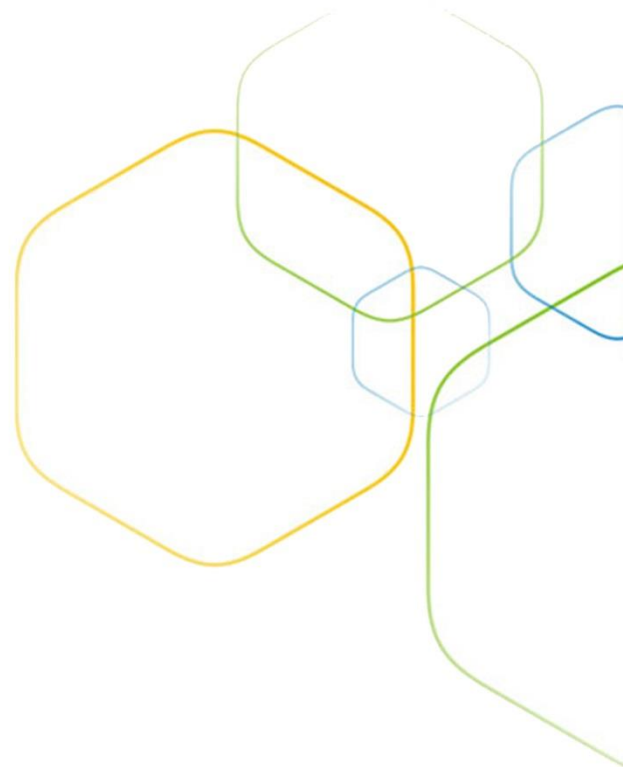


Investment Teaser

Establishment of the Beekeeping Complex for 2000 bee colonies

for production and processing of the beekeeping products (honey, pollen, wax, propolis)
and its further export to the markets of the EU, USA, Canada and Japan



Project Summary

The project provides for the establishment of the industrial apiary for 2000 bee colonies, construction of eight migration sites, construction of the specialized buildings with installation of the necessary equipment, consisting of the following operational buildings:

- warehouse
 - room of raw materials and packing materials
 - room of finished products
- wintering building
- warehouse of supers with empty honeycombs
- woodworking shop
- plant of bees products processing
 - honey processing shop
 - hot room
 - extraction room
 - tank room
 - filling room
- pollen processing shop
 - drying room
 - cleaning room
 - packing room
- propolis processing shop
 - cleaning room
 - packing room
- office for personnel

The planned **annual production volume** equals to:

- honey – 160 tons
- wax – 2 tons
- packages of bees – 2000 items
- pollen – 27.6 tons
- propolis – 0.2 tons

Production facilities of the project will be located in Vinnytsia region, and sites for production of honey and other beekeeping products will be located in Mykolaiv, Vinnytsia and Cherkasy regions of Ukraine.

High-tech equipment for maintenance, breeding of bees and processing of the obtained beekeeping products will be purchased from the well-known world manufacturers: Moffett, Ezyloader, XNOX, Paradise Honey, Dadant, Mann Lake, Cowen.

Produced beekeeping products are planned to be exported to the EU, Canada, USA, Japan.

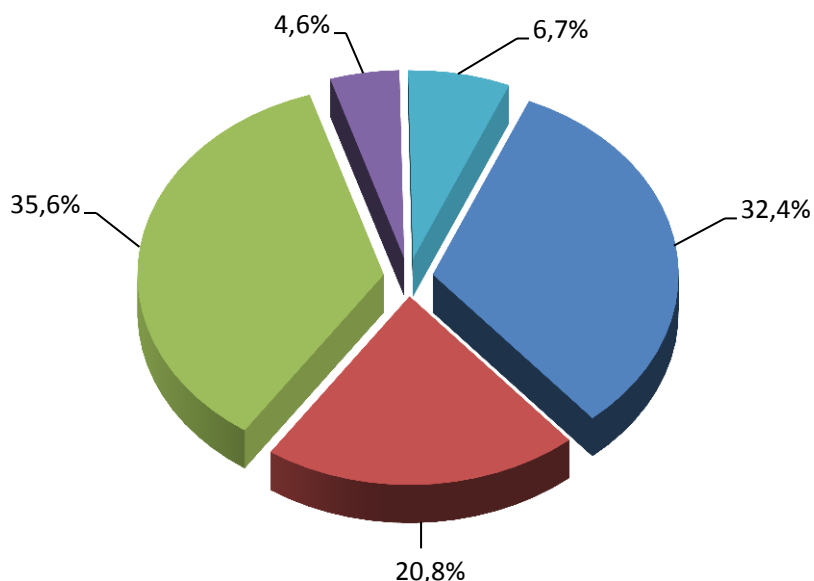
Results of evaluation of economic efficiency of the project:

