

# ECONOMIC-FINANCIAL ANALYSIS OF GREENHOUSES' MODERNIZATION AND NURSERY BEDS' CONSTRUCTION IN CENTRAL DANUBE REGION<sup>1</sup>

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## Abstract

*Taking into consideration a significance of natural potentials, a significance of agriculture, as well as a strategic priority of economic effectiveness and sustainability for development of Central Danube Region zone (metropolitan area Belgrade- Novi Sad), in the paper was made an evaluation of economic sustainability on agricultural husbandry within the mentioned protected zone in the Republic of Serbia. In this paper were used data collected in the Central Danube Region zone, i.e. on the territory of metropolitan area Belgrade- Novi Sad, during 2011, and which were obtained by surveying agricultural husbandry, which developmental perspective lies in function of economic sustainability. The authors point out to a significance of existing greenhouse modernization in husbandry, aiming to decrease the costs of thermal energy, which will primarily affect fully exploitation of production capacity, as well as obtaining higher price per a product unit, due to market performance in conditions of poor supply. Besides that, in the paper was pointed out to a significance of greenhouses construction, in which will produce a plantlet of various vegetable species. Building the nursery bed will provide continuous supply of husbandry with plantlet of controlled quality vegetable, as well as obtaining the additional incomes according to the plantlet sale, which has not been used in production on husbandry.*

**Key words:** *greenhouses, nursery bed, vegetables, economic-financial analysis.*

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## **Introduction**

The investment projects in agriculture have been mostly directed to making fixed assets which use during long period. These projects' exploitation is much longer than regarding, for example, industrial projects (*Jovanovi , 2000*).

Production in greenhouses represents the most intensive form of vegetable production. This production has been characterized by optimal conditions for growth and development of plants, which implicates significantly higher yields in regard to an open field production, but also in regard to yields which realize in case of production in other types of protected space. The production in greenhouses has an advantage in regard to the other forms of plant production, because it is possible to plan production cycles, which is important from timely delivery of products to a target market point of view.

Independent production of plantlets is important for encircling the production cycle in the husbandry, and significantly affect, as on realization of homogenous plantlet quality, as well as on continuity in supply with this important input in the production.

The Central Danube Region, i.e. the territory of metropolitan area Belgrade-Novı Sad, represents the area characterized by good conditions for vegetable production, which provide the intensive production in family husbandries. In this area are also good conditions for products sale, as on domestic, as well as on foreign market.

From vegetable production point of view, the most significant advantages of the Central Danube Region are high quality land, water resources and highly qualified labour. The advantages are also developed infrastructure and good geo-strategic position, from vegetable sale possibility point of view.

## **Material and method of work**

This paper's goal is to evaluate the investment project of greenhouse modernization and nursery bed construction, according to the data collected in the zone of Central Danube Region, i.e. on the territory of metropolitan area Belgrade - Novi Sad, during 2011, by surveying the

holder of agricultural husbandry, and which should significantly affect to development of vegetable production in the husbandry.

In accordance to the evaluation of the investment project and benefit which the investment brings, according to similar business conditions and other conditions which requires the agricultural production in the specific territory, the analyzed project can represent an example of good investment to other vegetable producers in the zone of the Central Danube Region.

## **Results of the research and discussion**

### **Significance of vegetable production in protected space**

In geographic area where the Republic of Serbia is, the production of fresh vegetables in open field has prominently seasonal character, i.e. it can realize only in the period April-September. Heating the greenhouses and other types of protected space can realize a persistent, whole-year supply of fresh vegetables.

According to *Ilin (2010)*, the production of vegetable in protected space has agro-technical, biological, ecological and an exceptional economic significance. The significance of the protected space reflects also in possibility of controlling rational water, energy, agricultural chemicals consumption, and the consumption of vegetables is possible both without land and in lands on which classic production can realize.

