European Union

Distribution Channels for dried fruits, nuts and honey

Tajikistan / Kyrgyzstan
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This brochure was developed to support processing entities and exporters of nuts, dried fruits and honey, as well as other persons interested in access to Customs Union markets (Russia, Belarus and Kazakhstan) in Tajikistan and Kyrgyzstan.

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ASTI – Association of Scientific and Technical Intelligentsia of Tajikistan
www.asti.tj

NASMB – National Association of Small and Medium Business Republic of Tajikistan
www.namsb.tj

AFVE – Association of Fruit and Vegetable Enterprises Kyrgyzstan
www.afve.org

TES – Center Kyrgizstan
www.tes-centre.org

WIFI – Институт по Экономическому Содействию при Торговой Палате Австрии
www.wifi.at

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Author profile:

Oleg Samukhin is an expert for logistics and international trade. He holds MBA and MSc in Logistics and Delivery Chain Management of Cranfield Univerity (Great Britain). Since 1998 Oleg has been a member of Chartered Institute of Logistics and Transport (Great Britain). Oleg worked in international transport-logistics companies in Russia, implemented transport-logistics projects financed by European Union, EEC UNO, USAID and ADB. Besides, he has the experience of training Logistics, Project Management, Production Management in business schools and in corporate trainings.

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ABBREVIATION

EU	European Union
IRT	International Road Transportations (TIR system)
CIS	Commonwealth of Independent States
FEZ	Free Economic Zone
TRACECA	Transport Program of European Union Traffic Corridor Europe-Caucasus-Asia

GLOSSARY

Brand	(trademark) — A term in marketing, which symbolizes a dataset on the companies, their product or service; popular, easy-to-recognize and legally protected symbolism of a producer or a product.
Distribution	A set of interrelated functions performed in the process of distributing material flow between multiple buyers. Thus, distributive logistics or physical distribution is considered an activity related to obtaining of a product, its storage to the moment of taking the order and subsequent delivery to the customer.
Customization	Production of bulk products to the customer's specific order by means of its kitting with complementary elements or accessories. This can be interpreted simpler: customization is adapting of the available product to specific consumer
Distribution channel	An aggregate of entities or individuals, who take the responsibiity or facilitate transfer of property rights to the other person in respect of specific goods or service on their way from producer to consumer
Cargo consolidation	Integration of cargo owned by different forwarders for their subsequent transportation by one transport. This scheme enables to save material sums and simplify the order of document arrangement
Logistics	Strategic management of material flows in the process of procurement, supply, transportation, selling and storage of materials, components and finished inventory
Logistician	Transport-logistics company, which is capable to provide the whole set of transport-logistics services to its customers
Multimodal transport	transportation of cargo by two or more types of transport based on single agreement
Retailer	Commercial enterprise (distribution network), which sells the products to the end consumers
B2B	Business to Business – selling of products to corporate customers
B2C	Business to Consumer – selling to the end (private) consumers

PREAMBLE

This document gives brief description of basic elements in distribution system of the companies in dried fruits, nuts and honey segment. The content of the document proves multipurpose experience of generating sales and distribution systems, and gives recommendations on how this multipurpose experience can be applied in practical activity of Tajik and Kyrgyz producers and exporters of dried fruits, nuts and honey.

This document can be useful to the reader who is familiar with fundamentals of marketing and logistics. However, the document will be mainly used as a supplementary document for holding of briefings, where the concepts and methods of generating logistics and physical distribution will be reviewed. In addition, such briefings will review the development concept of dried fruits, nuts and honey distribution channels.

To have a clear understanding of what distribution is, it will be purposeful to bring some definitions. So, the most widespread definition is as follows: "**distribution**" is making the goods available to the end consumer (definition from classical course of marketing). Another definition: "**distribution**" is arrangement of goods movement from producer to buyer (definition from the course of logistics). Alternative definition: "**distribution**" is producer's conscious choice of the structure and means, which "enable" producer to reach the end consumer.

It is important to note that "distribution" means both (1) chain of goods sales from producer through dealers to the end consumer, and (2) sequence of logistics operations, which need to be performed to deliver goods to the end consumer.

Accordingly, the document reviews the following components necessary for efficient (physical) distribution of dried fruits, nuts and honey:

- Geographical features of the market and logistical features of the product, their influence on the choice of transport and distribution channels
- Structure of sales and distribution channels
- Traffic routing
- Transport operators and logistics intermediaries
- Allocation of production operations and trade stock
- Transport-logistics process and information technologies
- Delivery terms in international business deals

Conclusive part of the document systematizes all basic items and serves as a basis for discussion in briefing.

1. PRODUCT FEATURES AND GEOGRAPHY, THEIR INFLUENCE ON FORMATION OF DRIED FRUITS, NUTS AND HONEY DISTRIBUTION

Distribution of dried fruits, nuts and honey from Tajikistan and Southern Kyrgyzstan is characterized by a set of factors, which influence the complexity of process.
The first thing to be taken into account is geopolitical component which has a material negative effect on export from Tajikistan and Kyrgyzstan. This is first of all related to importation prohibition of Tajik and Kyrgyz products to basic product markets. On the one hand, prohibitions adopted in Russia for importation of Tajik dried fruits and subsequent threats of phytosanitary inspection agencies to repeatedly adopt prohibitions are quite justified. Safety of the product delivered from Tajikistan is not always guaranteed by producers, as well as by phytosanitary and veterinary inspection agencies of Tajikistan. On the other hand, prohibition to importation of dried fruits and nuts can remain as one of Russia's pressure tools towards the administration of the Republic of Tajikistan in settling of its political objectives in the region. Once the Customs Union and Common Economic Space of Russia, Kazakhstan and Belarus establish, the governments of three countries will have to coordinate their economic policies and hopefully unfounded prohibitions will not be adopted any longer.

Another complex factor, which effects physical delivery of the product, is transit through neighboring states. Majority of political scientists do not anticipate quick opportunity of material improvement of relationships between Tajikistan and Uzbekistan (as well as material improvement of Uzbekistan's relationship with all its neighbors). Likewise, Central Asian countries do not carry on a real struggle with corruption and this causes worsening of border-passing procedure. On the other hand, establishment of Customs Union and probable accession of Kyrgyzstan to it (within the next 2-3 years) with the lapse of time will enable to reduce the number of transit countries for Tajik exporters.

As opposed to geography and politics, which are affecting and will affect the logistics of dried fruits, nuts and honey export from Tajikistan, the features of the product are suitable enough to be forwarded to long distances. The following product features are important for the shipping process:

- Value
- Physical compactness and configuration
- Damage risk
- Risk of loss

Each of the products under review (dried fruits, nuts, honey) is considered a product with long-term storage, of low cost, is not a product of enhanced risk of loss, very suitable for transportation and storage. Such products are very suitable for transportation by rail transport. This is all the more urgent for transportation to long distances to the basic consumers in Russia and Kazakhstan.

