMENDATIONS.

In this section we briefly put together assumptions and ways of development trends in the sector for the next five years (2003-2007). Moreover, we put emphasis not on accuracy of forecasts (as far as it is impossible) but identification of actions of interested parties that may facilitate the industry development according to optimistic scenario.

Based on this we brought together conclusions on the industry condition regarding key positions and main recommendations with respect to further activities that may ensure its sustainable development.

In our opinion, this analysis section is of disputable nature and we consciously attached such a meaning. We suggest using it as a ground for discussion between interested parties (enterprises, state agencies, international organizations (donor projects) working on small-size and medium-size enterprise development, national consulting companies and other institutions) in order to form a uniform vision of the sector development strategy and put common efforts for its implementation.

Scenarios and conditions

Optimistic scenario

Annual production volume increase by 30% in average. By 2007 production volume will exceed 2002 performance by 3.7 times. The export volume of processed fruit and vegetables will total to 8.5 mln. dollars by 2007. By 2007 3-4 large food companies of regional scale will function in the sector, as well as 20 medium companies part of which has specific orientation and another part is represented by contractors of big companies in the area of production activity.

Pessimistic scenario

Irregular production rates in the period until 2005 (both growth and fall). By 2005 production volumes in the industry would increase by 20% compared to 2002. The nature of this growth is inertial, i.e. growth on account of loss of positions gained earlier. After 2005 decrease of production volumes and export down to 400,000-500,000 dollars a year due to the pressure of competitors in the external markets. Export positions are predominantly held owing to products for subsequent processing. The period spanning the years 2004-2007 may see bankruptcy of 70% of presently running companies and appearance of a great number of small enterprises and plants (including those based on farms) during the same period and most of them would have extremely weak development potentiality.

These scenarios are outmost development possibilities. Implementation of the optimistic scenario is determined, in our opinion, by predominance of positive tendencies in the following factors:

1. Activity of enterprises

Enterprise managers choose long-run development strategy based on analysis data and tendencies in market development. The strategy is based on realistic assessment of their capabilities and selection of base variant:

1. focus on specific business segment with selection of limited assortment and development of competitive advantages based on unique product characteristics, optimal technology and high profit share in price;
2. search of possibilities of intensive extension of business through considerable investments in enterprise or through horizontal integration (amalgamation / strategic alliance / long-term partnership) with other enterprises. The basis of competitive advantages are maximum widening of assortment within a single commodity policy, vertical integration through

investments in raw material base, participation in capital of trade organizations (or capital of such organizations in production enterprises), increase of production volumes and sale of the most perspective commodity items and achievement of maximum effect of scale.

The second variant is more complicated and at the same time is a shorter way to achievement of investment attractiveness that may open access to significant financial resources during a short period of time.

Human factor is also very important here. The implementation of any base strategy implies the presence of long-sighted owners and effective managers. Possibly, for owners of some enterprises the best way out at present is the sale of their business while it is worth something.

2. Position of the Government

It is similar to the key principle of a doctor: "Do not do harm!" At present time the Government places high emphasis on small-size and medium-size business development. However, in this industry (in contrast to baking industry) it is important for the Government to be active in supporting the establishment and development of two or three large branch companies (which then can load capacities of smaller enterprises through placement separate orders) in the course of realization national economic interests, rather than great number of small companies.

Key conclusions

1. **High growth rates of the market in Russia.** Lower growth rates of competitiveness (raw material base cannot meet production demands and production cannot meet the market demands). The high rate of profit has been reached. There are two reasons:

- the sector is attractive for new capital investments. The Russian canning industry is more attractive (close vicinity of sales markets). Kyrgyz canning industry is primarily inviting due to vicinity of raw material base with good natural and climatic conditions and resources inexpensiveness;
- niche available to Kyrgyz companies. The restriction is a time condition. This niche has to be occupied and reinforced.

2. **Globalization of branch business in Russia and concentration of investments.** Good chance in investment attraction mainly for large companies (production volumes, assortment, market share) or companies that have better opportunities for consolidation within the next two or three years.

3. **Need in significant investments for the sector.** Investments in complex processing technologies allowing extension of production season and facilitating rapid profitability increase within a short period of time. Investments in information technologies. Investments in package upgrading (switch over to European standard). Investments in support of distribution networks. Investments in intangibles – quality management systems, brands. The goal is the reinforcement and extension of Kyrgyz fruit and vegetable processing industry positions in the external sales markets.

4. Intensive development of the sector is impossible without **consolidation of raw material base by enterprises**. The best way is various options of incorporation of raw material processors and suppliers into a single production complex with centralized planning and management.

5. **Brand-strategies** are the key units of unification of all business management functions within marketing conception. The availability of brand and skillful brand management is the base for successful promotion of canned fruit and vegetables and practically unlimited assortment diversification.

6. **At present time, it is not beneficial for enterprises to establish their own "deep" distribution systems.** In solving sales issue it is more important to concentrate the work of

marketing departments on search of trade partners capable to ensure maximum coverage of certain geographic market segments and interested in investing their own resources in product promotion and, in the future, partly provide funding of enterprise production programs.

Recommendations

We set forth specific recommendations for most of analysis patterns. Their only disadvantage is a lack of definite distribution of roles and responsibilities. In this respect we suggest to organize work conference (workshop) with participation of all interested parties in order to develop a single position and allocate roles in solution of certain issues.