A peculiarity of greenhouse production reflects in that, unlike the classic vegetable growing production in open field, it develops in the protected space, during the whole year, by which decreases a risk in the production. It also has a great importance, while, through this production provides the supply of vegetables in the period autumn-winter, i.e. in period when the climatic conditions do not make possible the open field production.

The vegetables production in protected space is highly profitable, i.e. it represents the most intensive form of plant production. *Ilin (2010)* quotes that yields of tomato are 8-10 times higher than the yields in open fields, pepper for 5, and cucumber up to 10 times higher. On economic indicators the most influence has time of production, yield and quality of produced vegetables. In absolutely controlled conditions is possible to plan the production and the picking in the moment when, due to lesser

supply, the prices on the market are significantly higher. One kilo of vegetables, produced in the protected space, usually has 5 and often even 10 times higher price than the vegetables in summer months from the open field.

### **Characteristics of the analyzed family agricultural husbandry**

The family agricultural husbandry, which has been a subject of the analysis, has been development-oriented and the priority has been put on the production of vegetables and plantlets by the existing business strategy, while the production of fruits represents the supplementary activity.

Prevalent activity of the husbandry is the production of various vegetables in the existing greenhouse, potato production on leased and own land and the production of fruits in own orchard.

The greenhouse, which represents a prototype of an old Dutch greenhouse, has a work-surface of 6 m of width and 40 m of length, which amounts 240 m<sup>2</sup>. The height of the greenhouse is 12 meters. The greenhouse heats by a closed heating system, with boilers and burner systems on heating oil. Besides various vegetables, in the greenhouse is also produced a part of plantlet necessary for vegetable growing in the husbandry.

Besides the greenhouse, the agricultural husbandry owns also 6 ha of land, of which 2 ha under fruits. In fruit plantations, the most represented is cherry, which occupies 1 ha, on which were planted 350 trees, apricot which grows on 60 a with 300 planted trees and 300 trees of peach, planted in area of 40 a.

The production in the analyzed agricultural husbandry realizes on principles of an integral agricultural production. According to *Miskovic and associates (2008)*, the integral production can be defined as economic production of high-quality products, where the priority is put on ecologically safer production methods, minimalization of unwanted effects of pesticides application, increase of safety regarding human health and the environment.

One hectare of land has been prepared, according to the plans on the production enlargement, for construction of the greenhouse in which will

produce the vegetable plantlet for sale on domestic, and later on, on the international market.

In 2009, the analyzed family husbandry was investing in construction of 2 research-exploitation wells with depth of 165m and 287m, while the investment value was 208,400 euro. The husbandry uses water from own wells, and the quality of water is satisfying, appreciating it from the chemical, mechanical and microbiological point of view.

Building the well of 287 m of depth was attained the approach to thermal water, which will, along with minimal heating, be used for floor heating in the greenhouse. In this way will achieve possibility for off-season production of early and late vegetables of good quality, along with high yields, as well as the possibility to realize higher prices on target market due to lesser supply.

### **Qualifying structure and salaries**

Managing the husbandry, organization of production process and products' sale on the target market is done by members of the family agricultural husbandry.

The production in the greenhouse is done under a supervision of one manager who organizes the production process with four workers, fully employed. Of four workers, one is directly responsible for distribution of products, i.e. delivery to buyers. The products delivery is done by a vehicle which belongs to the husbandry, while the delivery is included in costs structure.

Casual and temporary workers in production and realization of the products were observed at the level of three totally employed workers during a year, with average net salaries of 214 euro per a month, and the costs of salaries for a protection engineer, a production organizer, and a business administrator are 428 euro per a month. In accordance to it were calculated the total salaries costs, which would represent the total real expense of 54,115 euro per a year, with paid taxes and contributions.

