



Bananacoin:  
Expansion of banana production in Laos (Vientiane  
province, Lao PDR)  
with the help of crowdfunding

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# Introduction.

The Bananacoin project has been established by the group of professionals who have more than 3 years of experience in producing bananas in Laos, consulting with experts in software development, professional lawyers, who are able to use strong points of blockchain-technology for deciding real business objectives.

The strategic goal of the project is the core modification of investing and export relationships, which are connected with production and delivery of bananas. The initiators of the project set a goal - to decentralize the process of extension of this business and lead it outside the framework of the traditional financial institutions. Nowadays only several blockchain apps work successfully in the real world.

The Bananacoin project will lead blockchain to the wide recognition in the commodity market, being established on the blockchain - communities - Bitcoin, Ethereum, Waves and others.

Bananacoin will create tokens using blockchain (Ethereum), at the same time the emission of tokens will be connected with the export price of bananas. Tokens will be freely traded on the market, on a global scale, giving people the opportunity to increase their investments and to be real participants in the commodity market.

# 1. General description of the project.

Bananacoin is a multi-blockchain project aimed at the core modification of the industry of banana production in the world, like Uber has revolutionized the taxi industry and like Upwork has brought freelancing to a new level. In particular: the initiators of the project create processes in the production of organic bananas through the implementation of a financial - economic element in the export relations of this product, which seem to be clear for everyone.

Bananacoin is based on the proved crowdfunding model of ICO, when backers invest in the expansion of production and become holders of Bananacoin tokens, which can be exchanged after the launch of the project for goods or funds and will grow by more than 2 times in 18 months.

The gist of the project. The initiator of the project is planning to expand the production of bananas in Vientiane province (The Lao PDR) by increasing the production area from 1 to 3,6 times (of the territory).

The goal of the project. The goal of the project is to ensure during the planning period more than 360% of the growth in the sales of manufacturing products to the Chinese market through the expansion of production areas.

Objectives of the project. To achieve this goal, the initiator of the project is planning to implement the following strategic initiatives:

- issue and sell Bananacoin token, with 0.5 US dollars nominal value (nominal price of 1 token), it is connected to the market value of one kilogram of bananas;
- purchase on received funds an area for banana production (cultivation), its preparation for the production cycle (18 months);
- harvest bananas and sell them;
- introduce Bananacoin tokens into the crypto-commodity turnover;
- start redemption of tokens from investors with a guaranteed yield of 2x for 18 months;
- medium-term perspective — an increase in production areas up to 1000 hectares and implementation of the project to one of the agricultural Asian funds.

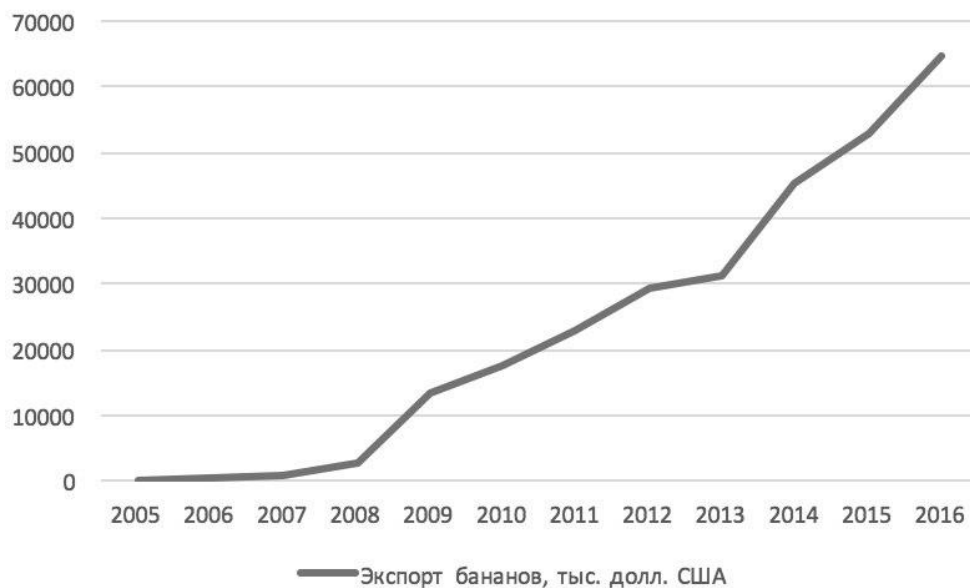
Required investments into the Bananacoin project:

