

# WHITE PAPER BANANACOIN

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

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## INTRODUCTION

The Bananacoin Project was established by a group of professionals with over 3 years of experience in producing bananas in Laos, consulted by software development experts and professional lawyers, in order to take advantage of blockchain technology in addressing real business objectives.

The strategic goal of the project is a core modification of business and export relationships connected to the production and delivery of bananas. The initiators of the project have set a goal — to decentralize the process of business expansion and take it beyond the framework of traditional partnerships.

The Bananacoin Project will facilitate wider recognition of blockchain technology on the commodity market, forming a close connection with blockchain communities — Bitcoin, Ethereum, WAVES and others.

Bananacoin will create tokens using blockchain (Ethereum), and tokens will be emitted based on the export price of 1 kilogram of bananas.

# GENERAL DESCRIPTION OF THE PROJECT

Bananacoin is blockchain project aiming to achieve a core modification of the global banana production industry, similar to how Uber has revolutionized the taxi industry or how Upwork has brought freelancing to a new level. In short, the initiators of the project create processes in the production of organic bananas through the implementation of an economic element in the seemingly completely understood export relations of the product.

Bananacoin is using the proven TGE crowdfunding model, allowing backers to participate in the expansion of production and become holders of Bananacoin tokens (BCO), which can be exchanged after project launch for goods or funds and are expected to more than double in value in 18 months' time.

After the realisation of the project, Bananacoin tokens will be exchangeable for a certain amount of Lady Finger bananas or equivalent monetary compensation. Because the token is backed by the market value of 1 kilogram of bananas, participants can be certain of the success of the project, as the demand for bananas is constant. Furthermore, Lady Finger bananas are considered to be among the best banana varieties, and the environmentally friendly technologies used in our project ensure that the good will remain an attractive participation and that its price will grow constantly.

### THE GIST OF THE PROJECT

The initiator of the project is planning to expand banana production in Vientiane province (Laos) by increasing production area. We aim to expand the territory of the plantation from 100 to 360 hectares.

### THE GOAL OF THE PROJECT

The goal of the project is to ensure over 360% growth in product sales on the Chinese market through expansion of production areas.

## THE KEY TASKS OF THE PROJECT

In order to achieve this goal, the initiator of the project is planning to implement the following strategic initiatives:

Issue and sale of the Bananacoin token, with a nominal value of 0.5 USD (nominal price of 1 token), pegged to the market value of one kilogram of bananas;

Purchase of an area for banana production (cultivation) using received funds, and its preparation for the production cycle (18 months);

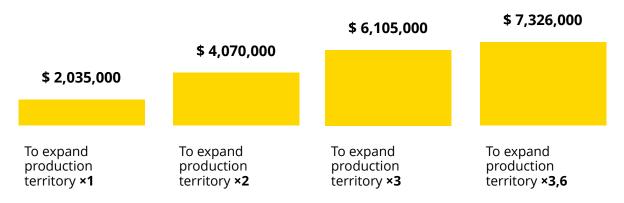
Harvest and sale of bananas grown on the new plantation;

Putting Bananacoin tokens into circulation;

Exchange of tokens for goods or equivalent monetary compensation;

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

### **ESTIMATED FUNDS REQUIRED BY THE BANANACOIN PROJECT**



# INDUSTRY DESCRIPTION

## **Analysis of industry dynamics**

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

According to the FAO, while bananas are produced in all regions of Laos, most of the production takes place in the Central region (52%) and Southern region (31%) of Laos. The smallest number of producers is located in the Northern region of Laos (17.2%).

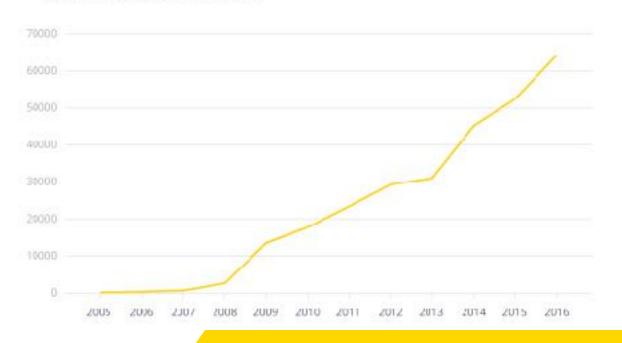
At present, the Lao Agriculture Development Strategy for 2015-2020 defines bananas as one of the main export goods produced on its soil.

Over the last 10 years, different models of this business have appeared: home-growing households, private agricultural organizations and state-private partnerships subject to concession agreements.

According to a report by the Ministry of Industry and Trade of Laos, the production of bananas is currently expanding due to major investment in this industry. The use of TGE crowdfunding as a mechanism for attracting funds is unique and innovative to the area - it has not yet become widespread in Laos.