### **Exploitation level of the greenhouse's production capacity**

The capacity exploitation in the greenhouse is high in the period spring-summer-autumn, or is in really acceptable limits. However, the

exploitation in time period when grow early and late vegetable cultures is low. Observed from the aspect of overall period in which is possible to produce vegetables in the greenhouse, the level of exploitation is evaluated on 80% of possible capacity.

The basic reasons of insufficient exploitation of production capacities are high costs of heating in winter period. Installing the floor heating in the greenhouse, the heating costs would be reduced to a minimum, because, as it was previously mentioned, the husbandry owns its own thermal source. With the project realization, the level of capacities exploitation would increase significantly, and the costs would decrease. In that way, the husbandry would make more significant revenues.

### **Supply market**

The quality of raw materials and continuity in supply are one of very important factors for successful production in greenhouses, on which, the analyzed family agricultural husbandry, bases its long-term production. From the same reasons, the husbandry purchases the necessary raw materials from tested suppliers, i.e. from the suppliers with whom there is long-term cooperation.

Regarding that the husbandry plans to build the nursery bed, there can conclude that, in the following period, will have the plantlet of various vegetables as its own product, which will affect the final product costs' reduction, but also keeping up the plantlet quality level.

The production of plantlets will provide that the production process does not depend on external factors, i.e. will be possible to make continuity in supply, regardless to the condition on plantlets market. Except for own production, a part of the plantlet will be meant for sale on, primarily, domestic market.

### **Economic-financial assesment of the investment project**

The investments of the analyzed agricultural husbandry are oriented in two directions:

1. Installation of floor heating in the existing greenhouse, by which the heating expenses in winter period (October-April) will significantly decrease, i.e. heating the greenhouse will be more efficient. The

mentioned will provide the production increase for 20-30% in that period.

2. Building the nursery bed for production of vegetables plantlet, which will later on plant in greenhouses, in a way that this kind of production will encircle as a whole. In the nursery bed of 1000 m<sup>2</sup> will grow the plantlets of aubergine, broccoli, crucifers, tomato and pepper. Of the total amount of produced plantlets 93% will sell on the market, and the other 7% will be used for own needs.

It is important to quote that the investment, by its character, represents reconstruction and modernization of an existing facility. The total preliminary calculation of necessary investments amounted 303,407 euro, of which the investment for installation of floor heating would amount 171,490 euro, for the nursery bed construction 123,512 euro and for working assets 8,405 euro.

The priority in the total investments on the agricultural husbandry was put on the floor heating installation. This investment is more important than the investment in the nursery bed, because it is more payable, i.e. it will bring to the husbandry higher income, primarily, due to enlargement of production capacity and decrease of production costs, which will result by higher competitiveness of the husbandry.

According to experience which bases on production and market results which were characteristic for previous years, the investor will base the following production on growing the most profitable vegetable species which prefer higher temperature conditions, which primarily considers the production of cucumber and tomato.

Necessary assets for construction of the floor heating, i.e. the source for financing the total work, in lack of own assets, the investor intends to provide by bank credits. After the floor heating installation will not be changed fixed work method, i.e. the production will be organized by fixed system, while this part in work process has been automated. After the nursery bed construction, aiming to produce high quality vegetables, i.e. the plantlets production, the husbandry will engage additional seasonal workers.

There is significant to mention that the investment from the aspect of eventual environment pollution is not risky. The production in the existing greenhouse and construction of new greenhouse does not deteriorate the conditions of human environment. The reasons for that are as follows: facilities do not produce harmful waters, facilities in exploitation do not release toxic gases, and facilities do not make noise.

According to all previously mentioned, there can conclude that there are not necessary any special measures of human environment protection, so they were not anticipated by this project.

### **Investments in fixed assets**

The total investments of the family agricultural husbandry in fixed assets, anticipated by business strategy of the family agricultural husbandry, amount 295,032 euro (*table 1*).