- 1) with the expansion of the territory of production 1 time - 2, 035, 000 US dollars.
- 2) with the expansion of the territory of production 2 times - 4, 070, 000 US dollars.
- 3) with the expansion of the territory of production 3 times - 6, 105, 000 US dollars.
- 4) with the expansion of the territory of production 3,6 times - 7,326,000 US dollars.

## 2. Industry discription.

### 2.1. Characteristic of the dynamics of the industry.

According to the Food and Agriculture Organization of the United Nations (FAO), commercial production in Laos started with the opening of a banana plantation in Luang Namtha province in 2005. In 2014 the amount of territories allocated for the cultivation of bananas increased to 22,920 hectares. In 2016 almost 2 times more tons of bananas were exported.



*The diagram 1 — The export of bananas in Laos.*

According to the FAO, bananas are produced in all regions of Laos, but the majority of them are produced in the Central part (52%) and Southern part (31%) of Laos. The smallest number of producers is in Northern part of Laos (17.2%).

At present the Lao Agriculture Development Strategy for the period 2015-2020 defines bananas as one of the main goods produced on its territory for export.

Different models of this business appeared during 10 years: as a development of a household, a private agricultural organization and a state-private partnership according to the concession agreement.

In compliance with the report of the Ministry of Industry and Trade of Laos, nowadays the production of bananas is expanding because of great investments in this industry.

The use of ICO crowdfunding as a mechanism for attracting investments is unique and innovative in the area, which has not found yet its spread in Laos.

## 2.2. The target market.

According to the latest report of the Ministry of Industry and Trade of Laos, the main sale markets are China and Thailand. The export of bananas produced in Laos to China has increased rapidly, which has led to a change in the direction of exports targeting on Thailand. The exports of bananas to China rose from 42% of the total volume of banana exports in 2011-2012 to 88% in 2014-2015. It will continue to grow. This expansion is connected to the fact that in 2012 Laos and China have signed the agreement about the export of bananas to China, which regulates the issue of procedures of customs, quality control and safety of this product.



*Рис. 1 – The target market*

Due to the fact that the main competitors are Cambodia, Vietnam and Myanmar, the target market is concentrated in China and Thailand. This is explained by the climatic features of these countries.

## 2.3. Competition.

From the point of view of investment advantage, the main competitor is China which is investing in the discovery and development of banana plantations in Laos. The first banana planters appeared in Laos in 2010. Nowadays the fruit is the main export item in the country. However at present the authorities of northern Lao Bokeo province have suspended the activities of 18 Chinese supported banana plantations after that they discovered violations of the rules of the use of agricultural chemicals. This tendency will be continuing, as the number of such cases is rising.

The key competitor is Vietnam. The Ministry of Agriculture and Rural Development of Vietnam indicates that every year Vietnam produces about 1.4 million tons of bananas and a huge share of the exports reaches the Chinese market.

But in fact, the cost of bananas exported from Vietnam is the lowest, due to the presence in the land of a large number of chemical elements (the consequences of the American-Vietnamese war in the period of 1965-1973).

The producers from Cambodia also can become the potential competitors. In particular, China is planning to increase the import of agricultural products from Cambodia according to the Protocol on Safety and Hygiene of Foods signed in 2014.

# 3. Description of the project.

## 3.1. Description of the team and experience

At present, the initiator - company of the project has successfully set up a production cycle for growing bananas on an area of 100 hectares.

The specialists of the project have allocated territories in Vientiane province, Lao PDR, near the floodplains, it gives the most fertile soils and reduces the cost of the water supply.

