

INVESTMENT PROJECT AGRICULTURE ORGANIZATION AS A BASIS OF MEDICINAL AND AROMATIC INDUSTRY IN RUSSIA

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An important task at the present stage of economic development is to create a solid base for the production of medicinal aromatic raw materials. To solve this problem it is necessary to ensure investment in production of raw materials. For this purpose it is necessary to develop investment projects for agricultural organizations producing medicinal and aromatic raw materials.

Keywords: medicinal and aromatic production, investment project

Invest-innovation project "Creation of production-scientific enterprise specializing in growing and integrated processing of essential oil crops in the Republic Crimea" corresponds one of the foreground lines of development of the agricultural sector in The Republic Crimea. This project is seen as a pilot project for the introduction of advanced technologies in the production of medicinal and aromatic.

The project envisages the creation of a complex for the production of essential oils and medicinal raw materials in the production cycle which includes the following steps:

- Storage of planting (seed) stock;
- Planting (sowing) campaign and care of the crops;
- Harvesting of medicinal and aromatic crops;
- Preparation of medicinal and aromatic raw material for processing;
- Processing of raw materials to give the corresponding products.;
- Storage and realization of the products [1].

According to the conditions of realization of the project and having regard to the task to process raw material maximum efficiently (wastefree) the following lines of using of investments are intended:

1. Formation of planting material according to a schedule of sowing campaign based on two year period of development of sowing fields (475 hectare).

2. Carrying out capital repair and reconstruction of the existent industrial and administrative premises as well as building an additional production facility made of easy-constructed unit constructions for processing roses.

3. Purchasing of agricultural equipment for carrying out sowing and planting campaign and harvest.

4. Organization of pre-plant cultivation of the soil and carrying out sowing and planting campaign of the first cycle (the first laying of plantations) paying attention to the fact that profit is not going to be formed in that period. The second and the following cycles of sowing of crops will be put into effect within the framework of economic activity of enterprise.

5. Execution of design works around the enterprise in general and around the complex of processing. The design works provide developing documentation for building new facilities, plan of placement of production lines and their packaging, execution of design works on setting and binding the main production equipment, organizing procurement and storage facility.

6. Purchasing basic process equipment, node points and installation, constructing and assembling of production lines, subsidiary objects, admission of service lines, carrying out startup-setup operations.

7. Inputs connecting with implementation and putting into production.

8. Current capital formation of the enterprise.

In the framework of the whole complex the Project provides creation of self-contained cycle on growing and deep processing of essential oil raw materials into different kinds of products such as essential oils, bio-extracts, toilet water, pharmaceutical medicine as well as supplements for cattle. In the framework of realization of the project it provides reaching planned capacity of production caused by both high level of work content connected with planting seedlings and with the long term of growing of some crops till the first harvesting.

In the Table 1 consolidated information about the lines and capacity of investing expenses in the framework of carrying out the project of creation of pilot production on processing of essential oil crops is presented.

According to the state document of using the land on August 2013 the PF "Crimea Rose" owns 2072 hectare of land. The land is given for scientific researches and productive activity. According to the Agreement about joint-cooperation from 6 April 2010 y. a part of the land was given to a private enterprise LLC "Agroproject "Troyanda Nova" (Lugansk city). For the period of 2013y. there was 1086,0 he. covered by crops. This way the PF "Crimea Rose" owns 553,2he of lands that are not used this time [2].

While realizing the project the following economic and social activities are intended to achieve which are presented in the Table 2.