## Export of bananas in Laos

Export of bananas (in thousands of USD s)



## **Target market**

According to the latest report by the Ministry of Industry and Trade of Laos, the two key export markets for goods are China and Thailand. The export of bananas produced in Laos to China has increased rapidly, with much of the exports previously destined for Thailand now sold to China. The export of bananas to China increased 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 signature of an agreement between Laos and China in 2012, covering the subject of banana export to China and regulating the issues of customs procedures, quality control and safety of this product.

The main competitors are Cambodia, Vietnam and Myanmar, while the target market is concentrated in China and Thailand. This is explained by the climate conditions of these countries.



Pic. 1 Target market

## Competition

The first banana planters appeared in Laos in 2005. Today, bananas are the primary export item of the country. In terms of investment advantage, the main competitor is China, which is investing in the discovery and development of banana plantations in Laos. However, the authorities of the Northern Lao Bokeo province have at present suspended the activities of 18 Chinese-supported banana plantations after discovery of violations of safety regulations regarding the use of agricultural chemicals.

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

However, in fact, the quantity of bananas originating from Vietnam is the lowest, due to the presence of a large number of chemical elements in the soil (the consequences of the American-Vietnamese war of 1965-1973).

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

# PROJECT DESCRIPTION

## Team and experience

The initiator-company of the project has successfully set up a production cycle for bananas on an area of 100 hectares. The Bananacoin Project team consists of like-minded people with outstanding experience in successful business development.

Our company has well-established connections in all business fields, from production to sales. We are ready to answer queries and discuss current work:



### **Oleg Dobrovolsky**

co-founder

is a Russian entrepreneur and philanthropist. He has been developing the agro-industrial complex in Lao PDR for over 3 years. He is responsible for the interaction of all departments of the working business, and is 100% involved in the project.



### **Alexander Bychkov**

co-founder

is a serial entrepreneur who has been involved in building companies "from scratch" in wholesale and retail since 2000. He is responsible for marketing and communications in the project.



### Mr. Prasan Sangsatjatham

lead agronomist

he has graduated from the Agro-Industrial Faculty of Kasetsart University in Bangkok, Thailand. He has been growing bananas in Thailand for a long time. Agricultural business is in his blood - his family owns an extensive plantation in Thailand.



### **Alexander Magomedov**

has been living in Lao PDR for 17 years. For 12 years, he was engaged in exporting premium varieties of wood to Russia. For the last 3 years, he has been involved in the agroindustrial business, namely the cultivation and export of bananas. He speaks fluent Laotian. Alexander has strong connections with the governor of Vientiane province where our plantations are located. The effective functioning of plantations is his responsibility.



### **Dmitry Mazutov**

representative in China,

Sichuan Province. He is a specialist in foreign economic activity and an interpreter for English and Chinese. He has had an educational practice at the Liaoning University of Shenyang City. He has extensive experience in management positions. For 8 years, he has worked in China in various areas: supply, marketing, logistics, customs, financial control, translations. He is responsible for product marketing.



Peter Peng

advisor

CEO of Oren Irrigation Equipment Ltd. The company has 10,000 hectares of irrigated land in its portfolio. It is engaged in irrigation, automation of processes in the agro-industrial complex, sale of equipment and training of personnel.

## Lady Finger banana variety. Specifics of cultivation

Specialists of the project have identified territories in Vientiane province, Lao PDR, near the floodplains, where the soil is the most fertile and water supply costs are the lowest.

The main competitive advantages for the production of bananas conferred by this location are:

- High average air temperatures;
- Fertile soil (red soil);
- Availability of a cheap water source;
- Availability of relatively inexpensive electricity for agricultural producers.

A common problem for the effective cultivation of plantations is the availability of sufficient areas concentrated in a single location. It is often possible to find plots with an area of up to 20 hectares, all scattered over a large area. For effective production, it is necessary to have areas covering at least 200 hectares.

In our case, taking into account the current location of the business, there is an opportunity to acquire territories of up to 8,000 hectares, all located in the same valley.

Chinese specialists are employed for production technology support — 6 workers per 100 hectares.

Saplings of «Lady Finger» bananas (Musa acuminate cultivar) are purchased from specialized companies in Thailand. These are small fruit of up to 12.5 cm in length, with light-yellow coloration and small brown strips. This type of bananas has a higher price on the end market, compared to other varieties of bananas, and is the most popular in China.

All required fertilizers are obtained from suppliers in Thailand.

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

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



Pic. 2 Banana flower

## **Project development strategy**

Our project development strategy can be divided into two parts:

### SHORT-TERM STRATEGY

involving the expansion of our production areas up to a maximum of 360 hectares.