Nominal value of all investments, mln. \$	2.54
Discount rate,%	5
Time horizon of the project, years	10
Total present value (PV), mln. \$	4.77
Net present value (NPV), mln. \$	2.26
Annual annuity payments, thousand \$	325.38
Internal Rate of Return (IRR),%	16.72
Modified Internal Rate of Return (MIRR),%	12.28
Internal Rate of Return based on DCVA (IRRd), %	12.25
Profitability Index (PI)	1.9
Simple payback based on FCF, years	6.2
Payback time based on DCF, years	7.6

* The financial model was built taking into consideration the sales forecast in case of conservative scenario. The given business model allows to ensure maximum reduction of price risks.



Distribution of investments in the process of establishment of the beekeeping complex



- **Other manufacturing facilities** (equipment for maintenance and breeding of bees)
- **Operational buildings and equipment**
- **Transport** (loaders, trailers, trucks for transportation of apiaries, transportation of products, personnel)
- **Salary of the personnel**
- **Manufacturing inventory** (jars, barrels, feed, medicine, fuel, etc.)

The total amount of the required investments equals to 2.54 mln. \$.

The Investments shall be paid by two tranches at the beginning and at the end of the first year, and will be used for the development of technical project for construction of operational buildings, construction of such operational buildings, purchase, installation and launching of equipment, purchase of equipment for maintenance and breeding of bees, formation of working capital.

The payback period for investments – 7.6 years

The investor receives 5 % per annum for the use of his investments (during the period of investment maturity) and **part of the shares of the company in the amount of 40 %.**

Interest payment for the use of investments shall start from October next year after receipt of the second tranche of the investments.

Payment of dividends to the owners of the authorized capital of the company shall start from the next year after investment maturity.

Key Project Success Factors

- The European Union and Ukraine signed an Association Agreement, facilitating trade within the territory of the EU. In addition, legislation for investment in the agricultural sector is in the process of liberalization in Ukraine;
- Low competition on the EU and Ukrainian markets:
 - The production cost of 1 kg of the beekeeping products in the EU countries is much higher than in Ukraine;
 - The percentage of industrial apiaries in Ukraine is 1.8 % of the total number of the apiaries. All other apiaries are private farms, for which honey production is just a hobby. These farms cannot provide high labour efficiency, stable quality, estimated cost and number of the manufactured products;
- Over the past 10 years a steady increase in honey import by the developed countries may be observed:
 - Import by the EU has increased to 21.4 % in comparison to 2010;
 - Import by the USA has increased to 45.4 % in comparison to 2010;
 - Import by Saudi Arabia has increased to 42.9 % in comparison to 2010;
 - Import by Australia has increased to 132.2 % in comparison to 2010;
- Ukraine has a significant stock of honey plants, what allows to increase number of bee colonies and to use them efficiently. Nowadays, Ukraine has 3.5 mln. bee colonies, while in 1995 this number was equal to 5 mln. bee colonies.
- Ukraine has extremely favourable climate and environmental conditions for development of the beekeeping sector. Under conditions of global warming, number of honey plants of Ukraine is increasing, allowing to obtain stable honey yield (for instance, from sunflower) in northern regions. In other countries (for instance, Italy, USA), decrease in honey production due to deterioration of natural resources and droughts may be observed.
- Implementation of the project will make it possible to receive the forecasted quantity of the certain type of products and to ensure its high quality that meets the EU standards. It may be possible by providing total quality control of production of the products during the entire production process.
Confidence in obtaining of the forecasted quantity and corresponding quality of the future products allows to enter into the agreements on marketing of the products in advance half a year, or a year prior to the start of manufacture of the products.
- Well-qualified personnel.
The team of professionals from various areas (industrial maintenance and breeding of bees, bee products processing, international marketing) will work on implementation of the project. People selected to the team have specialized education, and over 15 years of experience in the field of breeding and maintenance of bees, production and further processing of bee products, marketing in beekeeping, regularly participate in international seminars and conferences.