Picture 1. Dried fruits and nuts are suitable for storage, transportation and sale
Photo: http://www.turizm.ru/turkmenistan/gallery-38978

Taking into account the above-named features of the product, as well as the geography, the following factors need to be considered when building the distribution system of dried fruits, nuts and honey:

- Development of alternative product markets. Market of Russia and Customs Union can turn to be closed for Tajik producer both for objective and for political reasons. However, delivery cost of Tajik product is competitive only in case of delivery to Kazakhstan and Russia (mainly to Western Siberia, Ural and Povolzhye). However, even in these markets Tajik product needs to compete with higher quality products delivered from Uzbekistan. In case of delivery to Ukraine and European Union, transportation of Tajik product becomes more expensive as compared to transportation of Turkish product. Accordingly, penetration to the new markets should be ensured with formation of recognizable brand, improved package (specifically using small consumer snack packs), increase of product range (including promotion of snack nut-and-dried fruits mixtures)
- Availability of alternative delivery corridors. A material factor, which can change the type of product delivery from Tajikistan to the markets of Customs Union, can become accession of Kyrgyzstan to the Customs Union. This will unlikely occur in 2012. However, political management of Kyrgyz Repubic declared its intentions to join the Customs Union, and political management of Customs Union countries called Kyrgyzstan upon for commencement of preparatory process for accession to the Customs Union. When the border of Customs Union is located in few kilometers from Isfara, exporters will be more interested in consolidation, processing, packaging and shipment of goods from Batken region, Kyrgyzstan, not from Sughd region, Tajikistan. Motor corridor through Kyrgyzstan is of great significance when shipping the cargo. At that a part of cargo will be delivered to the end consumers by motor transport, the remaining part – by combined transport (road transportation to Bishkek or Lugovaya station), then by rail transport.

2. DEMANDS OF THE MARKETS AND THEIR INFLUENCE ON FORMATION OF DRIED FRUITS, NUTS AND HONEY DISTRIBUTION

Formation of sales channels and physical distribution is highly dependent on market segments which the producer intends to service. Before building of ditribution system it is important to clarify the following issues:

- *Volumes and share of sales in consumer (B2C) and industrial (B2B) markets.* Requirements to the physical configuration and consumer packaging of goods in industrial market is lower than in consumer market, however requirements to product quality, reliability and logistics quality can be the same or even higher than in consumer markets.
- *Promotion of goods under own brand or product delivery for wholesale or retail companies which promote the goods under their own brands.* Development of own brand and promotion of goods under own brand is recognized as long-term investment. When taking the decision in favor of development of own brand, producer will need to reduce investments in fixed capital (orchards, honey-bee colonies and beehives, production premises, hardware). Such decision requires following of considerations like long-term profitability and business value, availability of turnover capital to support and develop business, commercial risks.
- *Geography of deliveries and market penetration level.* Focusing on relatively small geographical segment of the world market can turn to be quite a suitable ditribution scheme. From the viewpoint of transport accesibility of the market and the degree of its acquaintance with Tajik products, markets of Ural, Kazakhstan, Western Siberia, Povolzhye, Moscow and St. Petersburg and a part of Eastern Siberia could serve as a basic platform for development of international sales of Tajik and Kyrgyz dried fruits, nuts and honey. Table 1 shows an approx. breakdown of population in these regions and population in urban areas with direct air communication with Khujand, which enables to determine the most preferable areas for export of dried fruits, nuts and honey. However this strategy has some risks. In the event of adopting prohibitions for importation of Tajik products exporters will lose a dig sales volume. In this repect it is important to diversify the sale geography and this will enable to have a better understanding of the feature of various markets, obtain skills of logistics when making deliveries to different regions. This experience will promote to switch over to the sales beyond Cutoms Union countries in the shortest period of time, as necessary.

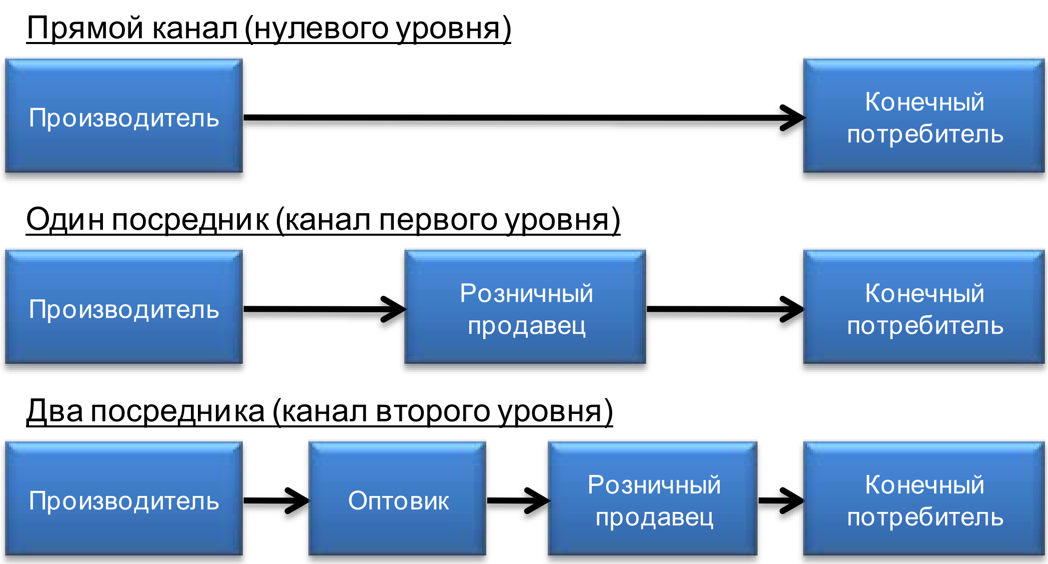
Table 1. Population of Russian federal districts and cities with direct air communication with Khujand

Territories and cities	Population (mln)
Central Federal District (CFD)	**37.1**
Privolzhskiy Federal District (PFD)	**30.2**
Siberian Federal District (SFD)	**19.5**
Southern Federal District (SFD)	**14.7**
Northwestern Federal District (NWFD)	**13.5**
Ural Federal District (UFD)	**12.3**
North Caucasian Federal District (NCFD)	**8.2**
Far Eastern Federal District (FEFD)	**6.5**
Moscow (CFD)	11.5
St. Petersburg (NWFD)	4.8
Samara + Tolyatti (PFD)	1.8 (1.1 + 0.7)

Novosibirsk (SFD)	1.5
Yekaterinburg (UFD)	1.4
Nizhny Novgorod (PFD)	1.3
Kazan (PFD)	1.1
Chelyabinsk (UFD)	1.1
Rostov-on-Don (SFD)	1.1
Ufa (PFD)	1.1
Krasnoyarsk (SFD)	1.0
Perm (PFD)	1.0
Krasnodar (SFD)	0.7
Irkutsk (SFD)	0.6
Tyumen (SFD)	0.6
Orenburg (PFD)	0.5
Surgut (UFD)	0.3
Khanty-Mansiysk (UFD)	0.1

Sales/distribution channels can have different length. The shortest sales channels are direct sales. Such forms of distribution lack intermediaries between producer and buyer. Direct delivery channels are frequently used for sales in industrial markets. In case of consumer markets retail buyer is regarded as the end consumer. Distribution channels till retail consumer, usually, include several intermediate links (Picture 2). In marketing books the channels are divided according to the levels – zero level channel corresponds with sales channel, and further depending on the number of intermediate links the channel can be of the first, second, third, etc. level.