### THE SHORT-TERM STRATEGY INCLUDES THIS STEPS

- Creation of the Bananacoin token, the purchase of which entitles the Participant to the future receipt of goods or equivalent monetary compensation.
- Sale of the token at main exchanges. Token price is pegged to that of 1 kg of bananas.

Banana production (up to 18 months).

Exchange of tokens for goods or equivalent monetary compensation.

## **LONG-TERM STRATEGY**

involving the expansion of our production areas up to a maximum of 1,000 hectares and establishing cooperation with major international and regional organizations and funds.

## Project risk assessment

Development risks	Risks minimizing method
	Currently, the use of TGE 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 production through the «organic farm» system, which is a competitive advantage in comparison with the existing banana plantations in Laos.
High level of competition	Products grown in Laos enter the Chinese market within three days of leaving the plantation. Fruits grown in Laos grow to an equal size on the brush and lack blackened areas (which appear due to a temperature drop), which is why they have the highest demand price compared to products from other countries.
Ecological risks («Panama disease» of the soil)	We are planning to create an «organic farm», as recommended by the FAO method for preventing Panama disease. An «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 fungal pathogen causing the disease is absent from the soil.
	All the territories planned for commissioning have never been used for agriculture (virgin jungle).
	According to the FAO, the utilization of chemicals and pesticides reduces the soil's resistance to Panama disease, so we are not use it in production.
Introduction of restrictions because of the use of chemicals and pesticides	The production cycle is planned to comply in full with the Laos Regulations for the Use of Agricultural Chemicals.
Political risks	Laos has no tension in relations with China, for example, like Vietnam does. This has a beneficial effect on the possibility of increasing exports from Laos.
Limitations imposed by the geographical location of the plantation opportunity of increasing exports from Laos.	The wind creates a great danger in countries bordered by the seas. A distance of less than 150 km from the coastline leaves a plantation exposed to risks posed by typhoons. Strong wind breaks banana leaves, hurting the plant and lowering yield. By growing bananas in the Vientiane province of Laos, we avoid the risks posed by typhoons; even strong gusts of wind cannot form as the plantations are located in river floodplains between the mountains.

## Technological and economic advantages

#### TECHNOLOGICAL ADVANTAGES

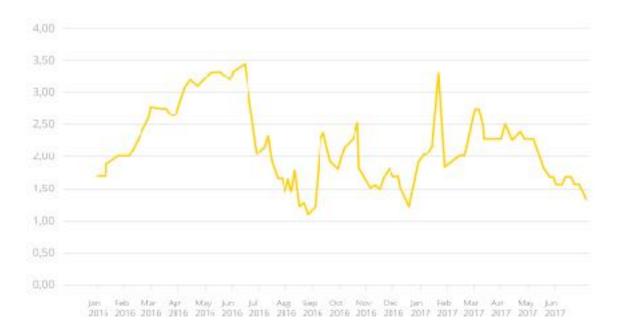
- **CONVENIENCE.** Tokens are interated into tokenized wallets, will be utilized on stock markets, and will eventually be able to be integrated with existing stores.
- USE OF BLOCKCHAIN ARCHITECTURE. Emission of Bananacoin tokens is done on the Ethereum blockchain, which is among the most stable on the market today.
- **EASE OF USE.** Bananacoin is being developed as an easy to use token with an understandable fiat equivalent (in the form of 1 kg of bananas). It does not require specialized knowledge in cryptography or blockchain technology.

### **ECONOMIC ADVANTAGES**

- **INDEPENDENCE.** Tokens based on commodity value are not dependent on banks or financial institutions, instead being directly tied to the productivity of the company and its export activity.
- PROTECTION FROM INFLATION. Tokens based on commodity value are pegged to the market value of bananas. Over the past 7 years, the price of 1 kg of bananas has increased by 4-10% annually (see Diagram). Therefore, tokens are well protected against inflation in comparison with fiat currencies, and they demonstrate extremely low historical volatility..
- **TRANSPARENCY.** Use of blockchain technology ensures increased transparency. Eventually this will translate into money transfers being documented and participants having access to information on crops growth and harvest, the volume of the harvest and its subsequent sale on the market. When this

## Lady Finger bananas price fluctuation

Price of 1 kg of Lady Finger bananas during various periods, \$



Growing Lady Finger bananas has great potential for business growth, thanks to the favourable weather conditions in Laos, while the growing Chinese market translates into further business growth potential.

The current shortage of bananas allows putting a plantation area of up to 30,000 hectares in circulation with guaranteed sales. Upon reaching the final date for the continuous cultivation of bananas in one area, it is possible to temporarily replace crops with cultures with similar payback parameters, like papaya or mango.