The efficiency of this type of activity can be enhanced if the parties would determine their positions and prepare definite initiatives in advance:

- **Processing enterprises (work group).** Is it possible to overcome lack of cooperation between producers and develop a joint fruit and vegetable canning production strategy? Is it possible to found association in the nearest time? Is it possible for association to establish international contacts (International Industrial Academy, VNIKOP), Konservprom Association)? Is there any possibility to find (establish contacts, hold negotiations) successful trade organizations for holding discussions regarding conditions and perspectives of cooperation?
- **Trade companies.** What criteria should products of Kyrgyz fruit and vegetable processing enterprises meet so that these companies get interested in their market promotion? What should be the terms of cooperation (payment, supplies, etc.)?
- **Helvetas-Kyrgyzstan** for two years is actively working on the project aimed at agricultural produce processing sector support, as well as **other international (donor) organizations working on raw material base development.** The issues of resource assignment for information, technical and expert assistance of processing enterprises.
- **State organizations and departments.** Is it possible to clearly mark this industry as a priority one for Kyrgyzstan's economy? Is it possible to have an effective and reasonable coordination of various agencies' interests in part of preparation and realization of lawmaking initiatives similar to the Government's Decree No. 782? In what periods it is possible to develop and adopt legislative acts pertaining to technical regulation? Is it possible for the Government to participate and in what form in mutual protection funds to minimize the problem of pledge insufficiency? Is it possible to set tax holidays for processing enterprises for five-year period (in part of profit allocation to capital investments in production and raw material base)? Fixed assets import exemption from VAT? Other positive (temporary) changes in taxation for processing enterprises?
- **Financial organizations.** Is it possible to finance brand creation programs and other intangibles? Is it possible (on what terms) to participate in establishment of diversified holding structures in the sector? Is it possible to accomplish factoring and bill discount operations (as mechanisms for capital turnover acceleration)?
- **Consulting companies.** Is it possible to incorporate intellectual resources for preparation and assistance in implementation of holding structure establishment project? What other mechanisms of integration (establishment of strategic alliances) can be proposed and what are benefits for participants and long-term effects?
- **All parties.** What should be a common goal? What should the parties interaction mechanism be in order to achieve maximum synergic effect?

ATTACHMENT

- Attachment 1.** **List of fruit and vegetable processing enterprises.** It is available in Russian upon advance order.
Senti Company
219 Chui Street, Bishkek, tel. 21-99-46,
e-mail: senty@infotel.kg
or
Helvetas, Private Initiative Support Project:
503 Frunze Street, Bishkek, tel. 62-00-67,
e-mail: spip_adm@helvetas.kg
- Attachment 2.** **Decree No. 782 of the Government of the Kyrgyz Republic of December 10, 2001.** (available in Russian upon request, see the contact above, Attachment 1)
- Attachment 3.** **List of investigated trade outlets.**

Attachment 3

List of investigated trade outlets

	Outlet name	Address, phone number	Type
Supermarkets			
1	Eurasia	49 Kievskaya St., ph.287370	Supermarket
2	Europe	70 Ibraimova St., ph.288951	Grocery department
3	Central Shop ('TSUM')	153 Chui Av.	Grocery department (leasehold)
4	Beta Stores	150 Chui Av.	Supermarket
Big Stores			
5	Kara Balta Trading House	145 Sovetskaya St. ph .286644	Grocery department
6	Ergeshov	Asanbay district ? .421737	Retail trade
7	Aristocrat	5 Akhunbaeva St. ? .420218	Grocery store
8	Shumkar	162 Chui Av.	Grocery store
Markets			
9	Alladin	Ortosay market \510163	Retail trade \ grocery
10	Aidai	Alamedin market	Small wholesale store
11	Seimyk	Alamedin market	Small wholesale store
12	Liliya	Ortosay market	Small wholesale store
13	Nadira	29 Beishenalieva St.	Small wholesale store
14	Bereket Trading Complex	Osh market	Grocery department
Small Wholesale Stores			
15	Yzyt	23\1 Vostok-5 ph.296511	Small wholesale store /grocery
16	Faraon	district # 12	Small wholesale store
17	Almaz	Auezova St. 59\2 ph.232814	Small wholesale store
18	Wholesale Store	district # 5 ph.418277	Small wholesale store
19	Sting	203 Kievskaya St. ph. 650062	Small wholesale store
20	Jyldyz	202 Jibek Jolu St. ph.663917	No
21	Raushan	213 Jibek Jolu St. ph. 295715	Small wholesale store
22	Maria	200 Toktogula St. ph. 213432	Grocery store
23	Kubanych Ltd.	district # 8 ph. 475791	Small wholesale store
Retail Stores			
24	Azamat	district # 6, 2 \ 416954	Grocery store
25	Nurai	district # 4 \ 473977	Grocery store
26	Solnyshko	104 Sovetskaya St.	Grocery store
27	Merkuriy	Donetskaya St.	Retail trade
28	Ulan	51 Mira Av.	Grocery store
29	Aidana	district # 12 ph.461779	Grocery store
30	Berenbai	28 Asanbai district ph.465530	Grocery store
31	? 48	district # 9 ph. 545675	Grocery store
Store Departments			
32	Leili	Almaatinskaya St. 3 ph.435389	Retail trade department
33	Tolkun	Akhunbaeva St. 134 ph. 545649	Grocery store
34	Issyk-Kul	Sovetskaya St. 137 ph. 285533	Grocery store
35	Bereke	Moskovskaya St. 100 ph. .226944	Grocery store