Picture 2. Types of sales/distribution channels



One and the same producer can use different length channels for different groups of customers. Dried fruits can be directly sold to small confectionery enterprises in Customs Union countries. Major western confectioners can most probably deliver the products through wholesale raw-stock suppliers. Retail sales in local market can run through one or two intermediary links, whereas international deliveries can run through a big number of intermediaries.

When choosing the sales channel it turns out difficult to determine the optimal length of the channel. Marketing books bring factors, to which the producer should pay its attention when selecting the length and width of channels, as well as when determining the roles of intermediaries. Unfortunately, the greater part of marketing books are intended for major producers, not for small ones, which are forced to "break the way through" the markets, which lack freedom of competition and where corruption is available.

Taking into account the complexity of logistics in Tajikistan, small producers will probably have difficulties managing without the services of "consolidators-exporters" in Sughd region. Consolidators can act both as dealers (wholesalers), which procure the goods and subsequently resell them and as logisticians, which do not procure goods, but just provide transport-carrier services. For producer using of Tajik dealer's services enables to quickly make deals and focus on its basic activity – growing, drying and packaging of apricot or any other product. But at that producer obtains the smaller part of total added value (Picture 3).

Picture 3. Generating of added value

When using the services of intermediary-logistician, producer possesses control tools of distribution till importing country. At that producer should find a customer in importing country, conclude the contract, arrange licensing documents for export of goods from Tajikistan and import to the country of destination. All these operations presume definite costs, among which the costs for sales (advertizing, marketing, travel expenses) will comprise the greater share of total costs. The costs should be correlated with extra income obtained from participation in a number of stages in the process of goods movement to the end consumer. Producer, which exports small quantity of product, will probably face the situation where the cost value of additional operations can exceed extra income obtained as a result of executing additional operations on the way to the end consumer.

Use of logistician-consolidator enables some small producers reduce their transportation costs at the expense of delivering large lots of goods. Consolidation also enables to improve the attractiveness of the offers made by each producer. Apart from the quality the customers take into account other parameters, like availability of sufficient quantity and range of goods, timely delivery and steadiness of deliveries. Consolidation enables to integrate the resources of several companies and increase the attractiveness of their offers for international customers. Such form of cooperation will be purposeful, provided that the products are sold under the single umbrella-type brand.

One of the ways of consolidating the goods of a group of companies for promotion and selling of their products is promotion of umbrella-type brand like the brand of “Rizhskaya Marka” (“Riga Brand”), which is currently used for promotion of Latvian products in Russia. To improve logistics through consolidation of physical cargo Tajik producers can establish their own cooperative marketing association, i.e. integrate logistics without integrating production facilities. Practically, the companies will remain as competitors in product processing, but they will become partners in distribution. Undoubtedly, establishment of production-marketing cooperatives could ensure a greater degree of integration, where single producers could combine their efforts for growing, drying, packaging and marketing of their products, as well as for marketing under common brand, and for distribution of goods. This form of cooperation does not imply application of collective farm method, but it replicates positive experience of the majority of cooperative associations in the sphere of agribusiness, which currently operate and prosper in European Union countries.

Operations related to export of the products from Tajikistan and their delivery to the importing country can be seen as a halfway to the customer. There is retail available between producer and buyer, and probably other intermediaries stand between them.

Currently, more and more consumers in Russia and Kazakhstan buy food products in major network stores. Though in all big cities of Russia and Kazakhstan there are huge and small bazaars operating, they are less active in the system of food products sale than bazaars of Central Asian cities. Customers of network stores – discounters, usually prefer them due to a wide range of goods and low prices as compared to the prices in wholesale markets.

Picture 4. Major federal networks have their own stores in many cities throughout Russia
Photo: http://www.okmarket.ru

Buyers of network stores rarely go there to buy one product only. Usually, having bursted through municipal traffic jam buyers wish to buy all needed products in one place. The same occurs with retailers. Having a wide range of goods and big sale volumes the stores are forced to buy from suppliers, which can supply wide range of goods at the same time. This is due to logistics considerations. Supply of a big number of commodities by multiple suppliers will imply a great number of trucks, which should be accepted and unloaded during each working day. Accordingly, an intermediary usually stands between retailer and producer, who can organize intracity distribution of wide range of goods. Each producer is far from being ready to organize such distribution system by own efforts. Transnational companies like Coca-Cola, Pepsico, Nestle, P&G are capable to organize such distribution of own goods at national level (i.e. in all cities of Russia, Kazakhstan and other countries).

Some major Russian and Kazakh producers have direct access to retailers. Smaller local and foreign producers happen to make their way through nonexclusive distributors, i.e. those distributors which sell and ensure delivery of a definite range of products from different producers.

Likewise exclusive distributors, nonexclusive ones can hold marketing campaign and advertize the product of suppliers (if supplier sells the goods under own brand). In addition, distributors can develop their own brand, which is typical for Russian market of dried fruits and nuts. Availability of own nut-and-dried fruits brand does not necessarily mean that promotion of goods under own brand through them is impossible. Most of operating Russian nut-and-dried fruits companies deal with the goods from Turkey, Iran, China, etc. In case of adding Tajik brand products the sales can gain positive dynamics. However, it is important to be ready to the circumstances where such distributors will be interested in the procurement of successful Tajik brand or creating of similar brand.

Picture 5. Majority of distribution networks have their own system of goods delivery to stores
Photo: http://www.globalgreen.ru/news/scania.htm

Greater part of operating distributors has both the experience of intracity distribution and dealing with retail outlets and networks, and the experience of import trade operations. Nevertheless, their basic competitive advantage is clear understanding of retail market, inter-country and intracity distribution. In this regard, one more intermediary – wholesaler-importer can come between distributor and producer, with the experience of foreign trade operations, but with no skills of inter-country/intracity distribution.