The main competitive advantages of the production of bananas, present at this location are:

- high average air temperatures;
- fertile soils (red soil);
- availability of a cheap water source;
- availability of relatively inexpensive electricity for agricultural producers;

The common problem for the effective cultivation of plantations is the availability of sufficient areas concentrated in one place (location). Often it is possible to find plots with an area of up to 20 hectares, which are scattered over a large area. For effective production, it is necessary to have areas from 200 hectares.

In our case, taking into account the current location of the business, there is the opportunity to enter into the turnover territories of area of up to 8,000 hectares, which are located in the same valley.

To support the production technology, Chinese specialists are used on the basis of 6 people per 100 hectares.

Saplings of bananas «Finger Lady» (sort «Lady's finger») are bought in China from the specialized companies. These are small fruit up to 12.5 cm long, with light - yellow colour and brown small strips. The advantage of this sort is its high price, in comparison with other varieties of bananas, it is the most popular in China.

The required fertilizers are supplied from Thailand.

The frequency of irrigation during the dry season and the utilization of fertilizers are determined according to the measurements of soil and plant parameters.

After harvesting, the most powerful shoots from the main trunk are selected to form the plant for the next crop, the main trunk is cut. The weak shoots are removed.





*Fig. 2 — Banana flower*

The team of the Bananacoin project is a solidary group of like-minded people who have a serious and successful business development experience.

The team includes:

Oleg Dobrovolsky is 53 years old, he is a Russian entrepreneur and philanthropist. He has been developing the agroindustrial complex in Lao PDR for more than 3 years. In the project he is responsible for the interaction of all departments of the working business, he is involved in the project 100%.

Alexander Bychkov is 35 years old, since 2000 he has been involved in establishing the companies in wholesale and retail sales «from scratch». In the project he is fully responsible for marketing and communications.

Mr. Prasan Sangsatjatham is 41 years old, he is the leading agronomist of the project. He graduated from Kasetsart University in Bangkok, Thailand, the agroindustrial faculty. He has been growing bananas in Thailand for a long time, he has his agricultural business in his blood - his family owns an extensive plantation in Thailand.

Alexander Magomedov is 63 years old, he has been living in Lao PDR for 17 years. He was engaged in exporting valuable kinds of wood to Russia for 12 years. For the last 3 years he has been engaged in agroindustrial business, namely, the cultivation and export of bananas. He speaks Laotian language fluently. He has strong connections with the governor of Vientiane province, where our fields are located. In the project he is responsible for the effective functioning of plantations.

Dmitry Mazutov is a representative in China, Sichuan Province. He is a Specialist in foreign economic activity and an interpreter of English and Chinese languages. He had an educational practice at Liaoning University of Shenyang City. He has extensive experience in managing positions, including a director of a branch. He has worked in China for 8 years in different areas: supply, marketing, logistics, customs, financial control, translations. In the project he is responsible for the marketing of products.

Our company has well - established connections in all business processes, from production to sales. Our technical partner (adviser) is always ready to answer queries and talk about the current work with the initiator of the project:

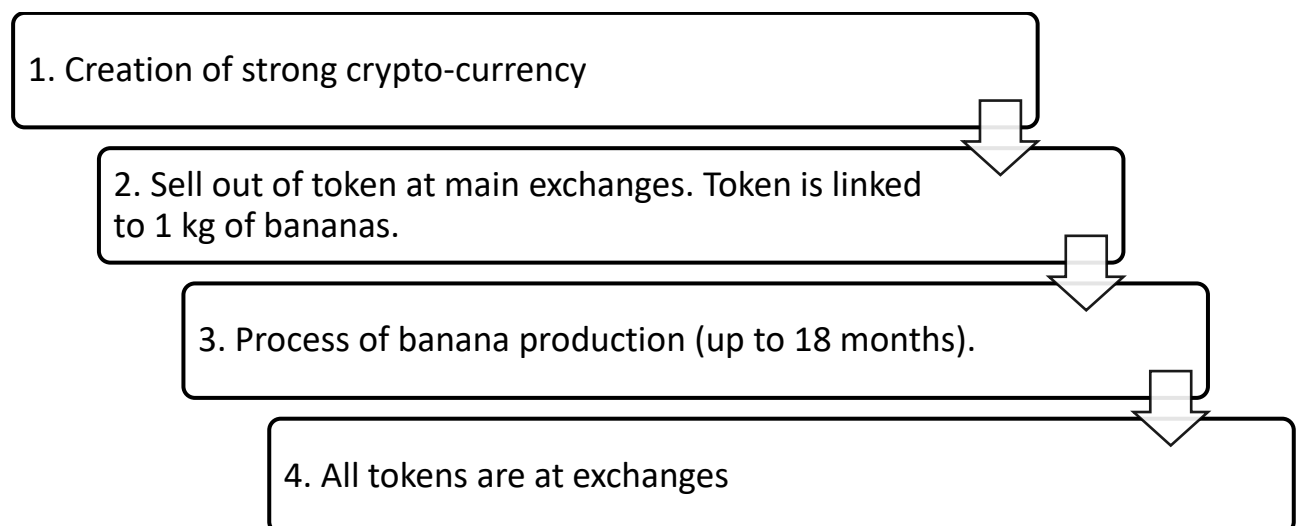
Peter Peng, CEO of Oren Irrigation Equipment Ltd., the company has in its own portfolio 10,000 hectares of irrigated land. The company is engaged in irrigation, automation of processes in the agroindustrial complex, sale of equipment and training of personnel.

## 3.2. Project development strategy

The project development strategy can be divided into two parts:

- 1) short-term strategy, which consists of the expansion of production areas (maximum) to 360 hectares;
- 2) long-term strategy, which consists of the expansion of production areas (maximum) to 1,000 hectares and cooperation with major international and regional organizations and funds through the disposal of assets.

The short-term strategy includes the steps shown in Figure 3.



*Puc. 3 – The short-term strategy includes the steps shown in Figure 3.*

### 3.3. Project risk assessment

The main risks of the project development are presented in Table 2.

Table. 2 - Development risks of the Bananacoin project:

<b>Risks</b>	<b>Method of minimizing risks</b>
High level of competition	<p>Nowadays the use of ICO technology in the production of goods is not widespread. It is planned to reduce this risk through the introduction of this technology, as well as the production through the «organic farm» system, which is a competitive advantage in comparison with the existing banana plantations in Laos.</p> <p>Products grown in Laos enter the Chinese market within three days from the date of shipment to the plantation. Fruit grown in Laos have an equal size on the brush and lack of blackening (which appear because of the temperature drop), that is why they have the maximum demand price compared to other producing countries.</p>
Ecological risks (soil disease «Panama disease»)	<p>It is planning to create an «organic farm», as recommended by FAO method of preventing this disease. «Organic farm» is a banana plantation, which is isolated from other farms. When choosing a production site, tests will be conducted to determine whether the fungus is absent in the soil.</p> <p>All the territories planned for commissioning have never been used for agriculture (virgin jungle).</p> <p>According to FAO the utilization of chemicals and pesticides, reduces the resistance of soils to «Panama disease» that is why it is planned to decrease their use in production.</p>
Political risks (introduction of restrictions because of the use of chemicals and pesticides)	<p>The full compliance of the production cycle with the Lao Regulations for the Use of Agricultural Chemicals is planned.</p> <p>Laos has no tension in relations with China, for example, like Vietnam has, that is why there is a beneficial effect on the opportunity of increasing exports from Laos.</p>
Limitations imposed by the geographical location of the plantation	<p>The wind creates a great danger in the countries that are washed by the seas. At a distance of less than 150 km from the coastline to the plantation due to the risks of typhoons.</p> <p>Strong wind breaks the banana leaves, in consequence of which the plant begins to hurt and the yield is reducing.</p> <p>When we grow bananas in Laos in Vientiane province we escape from the risks which are caused by typhoons, and even a strong wind can not be formed because the plantations are located between the mountains in river floodplains.</p>