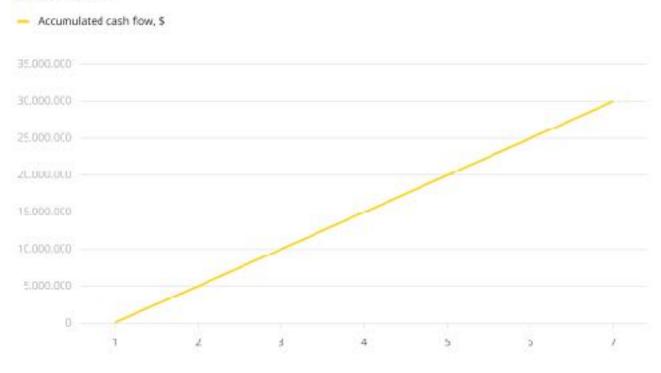
It is obvious that China, with a deficit of areas suitable for cultivating fruit and a constantly growing consumption, does not have any other options to satisfy demand, other than to import goods.

## **Financial justification**

The table below presents a calculation of the financial attractiveness of the project (Based on an optimal situation with the attraction of 7,326,000 US dollars on a land plot of up to 360 hectares).

Year	1	2	3	4	5	6	7	
Monetary resource, \$	7324,0							
Start costs								
Land lease, \$ (+3% annually)		189,8	195,5	201,3	207,4	213,6	220,0	
Labor 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	
Packaging, shipping and handling, \$	1323,5	1323,5	1323,5	1323,5	1323,5	1323,5	1323,5	
Total (before axes), \$	9097,6	3283,3	3289,0	3294,9	3300,9	3307,1	3313,5	
Income from bananas sale, \$	16272, 0	16272, 0	16272, 0	16272, 0	16272, 0	16272, 0	16272, 0	
Cash flows before taxes, \$	7174,4	12988,7	12983,0	12977,2	12971,1	12964,9	12958,5	
Accumulated cash flow, \$	7174,4	20163,1	33146,2	46123,3	59094,4	72059,3	85017,8	

## Cash flow



Thus, with funding of \$7324 the accumulated cash flow increases 2.3 times by the second year of the project, another 1.6 times in the third year, and by 1.3 times annually over the following period from year 4 to year 7. At the same time, the annual revenue from the sale of bananas is \$16272, with the starting costs of \$9097.6 in the first year of project development and about \$ 3298.22 during the period from year 2 to year 7 of project development.

# ATTRACTION OF FUNDS

The main stages of attracting funds:

### **PRE-TGE**

September 2017

At Pre-TGE we will sell 1 000 000 Bananacoin tokens with a 50% discount. Funds will be used for marketing for the main TGE. We will use ETH, BTC and Visa/MasterCard.

TGE
December 2017

We will use ETH, BTC and Visa/MasterCard. Funds will be used to produce bananas.

LAND READY
November 2017 – March 2018
All documents for land are signed, the area is cleared and ready for planting of bananas.

PRODUCING BANANAS

April – December 2018

Plants are growing. 2019 bananas are ready to be sold.

CIRCULATION OF TOKEN
July 2019

Tokens are exchanged for goods or equivalent monetary compensation 18 months after TGE.

**The main objective of the participation** for Members is to buy an goods which will be produced in future with a favourable price.

The Bananacoin token is backed by the value of the produced good, which is in high demand — bananas rank fifth in terms of commodity consumption on the global market.

## Why participate in the Bananacoin project?

The yearly consumption of bananas in China is about 13 million tons. The intake of bananas in China has increased by a factor of 12 within the last 8 years, and it is continuing to rise constantly because of the growing welfare of the population and the associated growth of consumption.

At the same time, even in developing countries, the consumption of bananas during an economic crisis is reduced only slightly, as bananas are a relatively cheap product.

This ties Bananacoin tokens, which are pegged to the price of bananas, to the positive dynamic exhibited on the market.

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

## **FUNDING**

Bananacoin is a participant-oriented project, aiming to make a profitable purchase of a future product based on blockchain technology that revolutionizes the production of bananas. This project is based on TGE crowdfunding and involves attracting funds through the sale of Bananacoin tokens, which are backed by the commodity value of 1 kg of bananas produced by the company.

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

### THE MAIN CHARACTERISTICS OF THE BANANACOIN PROJECT ARE:

- Bananacoin token is issued for participants;
- In 18 months, the value of the Bananacoin token value will increase due to the rise in sales volume and the dynamics of the cost of 1 kg of bananas;
- During crowdfunding, the production areas are to be increased to 360 hectares using received funds;
- Additional Bananacoin tokens are injected into circulation and made available for operations provided by well-known cryptocurrency stock markets.

## **List of sources**

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