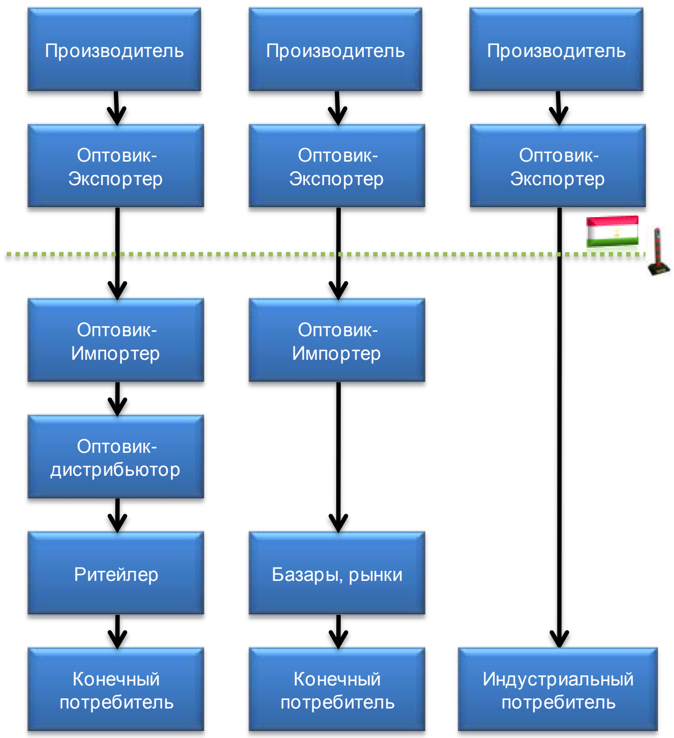
Picture 6 shows several possible versions of distribution channels in case of selling at various markets. It shows only those links which are involved in commodity exchange process, i.e. they buy and resell the goods. Apart from them the other intermediaries can operate which do not bear risks of goods procurement, e.g. agents. The role of agents can be limited by bringing marketers and buyers together, i.e. providing of intermediary services in the sphere of sales. In addition, agents can organize logistics. However, direct logistics function is performed by other participants of distribution process – transport operators, forwarders, brokers, warehouses, etc. They also do not buy and sell the goods. Description of their role is given in the next chapter.

Distribution channels can be both longer and shorter than are shown in picture 6. Longer distribution channels can hardly be considered as efficient. It is preferable to have shorter channels, but to make this each of channel members should have the skills and opportunities that enable them take a part of functions of “unneccessary” links in distribution chain and make earnings (i.e. their extra income should be more than extra costs).

Thus, who can consolidate the functional to reduce the length of distribution channels? The reponse is as follows: each of the members of this distribution chain. At that each of distribution chain members with repect to each other can act both as a partner and as a competitor:

- *Producer* can reinvest its profit in establishment of sales network. Creation of own retail outlets is a cost-based and inefficient operation. Some producers create demo retail outlets, e.g. confectionery enterprises, which produce a wide range of products. However retail outlets are not significant in total sales volume. For producers of dried fruits, nuts and honey it would be purposeful to create their own network of commercial agents. Selling of goods through commercial agents enables to refuse the services of one or two dealers. This can turn to be important if producer promotes the product under own brand, since long distribution channels do not enable to bring marketing sense of producer to the notice of the end consumer. Likewise, producer can organize export logistics, thereby taking the share of profit of wholesale intermediaries in Tajikistan. At that there are several ways of how to put this plan into practice: producer can commence acting as a wholesale intermediary (consolidator and exporter) for other producers; a group of producers can integrate their export operations (logistical cooperation); forwarders (logisticians) can provide their serivices on consolidation of cargo for a group of exporters thereby reducing their costs for transportation and providing their services of export facilitation.

Picture 6. The versions of sales/distribution channels for different markets



- *Wholesalers in Tajikistan* organize sales, goods consolidation and export. Availability of wholesalers-exporters enables producer focus on production, processing, improvement of product quality and packaging. Wholesaler-exporter per se can expand its business in the following fields: to reinvest the profit in procurement of processing facilities (backward integration); to expand the business through marketing of the products of many producers; to expand the business through marketing of a wider range of products (e.g., except dried fruits producer can commence production of fresh and canned vegerables and fruits, cotton, etc.). Such expansion of business will become possible provided that the potential of distribution network in importing countries is increased.
- *Wholesalers and distributors* in the countries of marketing can make backward integration by coming to Tajikistan and purchasing processing facilities.
- Even *retailers* can make a peculiar form of backward integration. They will not buy processing facilities, but they can commence production and marketing of the products under their own brand. In this case retailers will practically use the services of manufacturing and packaging enterprise only. Producer and processing entity will obtain stable product market; retailer will obtain the product with low cost value. However such schemes are appropriate for the products with big sales volumes and simple logistics. Tajik dried fruits do not fit in with this scheme yet.

Picture 7. Dispensers with their own products and shopboards with nuts and dried fruits in supermarkets
Photo: http://flavorstitch.com/2010/09/whole-foods

In long-term outlook one more factor can have an effect on reduction of the length of dried fruits, nuts and honey distribution channels – expansion of Customs Union and accession of Kyrgyzstan, and later, probably, Tajikistan to the Union. Lack of customs control on the borders will mean that export-import procedures will not be needed any longer.

3. TRANSPORT OPERATIONS AND TRAFFIC CORRIDORS

Basic delivery routes of products from Sughd region pass through CIS countries (Uzbekistan or Kyrgyzstan, Kazakhstan and Russia). Other delivery routes are also available:

- Through Uzbekistan, Turkmenistan, Iran and Turkey. The length of such transportation will comprise 4-5 thousand km, but goods will still be in the territory of the countries, which grow and successfully sell dried fruits and nuts themelves
- Tranportations to China or through China. These routes are long a well, at that China is a major producer of dried fruits and nuts
- Delivery through Afghanistan to Karachi port with subsequent transportation by marine transport to the destination point (Picture 8)

Let us review this corridor in detail. Total distance from Khujand to Karachi port is approx. 2700 km, which covers the following areas:

- Khujand – Dushanbe – 320 km (through Shahristan tunnel, 2700 m and Anzob tunnel, 2700 m)
- Dushanbe – Kabul – 700 km (through Salang tunnel, 3400 m)
- Kabul – Peshawar – 300 km
- Peshawar – Karachi – 1400 km, rail traffic is also available.