### 3.4. Technological and economic advantages

Технологические преимущества	Экономические преимущества
1) Convenience. Tokens can be used as well as any other cryptocurrency and can be integrated with the existing stores, cryptocurrency stock markets and wallets.	1) Independence. Money based on the commodity value does not depend on banks or financial institutions, but it directly depends on the productivity of the company and its export activity..
2) Multi-blockchain architecture. «Bananacoin» will emit tokens on all main blockchains, depending on market demand and development of new blockchain platforms. Thus, «Bananacoin» will never become obsolete because all tokens have been released on the blockchain, which has ceased to be relevant.	2) Protection from inflation. Currencies based on the commodity value are connected to the market value of bananas. Over the past 7 years, the price of 1 kg of bananas has been increasing by 4-10% per year (see Diagram 2). Therefore, tokens in comparison with the fiat currencies are well protected against inflation and they historically demonstrate extremely low volatility in comparison with other financial assets, such as gold.
3) Easy to use cryptocurrency. «Bananacoin» will be developed as other well - known cryptocurrencies.	3) The system is decentralized. The commodity exchanges will be the basis of this alternative financial system.

Figure 4 - Description of the technological and economic benefits of the project

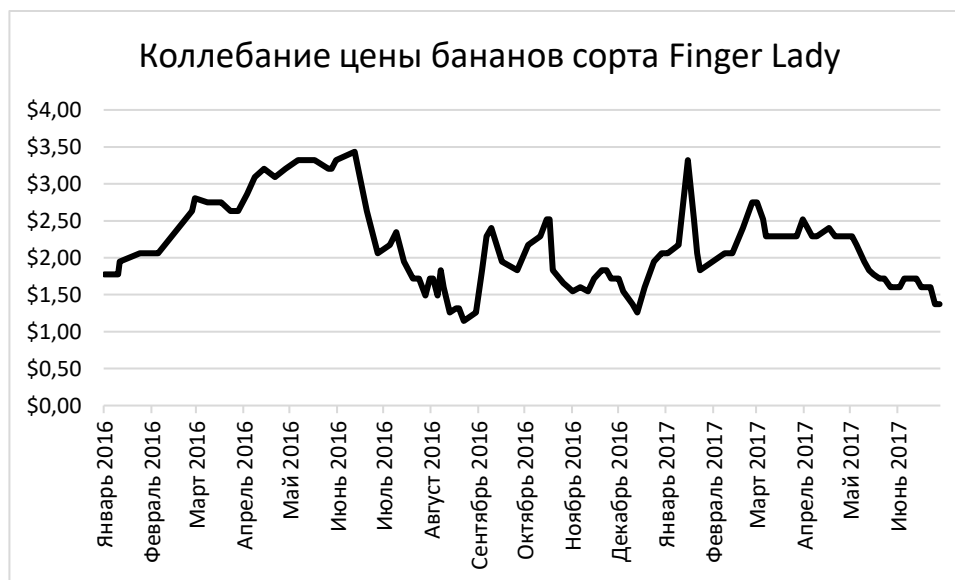


Diagram 2 - The price of 1 kg of Lady Finger bananas in the specified period

Growing bananas of the Finger Lady variety (the «Lady's finger» sort) has a great potential for the business growth, in the favorable weather conditions of the Lao People's Democratic Republic for a dynamically growing Chinese market with a rapid return on investment.

Today the existing shortage of bananas allows to put in circulation the plantation area up to 30,000 hectares with the guaranteed sales. When the last date for the continuous

cultivation of bananas in one area is reached, it is possible to temporarily replace crops with similar payback parameters — like papaya, mango.

It is obvious that China, with a deficit of areas which are suitable for cultivating fruit and the growing consumption, does not have any other options for satisfying demand except the import.

### 3.5. Financial justification

The calculation of the investment attractiveness of the project is presented in Table. 3 (the optimistic option, taking into account the attraction of 7.324 US dollars, on a land plot of up to 360 hectares).