**Table 1.** *Investments in fixed assets*

<b>Fixed assets (equipment/flock/plantations)</b>	<b>Value (Euro)</b>	<b>Structure (%)</b>
Installing underfloor heating	171.492	58,1
Building nursery bed	123.540	41,9
<b>Total investment value</b>	<b>295.032</b>	<b>100,0</b>

In the total investments, the value of the floor heating construction in the greenhouse will participate with 58.1%, while the participation of the nursery bed construction will be 41.9%.

### **Forming incomes**

On the occasion of the investment planning, the husbandry has put the priority on the floor heating installation, because the production, in the period when heating is necessary, would increase for 20-30%.



**Table 2. Revenue from investment per years of the project**

Product	Measure unit	Price/M U	Annual amount in MU	Revenue from investments per years of the project				
				1	2	3	4	5
				Total income (eur)	Total income (eur)	Total income (eur)	Total income (eur)	Total income (eur)
Cucumbers	kg	1	11.875	11.875	11.875	11.875	11.875	11.875
Tomato	kg	1,1	10.688	11.756	11.756	11.756	11.756	11.756
Salad	head	0,23	24.875	5.721	5.721	5.721	5.721	5.721
Pepper	kg	1,5	11.875	17.813	17.813	17.813	17.813	17.813
Cucumber plantlet	stalk	0,28	52.800	14.784	14.784	14.784	14.784	14.784
Tomato plantlet	Struk stalk	0,3	60.000	18.000	18.000	18.000	18.000	18.000
Salad plantlet	Struk stalk	0,03	627.200	18.816	18.816	18.816	18.816	18.816
Pepper plantlet	Struk stalk	0,3	60.000	18.000	18.000	18.000	18.000	18.000
<b>TOTAL</b>				116.765	116.765	116.765	116.765	116.765

Regarding the preliminary calculation of the total income were taken into consideration minimum amounts which can get per a stalk of a plantlet. Such review of revenues points out that final net profit per a profit and loss account can only be higher, which shows how the project is payable and acceptable.

### Costs structure

In preliminary calculation of direct materials per a product unit has been taken into account minimal amounts, which can get per a stalk of plantlet. This review of expenditure points out that it cannot be higher than the planned one, while there was taken into account the maximal expenditures, not the minimal.

Different indicators point out to the significance of investments in nursery bed construction. Besides significant distinctions in costs, which burden the vegetable production, the significance has also providing undisturbed supply with the plantlet, without the external factors influence, as well as

the possibility of providing high quality, which had oscillated in case of purchasing the plantlet from various suppliers. Although the most important is direct saving, this realizes by production in the husbandry. In *table 3* were given reviews of plantlets prices by species of vegetables before investments and after investments in the nursery bed.

**Table 3.** *Price of plantlet before and after investment in nursery bed (eur)*

Vegetables	Measure unit	Price before investment	Priceafter investment
Cucumber plantlet	kg	0,049	0,020
Tomato plantlet	kg	0,067	0,030
Salad plantlet	head	0,030	0,015
Pepper plantlet	kg	0,067	0,030

It is important to emphasize that the capacity of plantlet production will be higher than needs of the analyzed family husbandry, so the rest of quantities will be placed on domestic market, which will significantly affect income growth in the future period.

**Table 4.** *Expenditure of investment (eur)*

Expenditure	INVESTMENT EXPENDITURE				
	1	2	3	4	5
	Total expenditure (eur)	Total expenditure (eur)	Total expenditure (eur)	Total expenditure (eur)	Total expenditure (eur)
Expenditure per years of the project with investment	67.716	67.716	67.716	67.716	67.716
Expenditure per years of the project without investment	61.119	61.119	61.119	61.119	61.119
<b>TOTAL</b>	<b>6.597</b>	<b>6.597</b>	<b>6.597</b>	<b>6.597</b>	<b>6.597</b>

Especially important, from aspect of financial-economic payability of investments, is also the distinction in energy costs, which had burdened the vegetables production before the anticipated investment and in production process after the anticipated investment.