To compare we bring the distance from Khujand to:

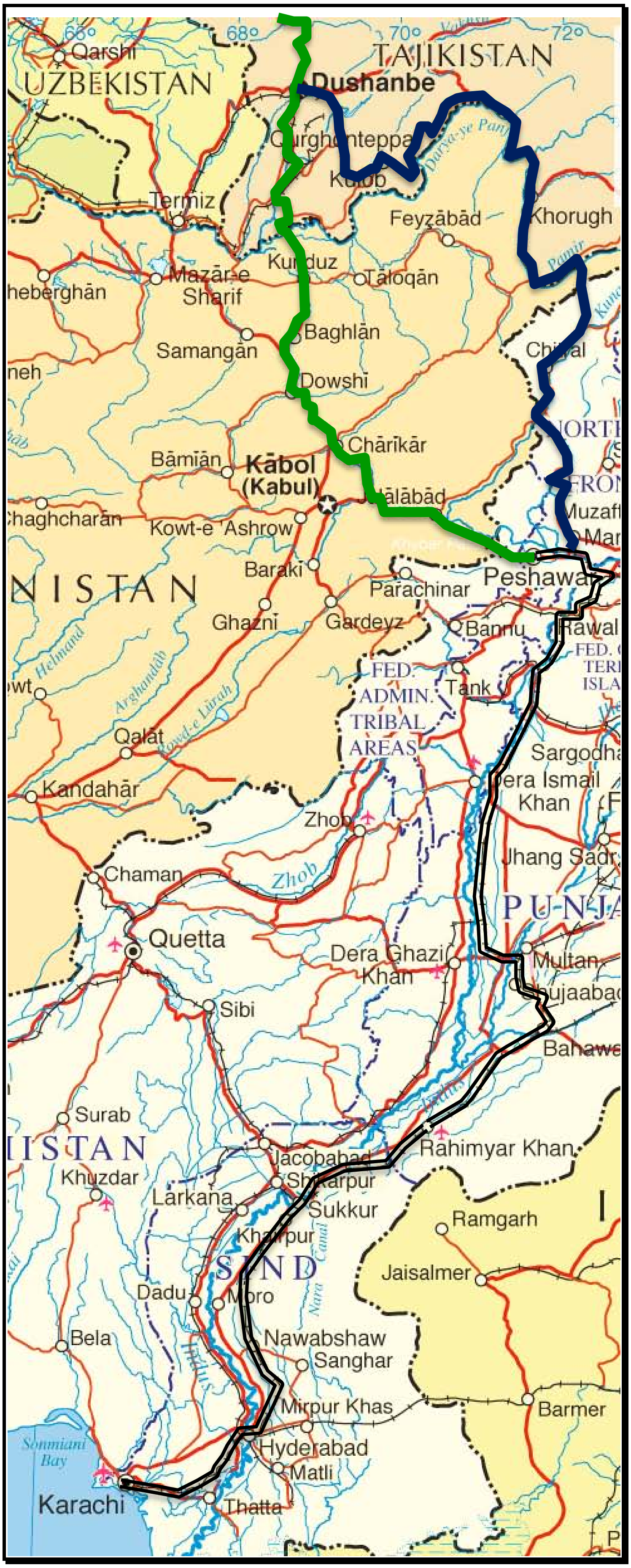
- Almaty – 1000 km
- Astana – 1800 km
- Chelyabinsk – 2500 km
- Novosibirsk – 2700 km
- Moscow – 3900 km
- Novorossiysk port – 4000 km
- St. Petersburg port – 4800 km

At that Afghanistan and Pakistan are not the members of European Transport Space, i.e. it is impossible to pass through them by motor transport with TIR Carnet. Moreover, motor transportation without transshipment to Afghan and Pakistani trucks is quite impossible. Rail traffic is possible in the area from Peshawar to Karachi port, but to reach Peshawar it is required to go through 3 high-mountain passes, as well as through the territory with high military and political risks. In addition, Karachi port is not an exemplary site in terms of the quality of management therefore there is no guarantee that having reached the seaport the cargo will not get stuck in the port for a long time.

The project of traffic corridor through Vakhansky isthmus is also considered unpromising for transportation of dried fruits, nuts and honey from Northern Tajikistan, since the geography of transportations through this area is still complicated. This corridor is more practicable for Gorno-Badakhshan, as well as for development of trade between Northern Pakistan and Western and Central China.

The best (less bad) traffic corridor for transportation of product from Sughd region, as was reviewed in chapter one above, is transportation by railroad through Uzbekistan.

Picture 8. Traffic corridor till the closest seaport
Source: Based on the map of http://www.nationsonline.org/oneworld/map/pakistan_map.htm



Picture 9. Burned trucks on Pakistani – Afghan border (post control of Landi-Kotal – Torkam)
Photo: ABC News, 2011 (http://abcnews.go.com/International/wireStory?id=13653515) and The Lede, 2009 (http://thelede.blogs.nytimes.com/2009/02/04/another-attack-near-the-khyber-pass)

Transportation through Kyrgyzstan by motor transport of combined (multimodal) transport can serve as another opportunity. The role of this corridor can increase once Kyrgyzstan joins the Customs Union.

Picture 10. Traffic corridors through CIS countries
(blue corridor – road through Uzbekistan, green corridor – road through Kyrgyzstan)
Source: based on TRACECA map (http://www.traceca-org.org/fileadmin/fm-dam/tarep/58jh/expert_group_model_gis/kyrgyzstan_07_11_2011_300dpi.png)

4. TRANSPORT OPERATIONS AND TRANSPORT OPERATORS

As was reviewed in chapter two, both dealers and logistics intermediaries are involved in the process of goods distribution. The most evident type of logistics intermediaries are rail and motor transport operators.
Usually in all the countries, including Tajikistan, there are a great number of motor transport enterprises, which compete with each other and there is one monopoly rail transport carrier. Motor carriers are small companies or individual carriers, which hardly withstand the lawlessness of controlling units therefore they are usually teamed up in associations. Those associations are aimed at protection and representation of the interests of carriers, but this is not the single and the primary objective of association. In Central Asian countries, including Tajikistan, the primary function of associations is to ensure customs guarantees on TIR Carnet and to disseminate TIR Carnet among carriers. TIR system unifies carriers and serves as a guarantee of reliability for carriers with respect to payment of customs dues to customs agencies. There is an inspection system of carriers permitted to TIR system. This system also enables the customer be confident in reliability of such carriers. Accordingly, when choosing a carrier permitted to TIR system, exporter reduces its transport risks.

Picture 11. International carrier should possess the transport, which correpords to TIR system and TIR Carnet for each shipment.
Photo: friedman.com.ua/ru/info/show/242?PHPSESSID=f7db2c1d452004d5df63e624d5ca1be8, uslugi-transporta.ru

There are several strategies to use transport services. Exporter can:

- Choose one carrier and perform all transportations with that carrier only. This strategy implies establishment of long-term partnership between the customer and carrier. This strategy is more appropriate for transportation of special cargo, for which special transportation conditions are very important.
- Cooperate with several carriers, at that it is important to determine approx. share of each carrier in total transportation volume. The greater share in transportation volume will be taken by the most reliable and low-price carrier. At that the customer secures himself by giving small tranportation volumes to one or two other carriers. This strategy enables to have a clear view of the cost and quality of services and "stimulate" exemplary carriers as necessary, by giving them big transportation volumes
- Use of single carriers. This strategy presumes search and selection of a carrier every time when transport operation is needed. In case of big transportation volumes this strategy will cause heavy administrative costs. Moreover, it turns difficult to find the needed transport in a market where the offers for transport services are limited.