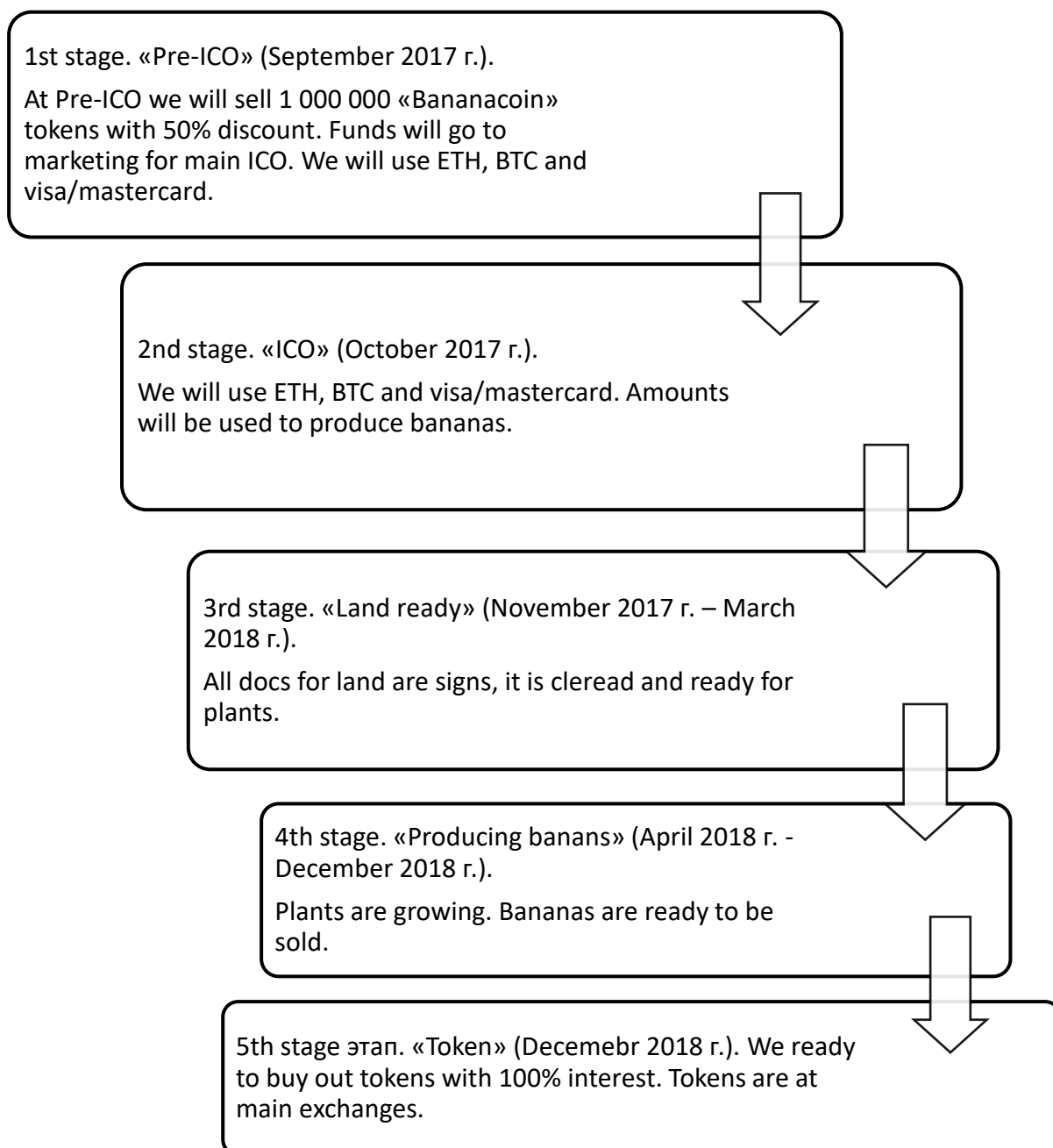
*Table. 3 - Financial justification of the project for 360 hectares of culture, in \$*