- Stable demand for finished products in the domestic and foreign markets is provided for by business contacts, established during more than 12 years of international activities;
- Cooperation with laboratories for quality control and safety of the beekeeping products of Ukraine and the EU has been established;
- It is possible to increase revenues of the project without the substantial increase in expenditures:
 - Marketing of goods at the prices of optimistic scenario;
 - Wholesale of products packaged in jars for 5-30 kg;
 - Provision of pollination services for Ukrainian farmers (11 \$ per bee colony);
 - Establishment of the Trading House in the USA, Canada, EU;
 - Development of markets in Japan, Australia, Saudi Arabia;
 - Obtaining of the Certificate of organic production;

SWOT Analysis of the project

Strengths:

- High quality of the finished products that conform to the EU standards;
- Developed countries increase honey import annually, and increase purchase prices as well;
- Export orientation of the project (products are sold on the foreign markets at stable currency) completely eliminates the risks associated with the devaluation of the national currency;
- The finished products have a long shelf life, requiring no special conditions (over 1 year);
- The property consists of the land plots for disposal of the manufacturing facilities and there are signed agreements with the owners of the land plots in the best melliferous regions of Ukraine for setting up of the apiary during migration.
- Low competition on the EU and Ukrainian markets;
- Employed qualified personnel;

Weaknesses:

- The products are sold in bulk in metal barrels intended for food products with capacity of 200 l (290 kg of honey);
- Seasonality of the production process;
- The necessity of arrangement of migrations of the apiary to melliferous lands.

Opportunities:

- Increase in revenues of the project without a substantial increase in expenditures;
- Marketing of the goods on the international markets, packaged in shallow jars from 0.05 to 1 kg under its own brand.
Honey of our own brand has received numerous awards at the international congresses and symposia.
Italian manufacturer has developed and tested (a test batch of products was manufactured) forms for production of the personalized glass jars (36 ml, 72 ml, 179 ml, 358 ml, 370 ml, 720 ml).
The corporate identity (logo, label, packaging, advertising products, slogans, website, etc.) and the range of different packaging both for social and for premium segment of the customers have been fully developed;
- Implementation of the project will promote development of rural areas, improve the yield of agricultural entomophilous crops of certain regions;

Threats:

- Honey bee diseases;
- Losses of bee colonies during winter;
- Treatment of fields with pesticides;
- Decrease in prices for the beekeeping products.



Key project risks and ways to manage them

Honey bee diseases



The agreements on supply of European veterinary drugs have been signed. The beekeepers have undergone advanced training courses in relation to protection and breeding of bees.

Losses of bee colonies during winter



The project provides construction of the building of wintering. Wintering of bees in this building significantly improves the results of wintering. The beekeepers have more than 20 years of experience in preparation of bees to wintering.

Treatment of fields with pesticides



It was agreed with farmers, treating the fields near the apiaries, that they would notify in advance on the planned treatment of melliferous lands. The schedule of such treatment shall be discussed in advance.

Decrease in prices for the beekeeping products



Contacts established during 12 years of the international activities allow to diversify the marketing outlets of the finished products.



Honey Market Analysis

World production of honey is almost always stable and **totals to 1.6 - 1.7 mln. tons** depending on a year and, according to the FAO data, **Ukraine produces about 4.3 % of the world production – nearly 73 thousand tons of honey.** It is a very high rate.

Ukraine is reckoned among four world honey producers.

There is a clear demand for the beekeeping products of a high quality in the world. The current production volume of the most developed countries do not meet all existing demand. Bees population in the world is gradually reducing.

The EU annually imports about 307.3 thousand tons of honey for the amount of 1 114.2 mln. USD.

Volume of import has increased to 21.4 % in comparison to 2010;

The USA annually imports about 165.9 thousand tons of honey for the amount of 561.5 mln. USD.

Volume of import has increased to 45.4 % in comparison to 2010;

In 2014, volume of world export of natural honey in financial terms was totalling to 2.3 bln. USD.

Ukrainian export was about 4 % of the total volume of world export.

Ukraine is one of the world's suppliers of honey, especially for American and European markets. During 2014, Ukraine exported 36.335 thousand tons of honey for the amount of 93.409 mln. USD.

Three largest importers of Ukrainian honey are the following countries: Germany (45 % of the total export), Poland (21 % of the total export) and the USA (12 % of the total export).

Ukrainian export of honey in 2014, thousand \$