Table 1

The lines of investment and capacity of investment

Investing expenses item	Capacity of investment
	Thousands of dollar USA
General crop complex total, including.:	1 499,0
– purchasing of planting stock	753,0
– purchasing agricultural equipment	601,0
– expenses on planting crops	145,0
Processing complex total, including.:	2 412,5
– expenses on drafting and put into operation	120,0
– civil and erection works and repairing works	470,0
– purchasing main productive nod points and aggregates, subsidiary subjects and materials	1 252,5
– expenses on installation and commissioning works	400,0
– finances (current capital)	170,0
total investing expenses	3 911,5

Table 2

the main activities of economic and social efficiency of the project

An activity	Unit of measure	1 year	2 year	3 year	4 year	5 year	6 year	total
Profit from realization	Thousand dollars	456	2 019	4 070	4 720	7 956	5 204	21 429
Net profit	Thousan. dollars	–116	366	1235	1430	1505	1582	6002
Profitable work	%	–	22	36	36	36	36	28
Creation of working places with increasing result	Unit	47	55	58	58	58	58	58

Significant increase in production capacity of medicinal raw materials and essential oils with high quality and reasonable price enable displace imports and increase export potential significantly. Implementation of the project will influence on the social development of the region in the best way.

Investing efficiency of the project was analyzed by calculating of the activity of net present

value of the project (NPV), internal rate of profitability (IRP), a term of recoupment and a present term of recoupment of investments on the measures specified in this business-plan and the index of profitable inputs. The results of this calculation is presented in the table below. Discount rate was accepted on the level of 10% (an average deposit rate is 5%, as well as perils of decreasing of a level of profitability are 5% in the project).

Table 3

A consolidated table of activities of efficiency of the project

An activity	Units of measuring	Value
A period of recoupment	year	4,7
Discount period of payback (DPP)	year	5,4
Net present value of the project (NPV)	thous.dollars	1639
Inner rate revenue (IRR)	%	22
Profitable index of inputs (PI)	unity	1,46
Revenue of investments (ROI)	%	17,6

The project has enough level of inner rate of revenue that is 22% that exceeds discount rate more than two times. As it becomes clear from the table the project is effective, implementable and attractive for investments.

Table 4 presents data on volumes of production of medicinal and aromatic raw materials in Crimea. It should be mentioned that the given structure of sowing areas and gathering essential oil raw material remains without any changes during last years.

Table 4

Production of essential oil raw material in ARC in 2012 year [3]

A name of region	Name of production													totally	
	sage			lavender			coriander		rose			others		Total area	Production, t
	Area, he		Croppage, t	Area, he		Croppage, t	Area, he	Croppage, t	Area, he		Croppage	Area, he	Croppage		
	total	fertile		total	fertile				total	fertile					
Bakhchisarayskiy	285	129	110	318	318	439			25	25	12	153	148	771	710
Belogorskiy	381	108	1062	1272	1040	814	1629	650	60	30	36			3343	2562
Dzhankoiskiy							647	195						647	195
Kirovskiy				182	182	1	728	635						910	636
Krasnogvardeyskiy	98	30	67	414	414	178	3288	1942				25	1	3825	2186
Krasnoperecopskiy							542	137						542	137
Leninskiy							276	164						276	164
Nizhnegorskiy							2116	2086						2116	2086
Pervomaiskiy							665	194						665	194
Sakskiy							587	445						594	447
Simferopolskiy	374	374	841	291	291	279	1072	523	16	16				1482	1643
Sovetskiy							1208	1157						1208	1157
Chernomorskiy				171	171	75						25	15	196	90
Alushtinskiy pl.of es.				107	107	32			32					141	32
Totally	1138	641	2080	2755	2523	1818	12758	8128	133	71	48	203	164	16716	12239

Basis for successful production are::

- natural-climate conditions;
- technologies;
- culture of production, professional skills of a producer.

Those producers who own more advanced technologies have considerable advantages and higher rate of profit over the rest.

Currently Crimea has all three components for quality medicinal and aromatic raw materials. Natural-climate and soil conditions are very favourable for it. On detritus and marly soils where crop capacity of cereals 6–7 c/he and crop capacity of lavender is 40–50 c/he, sage – 60–70 c/he. Besides that so rare essential oil plants as rockrose, rosemary, gumweed

and some other plants that can be cultivated in the framework of planned enterprise are grown only in the Crimea.

Our country only on the Crimean resources may be the world's largest producer of essential oils and medicinal herbs.

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