Years	1	2	3	4	5	6	7
<b>Investments</b>	<b>\$7324,0</b>						
<b>Starting costs:</b>							
Rent of land + 3% per year		\$189,8	\$195,5	\$201,3	\$207,4	\$213,6	\$220,0
Labour costs		\$1320,0	\$1320,0	\$1320,0	\$1320,0	\$1320,0	\$1320,0
Fertilizer	\$370,6	\$370,6	\$370,6	\$370,6	\$370,6	\$370,6	\$370,6
Electricity	\$79,4	\$79,4	\$79,4	\$79,4	\$79,4	\$79,4	\$79,4
Packing and transportation	\$1323,5	\$1323,5	\$1323,5	\$1323,5	\$1323,5	\$1323,5	\$1323,5
Before taxes	\$9097,6	\$3283,3	\$3289,0	\$3294,9	\$3300,9	\$3307,1	\$3313,5
Revenue from the sale of bananas	\$16272, 0	\$16 272,	\$16272,0	\$16272, 0	\$16272,0	\$16272,0	\$16272,0
<b>Cash flow before taxes</b>	<b>\$7174,4</b>	<b>\$12988,7</b>	<b>\$12983,0</b>	<b>\$12977,2</b>	<b>\$12971,1</b>	<b>\$12964,9</b>	<b>\$12958,5</b>
<b>Accumulated cash flow</b>	<b>\$7174,4</b>	<b>\$20163,1</b>	<b>\$33146,2</b>	<b>\$46123,3</b>	<b>\$59094,4</b>	<b>\$72059,3</b>	<b>\$85017,8</b>

Thus, with an investment of \$ 7324 the accumulated cash flow increases by 2,3 times in the second year of the project, it increases by 1,6 times in the third year, it increases by 1,3 times per year during the period 4-7 years. At the same time, the revenue from the sale of bananas per year is \$ 16272 with the starting costs of \$ 9097,6 in the first year of the project development and about \$ 3298,22 during the period 2-7 of the project development.

## 4. Attraction of investments.

The main stages of attracting investments are shown in Figure 5.



*Figure 5 - Stages of attracting and implementing investments*

The main objective of the investment for investors is to buy an option with a yield of 5,5% per month, as well as to receive a financial instrument that has free circulation on exchanges.

«Bananacoin» token is «protected» by the value of the produced asset, which has a high demand - bananas take the fifth place in terms of commodity consumption.

## Why invest in Bananacoin?

The consumption of bananas in China is about 13 million tons per year. The intake of bananas in China has increased by 12 times during 8 years, and it is continuing to rise constantly because of the growing welfare of the population and the consumption growth.

At the same time even in developing countries during the crisis the consumption of bananas is reducing slightly because it is a cheap product.

Buying «Bananacoin» token, investors can expect to receive benefits (profit) from the resale of the Bananacoin option at a higher price in the future.

In the medium-term outlook, our team is planning to increase the production area to 1,000.

# ВЫВОДЫ

## Fundings.

The Bananacoin is the project that is oriented to an investor, who is striving to guarantee his income and also to receive a financial instrument that revolutionizes the production of bananas on the basis of blockchain technology and cryptocurrency. This project is established on the ICO crowdfunding and consists of attracting investments through the sale of Bananacoin tokens which are «protected» by the commodity value of 1 kg of bananas producing by the company.

The initiators of the project and the project team believe that the current economic realities and the advantages of blockchain technology create the currencies based on the commodity value as the foundation for the real economy sector and an alternative source of investment.

The main characteristics of the Bananacoin project are:

- 1) Bananacoin token is issued for investors;
- 2) during the crowdfunding the production areas are increasing to 360 hectares on the received funds;
- 3) in 18 months Bananacoin token increases due to the rise in sales volume and the dynamics of the cost of 1 kg of bananas;
- 4) further Bananacoin tokens are entered/ enter into the turnover; the operations provided by well - known cryptocurrency stock markets are performed with them.



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