**Table 5.** *Energy costs with and without investment (eur)*

Name of material	DURATION OF PROJECT'S INVESTMENT				
	1	2	3	4	5
Calculation of energy with investment	18.415	18.415	18.415	18.415	18.415
Calculation of energy without investment	41.435	41.435	41.435	41.435	41.435
<b>Total energy costs</b>	-23.019	-23.019	-23.019	-23.019	-23.019

After the realization of the investment project, the costs of energy will decrease for 23,019 euro per a year. This data shows that the husbandry would save 138,115 euro for 6 years, which is the investment project duration, or 46.81% of loan.

### Credit pay off

The investments can differ by funding resources. Observed from this point of view, the investment of the analyzed husbandry represents the investment funded from foreign sources. In the total investments dominate the assets taken from the commercial bank, with participation of 60%, while the assets of the Ministry of Agriculture, Forestry and Water Management were participated with 40% (table 6).

**Table 6.** *Paying off loans*

Principal	295.000	
Source of loans	Bank	– 60 %, 177.000
	MAFWM	– 40 %, 118.000
Payoff term	6 years	
Grace period	1 year	
Annual interest	Bank	– 11,2 %, 33.040
	MAFWM	– 0 %, 0
Annuity calculation	Quarterly	
Period of credit payoff	Grace period	– I godina
	Bank	– II, III i IV godina
	MAFWM	– V i VI godina

There should emphasize that grace period lasts 1 year, which is important, because the husbandry won't refund the loan from other incomes of the husbandry, i.e. before the modernized greenhouse, as well as new-built nursery bed won't be in the process of production or won't start to yield a profit. The credit pay off will be done in a way that, after the grace period, the assets will be refunded to the bank in second, third and fourth year, while the assets borrowed

from the Ministry of Agriculture, Forestry and Water Management will be refunded during the fifth and the sixth year.

### The project's profit and loss account

**Table 7.** Profit and loss account per the project's investments duration (eur)

	Position	THE INVESTMENT PROJECT DURATION				
		1	2	3	4	5
<b>A</b>	REVENUES AND EXPENDITURES					
<b>I</b>	POSLOVNI PRIHODI BUSINESS REVENUES	118.765	118.765	118.765	118.765	118.765
1	revenues from products sale	118.765	118.765	118.765	118.765	118.765
2	other revenues					
<b>II</b>	BUSINESS EXPENDITURES	43.159	43.159	43.159	43.159	43.159
1	Prime value of sold goods					
2	Materials costs	16.568	16.568	16.568	16.568	16.568
3	costs of salaries, reimbursements and other expenditures	0	0	0	0	0
4	amortization costs	20.652	20.652	20.652	20.652	20.652
5	other business expenditures	5.938	5.938	5.938	5.938	5.938
<b>III</b>	BUSINESS PROFIT	75.607	75.607	75.607	75.607	75.607
<b>IV</b>	BUSINESS LOSS					
<b>V</b>	FINANCIAL REVENUES					
<b>VI</b>	FINANCIAL EXPENDITURES	19.959	17.785	11.598	4.689	0
<b>VII</b>	OTHER REVENUES					
<b>VIII</b>	OTHER EXPENDITURES					
<b>IX</b>	PROFIT FROM BUSINESS OPERATIONS	55.648	57.822	64.009	70.918	75.607
<b>X</b>	LOSS FROM BUSINESS OPERATIONS					
<b>XI</b>	CUT OFF PROFIT					
<b>XII</b>	CUT OFF LOSS					
<b>XIII</b>	PROFIT BEFORE TAX	55.648	57.822	64.009	70.918	75.607
<b>XIV</b>	LOSS BEFORE TAX					
<b>XV</b>	PROFIT TAX	5.565	5.782	6.401	7.092	7.561
<b>XVI</b>	NET (CLEAR) PROFIT	50.083	52.040	57.608	63.826	68.046
<b>XVII</b>	NET LOSS					

## Financial course of the project

In *table 8* was shown the financial course of the greenhouse modernization project and the construction of the nursery bed in the family agricultural husbandry, where was taken into consideration only new loan which the investor required from the bank.