Producer or exporter can purchase own transport for its needs both for domestic and for international transportations. Exporter’s investments in international transport unlikely will be profitable unless new carrier services its own needs for transportation of products for export. To increase profitability of transportation by own transport it is important to think over reverse loading of transport, i.e. carrier should gain from back-and-forth transportation. This can be realized by means of offering own transport services to other customers.

Rail traffic is beyond competition. Antimonopoly legislation enables to regulate tariffs, however it merely influences the quality of the services provided. Use of the services offered by forwarders – intermediaries which organize transportation but do not directly perform those services, enables consignor to simplify rail traffic procedure. Forwarders have agreements with rail stations they can pay for transportation within the territory of their country using their own codes and perform transportation in the rail territories of other countries using the codes of foreign forwarders, arrange documents for their customers, arrange transport and trace of cargo. Frankly speaking, in case of full consignment transportations by one type of transport (carriage, container and truck) the role of forwarder is rather limited. Motor carriers are capable to manage preparation procedures of transportation and efficiently maintain contacts with customers. On the contrary, railroads (of all CIS countries) are completely taken up with production only and cannot maintain contacts with customers at all. Forwarders serve as translators from business language to rail language and vice-versa.

Currently railroads undergo reforms, which will simplify the work of customers with railroads with the lapse of time. This implies that if forwarders act as railroad agents only, they will cease to be useful for their customers in due course. Accordingly, if forwarders wish to remain in the market and develop efficiently, they will need to expand their business by offering competitive services, like:

- Consolidation and transportation of small consignments for several customers by motor and rail transport
- Organizing of multimodal transportations (e.g., motor traffic till Bishkek, then by railroad)
- Providing of warehousing services both in Tajikistan and in the product markets through partner network

Picture 12. Container transportations – a basis of multimodal transport. Container terminal of Dushanbe-2 station.
Photo: Author

Carrier companies inherently are considered networking entities. Tajik and Kyrgyz forwarders need to actively develop their partner network in the regions where the products of local producers are exported. Apart from this, FEZ “Sugd” can serve as a center of transport-logistics expertise consolidation, which will enable regional transport-logistics community to ensure efficient settlement of the issues relating to the needed operational skills, etablishment of operational base in the country of destination, reduction of non-physical barriers.

5. ALLOCATION OF PRODUCTION OPERATIONS AND TRADE STOCK

Allocation of production facilities and trade stock is one of the most important objectives of physical distribution. Allocation of production facilities is urgent for major enterprises with international production network and goods sale. Small enterprises usually have their basic production in one site.

Availability and allocation of trade stock has a great effect on capability of companies to make sales. The closer trade stock to the customer, the higher is the probability of successful sale. For instance, a potential customer of Tajik producer of dried fruits in Russia will most probably buy the goods, if producer's trade stock is available in Russia.

However, any accumulation and storage of trade stock entails definite costs. There is a rule in logistics: to procure and store the product in the quantity that could cover necessary sales. Surplus stock implies deferred capital and extra costs for storage. Lack of sufficient quantity of trade stock or production stock causes lost sales. Companies need to find balance between excess costs and lost sales.

Picture 13. Trade stock is considered as current assets, which entail costs of financing, storage and losses
Photo: http://sar-daniloff.ru/wp-content/uploads/2011/08/sklad.jpeg

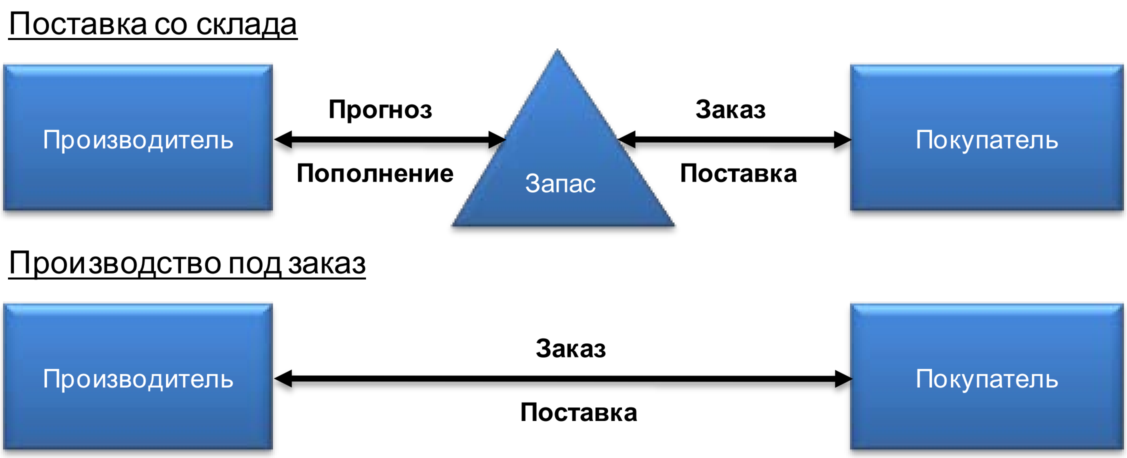
Storage costs of trade stock include the following types of costs:
- Costs for stock financing can reach 15-20 and more percent per annum depending on how the excess stock is financed (credits, own turnover funds, delay of payment from supplier). When financing from own turnover funds, it is important to take into account the lost opportunities for investment in development of production.
- Warehousing storage costs. The higher the volume of trade stock, the bigger are the warehousing areas needed for storage. At that storage in own warehousing areas can have the least costs, and accountable storage in warehouses of sales areas can cost higher for several times.

- Obsolescence and spoilage of stock. The greater part of trade stock has its useful time (food products, medicine) or can become obsolete (electronic components, fashionable garments, videofilms, music).
- Loss of stock. Theft usually occurs in places where a big volume of stock is stored, with obsolete stock available, without any storage conditions.

Production feature of dried fruits and nuts implies gathering and storage of products in that quantity which was grown in the given year. Producer seeks to process and preserve the whole product volume. Further it is important to take a decision on where to store the whole product. The least hazardous option is storage in producer country. The highest potential for sales is ensured by storage in the region of sales. However producer should be confident in availability of sufficient demand for the products and allocation of products for storage; besides producer needs to ensure marketing of stored product in the region of sales.

Decision on the place of stock allocation also depends on sales expertise. Products can be marketed from the warehouse or produced to order (Picture 14).

Picture 14. Deliveries from warehouse and production to order



Complex technological goods are usually produced to order. This is evident both for supplier and for buyer, though this case has its exceptions. For instance, customers in Turkmenistan and other Central Asian countries usually wish to obtain road-building machines in shortest terms from the warehouse. Working in such kind of market a producer needs to be ready for unexpected orders.