**Table 8.** *Financial course of the project investments per duration (eur)*

Elements	THE INVESTMENT PROJECT DURATION					
	0	1	2	3	4	5
<b>I TOTAL INCOMES (1+2+3)</b>	303.440	118.765	118.765	118.765	118.765	310.536
Total revenue		118.765	118.765	118.765	118.765	118.765
Funding sources	303.440					
-foreign	295.032					
-own	8.408					
Rest of the project's value						191.771
-in fixed assets						191.771
-in working capital						
<b>II TOTAL EXPENDITURES</b>	303.440	48.030	98.695	99.272	99.917	89.073
3. Investments	303.440					
-in fixed assets	295.032					
-in working capital	8.408					
Business expenses without amortization		42.465	40.291	34.104	27.195	22.506
Profit tax		5.565	5.782	6.401	7.092	7.561
Liabilities to funding sources		0	52.621	58.767	65.631	59.006
<b>III NET INCOMES (I-II)</b>		70.736	20.071	19.493	18.848	221.462

According to previously shown can conclude that the project is positive and that the loan for the greenhouse construction and the nursery bed modernization will be refunded in terms, anticipated by the plan.

## Economic course of the project

The economic course of the investment project represents a review of all incomes, expenses, and then their values' distinction. According to the data in *table 9* can be concluded that net current value from the economic course has been positive during the entire project duration.

**Table 9.** *Economic course of the investment project*

Elements	THE INVESTMENT PROJECT DURATION					
	"0"	1	2	3	4	5
<b>I TOTAL INCOMES</b>	0	118.765	118.765	118.765	118.765	310.536
Total revenue	0	118.765	118.765	118.765	118.765	118.765
Rest of the project's value	0	0	0	0	0	191.771
- -fixed assets	0	0	0	0	0	191.771
- -working capital	0	0	0	0	0	0
<b>II TOTAL EXPENDITURES</b>	303.440	68.682	66.726	61.157	54.939	50.719
Investments	303.440	0	0	0	0	0
-in fixed assets	295.032	0	0	0	0	0
-in working capital	8.408	0	0	0	0	0
Business expenses	0	63.117	60.943	54.757	47.847	43.159
Profit tax	0	5.565	5.782	6.401	7.092	7.561
<b>III NET INCOMES (I-II)</b>	-303.440	50.083	52.040	57.608	63.826	259.817

The shown data point out that, due to the given size of investments, prices ratio and funding structure, the enterprise would be capable to settle its obligations from business operations and to pay off regularly the credit, granted for equipment and production materials purchase.

### Internal profitability rate

The internal profitability rate makes equal positive and negative effects brought down to the current value. In other words, it is the rate under which could encumber and place the resources engaged by the project, and the result to be neutral in the total duration of the project.

**Table 10.** *Internal profitability rate (eur)*

Year	Net incomes	Discount rate 10%	Current value	Net incomes	Discount rate 20%	Current value
1	2	3	4	2	3	4
		Discount factor 1,1			Discount factor 1,2	
0	-303440	1	-303440	-303440	1	-303440
1	50083	0,909091	45530	50083	0,833333	41736
2	52040	0,826446	43008	52040	0,694444	36139
3	57608	0,751315	43282	57608	0,578703	33338
4	63826	0,683013	43594	63826	0,482252	30780
5	259817	0,620921	161326	259817	0,401877	104414
			33300			-57033

In this case, it amounts 15.84% and, in regard that the interest rate of loan is lower than the internal profitability rate, during the project exploitation will realize the positive financial result from funding, i.e. the financial leverage will be positive. From the previously mentioned can conclude that the project is acceptable.

### **Period of the investments refund**

According to got result, a time necessary for refund of investment is more than 4 years and, regarding this period is shorter than the economic duration of the project, the project evaluates as acceptable.

**Table 11.** *Period of investments refund of the project*

The project duration	Net value of incomes	Uncovered part of investment
0		-303.440
1	50.083	-253.357
2	52.040	-201.317
3	57.608	-143.709
4	63.826	-79.883
5	259.817	179.934
<b>Totally</b>	483.374	179.934

The investment project liquidity is its ability to reconcile its obligations in every moment. The liquidity in the project's duration uses permanent prices of incomes and expenses from the time of the investments' program preparation, and carries out according to information from financial course, which incomes comprise all items

and business operations which increase financial potential of the project, and expenses those which decrease it. In regard that net incomes in the entire project's duration have been positive, i.e. above zero, the project is acceptable.

### Bottom profitability point

Bottom profitability point or a critical point represents the level of production on which the investment project does realize neither profit nor losses, i.e. on which it still realizes a positive financial result (*Subi* , 2010).

**Table 12.** *Bottom profitability point*

Description	THE PROJECT'S DURATION				
	1	2	3	4	5
Total revenue	664.883	664.883	664.883	664.883	664.883
Variable costs	245.525	246.008	247.085	248.279	249.302
Fixed costs total	232.192	227.355	216.590	204.647	194.423
Marginal results (revenues-variable costs)	419.358	418.875	417.798	416.604	415.581
Turning point of profitability –value-	368.136	360.882	344.681	326.608	311.055
*Safety level fixed costs/contribution*100	<b>55,37</b>	<b>54,28</b>	<b>51,84</b>	<b>49,12</b>	<b>46,78</b>

\* Shows a minimum percentage (%) of sale (production) in conditions of profitable business, necessary for not doing business at a loss

The bottom limit of capacities exploitation for this project is 55.37% and, after this criterion, evaluates that the project is flexible to the capacity change.

### Financial-market assesment of the project

In accordance to the data in *table 12* can conclude that the project's efficiency, as a ratio between total revenues and total expenditures, is higher than 1, which shows that the analyzed project is acceptable.



**Table 12.** *Financial-market assessment of the project*

	<b>I</b>	<b>II</b>	<b>I/II</b>
<b>EFFICIENCY TI/TE</b>			
-Efficiency rate of the project	118.765	63.117	1,88
<b>ACCUMULATION PROFIT/TI *100%</b>			
-Rate of the project's accumulation	50.083	118.765	42,17 %
<b>PROFITABILITY PROFIT/VI*100%</b>			
-Profitability rate of the project	50.083	303.440	16,51 %

The project accumulation rate amounts 42.17%. The project accumulation rate, as the ration between accumulation and investments in fixed and working capital shows the project's ability that realizes certain accumulation, along with costs burden, on account of fixed and working capital.

### **Conclusion**

Future activities of the agricultural husbandry will be directed toward keeping the existing quality of products and to enlarge the market with good prices, as well as to transfer the existing system of integral production into the production system which will base on organic principles.

Elements for statistic and dynamic evaluation were given in past projections. Out of them results:

- That net current value from economic course is positive during the entire project duration, which means that, in specific size of investments, price ratio and funding structure, the enterprise would be capable to reconcile its accounts from current operations and to pay off regularly the credit for purchase of equipment and production materials,
- That the rate of accumulation of the project is 42,17 %,
- That efficiency of the project is 1,88,
- That profitability of the project is 16,51 %,
- That invested assets refund after 2 years of the project, which shows that the project is profitable,
- That internal profitability rate is 15,84 %

- That refunds 46.81% of investments by saving in heating of 138,116 euro.

According to the mentioned parameters can conclude that the investment project of the greenhouse modernization and the nursery bed construction in the analyzed agricultural husbandry is justified in economic and financial sense.

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