An accepted form of deliveries in food product market, especially at retail sales level, is ex-stock delivery. Sales from warehouse mean that producer should produce a definite volume at its own risk and rely on sales. If producer manufactures the product more than required, there is a risk of excess stock which will cause reduction of profit. If producer manufactures less than required, will lose sales and profit in competitive market. Tajik producers make deals in competitive market where the prices are mainly set by major Turkish and Iranian suppliers, accordingly, lack of goods will have a negative effect on proceeds and profit.

Almost all the companies which sell their products from the warehouse are forced to analyze the market and predict the sales. There are a great number of companies which sell a wide range of products in many geographic markets. They are forced to make analysis and prediction of sales both on product and on range. Nevertheless, a popular wisdom tells “if your sales coincide with prediction, it means that you were lucky”, therefore all companies seek to have small extra insurance stock.

To make prediction it is important to have reference data. Usually two basic methods of sales prediction are applied – time-series models and and regression models. Analysis of time-series models is the simplest and the most accessible method of sales prediction. There are different types of time-series models analysis. In case of sales with seasonal prevalence the best method is exponential smoothing *using Holt-Winters method*. This method applies decomposing of historical data and synthesis of general prognosis based on several prediction components. Predictions cover the following components (Picture 15):

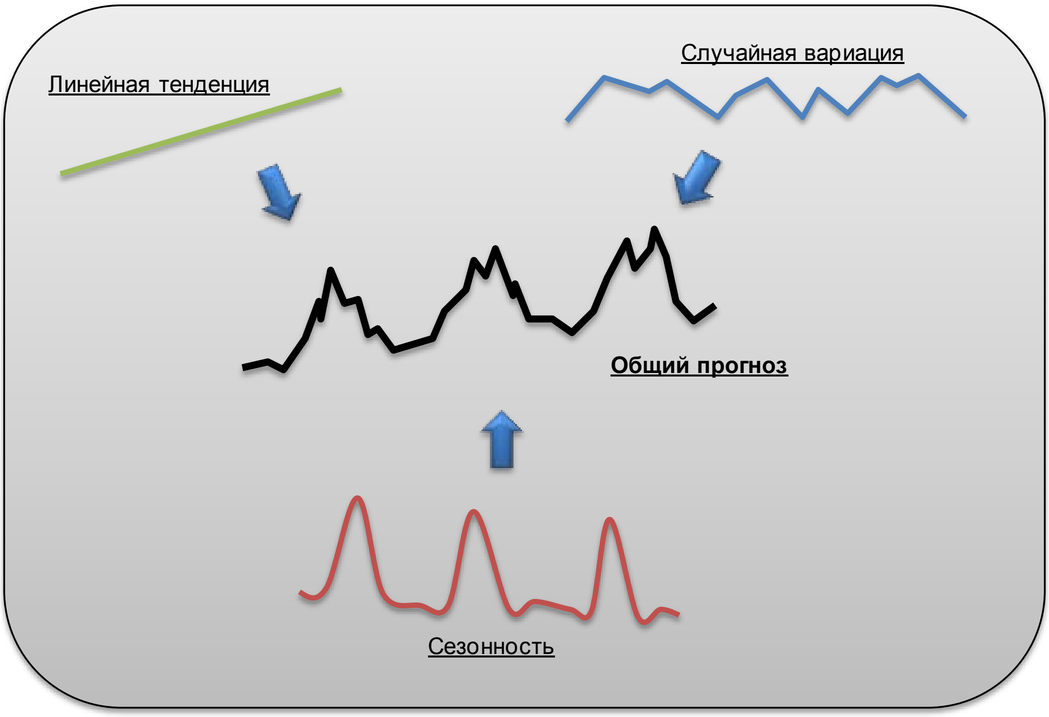
- Chance variation
- Trend (tendency)
- Seasonal prevalence
- Cyclicity

It is imposible to ensure accurate prediction without sales history. In this respect, penetration to the new market always requires taking of careful actions, directly or through intermediaries, which are ready to bear commercial risks.

It is important to note that accuracy of prediction for each market separately is always lower than prediction for total markets, since negative and positive errors are summarized. In this repect in case of regular transport availability, it will be purposeful to have one regional warehouse and forward the goods to all cities of region from that warehouse, rather than having a great number of small warehouses with a few stock in each city.

For this reason it is difficult to make prediction of product packages in different types of packaging than to appraise general sales volume of unpackaged product.

Picture 15. General prediction of sales as a composition of several prediction constituents



Packing of the products in proper consumer package can have a material effect on sales. Dried fruits, nuts and honey are very useful products. And though one can live on these products only, and maybe live a long life, they are considered non-essential products. In this regard, as compared to some essential products (potato, macaroni, etc.) a few buyers procure big quantities of products in big packages. Accordingly, producer needs to properly determine the most preferable types of packages in these or those markets and make the package more attractive. If producer is incapable or is unwilling to make this, all the same someone in distribution chain should perform this role. It is important to realize that distribution chains compete with each other. If producer and its partner in distribution chain are incapable to produce high quality product in high quality package, deliver it to the required destination, the whole chain will lose the sales.

Usually, logisticians believe that product customization (adjustment to the customer needs) should be made on later stage of product movement to the end consumer. Indeed, unpacked dried fruits can be brought up to the customer needs and packed in proper package when the products reach final market (in Moscow, Yekaterinburg, etc.). If they are packaged much earlier the volumes and geography of sales cannot be predicted. However, for a small producer, which is incapable to manage all its distribution chain, will mean that packaging will be made by one of its partners in distribution chain. Most likely this will be a company incorporated in Russia or in any other country which imports Tajik product. For Tajik producer and for Tajikistan this implies that added value will be established by importer and this very importer will gain added revenue.

6. STORAGE, MARKING AND TRANSPORTATION OF GOODS

Packaging and marking requirements in respect of international transportations to European Union countries are much more serious that transportation to CIS countries. This is primarily related to the fact that the share of manual labor in loading, unloading and storage of cargo in all European Union countries is quite small.

Logistics packaging in EU adopted a so-called europallet, a timber pallet of 120 x 80 cm size. Goods are placed to pallet and fixed by stretch tape, as shown in picture 16. One pallet is considered as one unit load and, accordingly, is marked in such a way to enable automate the warehouse stock-taking. Usually, bar coding is applied for marking of pallets, like the coding for marking of consumer packages. The difference is that for marking of consumer packages EAN standard is applied and for pallets and boxes GS1-128 standard is used (Picture 17). Apart from bar code the marking contains all basic information on goods in textual form (name, nomenclature article, quantity of boxes in pallet, quantity of unit packs in the box, weight, dimensions, transportation requirements, etc.). To read the information bar code readers are used (Picture 18).

Picture 16. Europallet with goods contained in cardboard boxes
Source: http://www.packagingsupplies.com

Picture 17. Barcodes of EAN standard (on the left) and of GS1-128 standard (on the right)

5 060123 456783 >

(01)95012345678903(3103)000123

Picture 18. Bar code reader (warehousing version)

Forklift trucks and hand trucks are used for loading and unloading of pallets (Picture 19). It takes approx. 30 minutes to unload one eurotruck (33 pallets) using forklift truck and this operation is executed by one employee only.

Picture 19. Forklift hand truck and forklift truck

To ensure high level of storage in warehouse rack stacks are applied for storage of pallets (Picture 20). In addition, majority of warehouse are equipped with Warehouse Management Systems, which keep accounts of storage and movement of cargo in pallets. Thus, standards of pallets, rack stacks, sizes of carbodies and containers and information systems are brought together in uniform system. This example proves that dealing with European consumers will most probably mean for Tajik or Kyrgyz exporter shifting to logistics technologies of their customers.

Picture 20. Rack stacks enable to increase storage compactness in warehouse

7. INTERNATIONAL BUSINESS DEALS

Selling goods in international markets presumes application of international tools. One of the tools reviewed in the brochure devoted to the access to Customs Union markets is trade financing. Brochure covered the following trade financing tools:

- Documentary credits
- Documented collection
- Bank's payment guarantee

These types of trade financing are rarely applied in post-Soviet countries yet; however the farther the customer located from Central Asia and closer to European Union countries the greater is the role they play. Trade financing tools apply to payment for the services provided. Those services imply delivery of goods in accordance with contract terms and conditions.

One of the basic contract terms apart from product specification and form of payment is description of delivery terms. To avoid variance between understanding of supplier and customer, delivery terms were standardized by International Chamber of Commerce in base delivery terms INCOTERMS.

Base delivery terms answer the following questions:

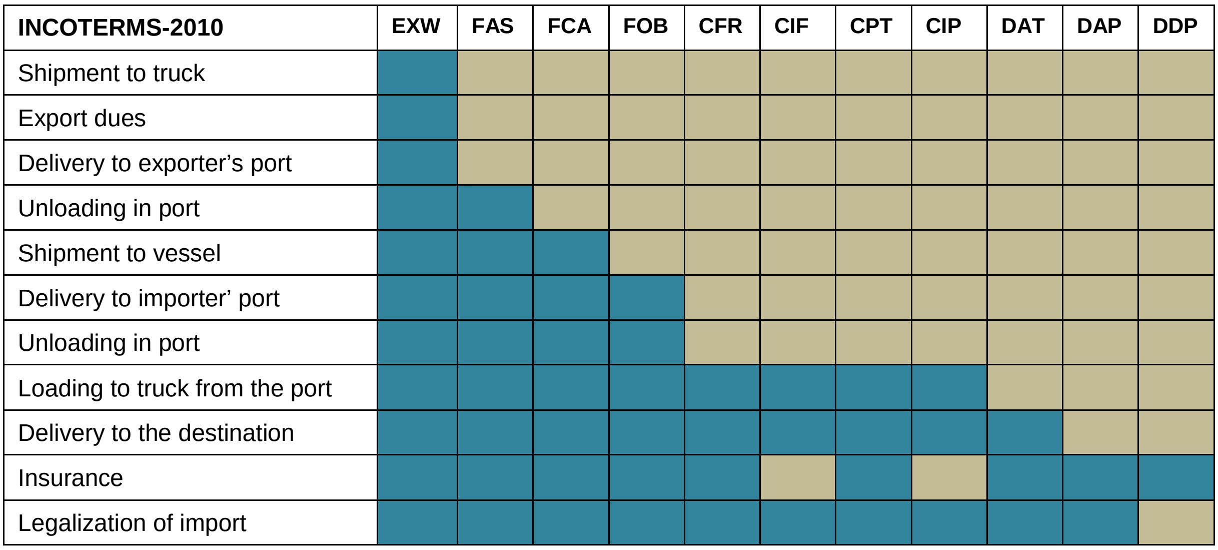
- Who arranges and pays for transport operations and to what destination point
- Who bears risks and insures liability
- Who makes customs legalization and pay duties

Table 2 contains the list and description of base delivery terms INCOTERMS 2010, and picture 13 shows separation of responsibility of the buyer and marketer in different base delivery terms.

Table 2. Base delivery terms INCOTERMS 2010
Source: http://www.tamognia.ru/incoterms_2010

Term	Type of transport	Definition
EXW	any types of transport	Ex Works (... named place)
FCA	any types of transport	Free Carrier (...named place)
FAS	marine and internal water transport	Free Alongside Ship (... named port of shipment)
FOB	marine and internal water transport	Free On Board (... named port of shipment)
CFR	marine and internal water transport	Cost and Freight (... named port of destination)
CIF	marine and internal water transport	Cost, Insurance and Freight (... named port of destination)
CIP	any types of transport	Carriage and Insurance Paid To (... named place of destination)
CPT	any types of transport	Carriage Paid To (... named place of destination)
DAT	any types of transport	Delivered At Terminal (... named terminal of destination)
DAP	any types of transport	Delivered At Piont (... named point of destination)
DDP	any types of transport	Delivered Duty Paid (... named place of destination)

Picture 21. Separation of responsibility of the buyer and marketer in different base delivery terms



8. CONCLUSION

This brochure reviewed a range of factors, which enable to build modern distribution system of dried fruits, nuts and honey. It proved that distribution system consists of peculiar blocks, which need to match each other and should be reviewed in the system.

This brochure motivates to a wider view to the competition. It showed that competition exists both between producers in respect of quality and price of the product and between distribution channels in the market. Improperly selected channels will cause low movement of the product to the market, loss of quality, excess costs, which make the product uncompetitive. Producer not necessarily plays a main role in distribution channel, however should consciously take decisions on what operations relating movement of the product to the market to be assumed, and what actions are performed by partners in distribution chain. Choice of the partners plays great role as well.

The following elements should be developed in the system:

- Development and promotion of own brand requires reduction of distribution channels length
- Promotion of own brand presumes building of sales network in importing countries, directly or through reliable distributor
- Own brand presumes the use of attractive consumer packaging
- Greater involement in sales in the importing countries and availability of wider range of packaged products under own brand requires better undertanding of the market and more accurate sales prediction
- To support sales in the regions building of own trade stock in product markets is required
- Errors in predictions lead to profit loss
- Prediction risks can be reduced by means of shifting packaging operations to importing countries, at that the added value will be created and be liable to tax in importing country, not in source nature.
- Accession of Kyrgyzstan and Tajikistan to the Customs Union will result in increase of the role of motor transport and reduction of distribution channels length
- All elements of distribution system influence both the income and expenditure of the company. Taking a decision on configuration of distribution system it is important to appraise the influence of each decision on profitability of the business and to take material commercial risks into account.