

Economic Effects of Investing in Entrepreneurial Initiatives in Rural Communities: Case Study of Greenhouse Structures Production

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Abstract. *Vitality even survival of certain rural community could be secured by devising and implementation of proper infrastructural contents and entrepreneurial initiatives. Moving business ventures that do not have direct implications to agriculture and food production, from urban to rural space, particularly will benefit local community initiating its revitalization and renewal. In this circumstance, there will be decreased extensive migrations and demographic evacuation from rural space, while community will be economically strengthened enough to offer the local population somewhat decent level of living. Mentioned initiatives in rural space are usually adequately supported by state or even local authorities, as their core strivings are balanced regional development and elimination of depopulation processes.*

Performed research aims to assess the investment in realization of one business idea in certain rural community (implementation of facility for production of greenhouse structures) as economically justified. In research used data are obtained from one agricultural cooperative active in Western parts of Serbia, while investment analysis considers applying of commonly used static and dynamic methods for evaluation of investment efficiency. Gained results (static: $E_e - 1.48$, $NPM - 27.53$, $ARR - 23.75$, $SPP - 3.49$ years, or dynamic: $NPV - 50,569.32$ EUR, $IRR - 23.69$, $DPP - 4.05$ years) linked to implementation of planned entrepreneurial initiative, show that business idea could be considered as socially and economically good, even very profitable business solution for cooperative and overall rural community.

Key words: entrepreneurial initiatives, rural areas, green house structures, investment analysis.

Introduction

Rural areas are not strictly linked to core agriculture (Harrop, 2007; van der Ploeg et al., 2008). Besides food production and processing, mainly for urbanized areas, in recent decades rural communities have been striving to better utilize available natural resources and local historical and cultural heritage. By decomposing the image of rural territory as pure rotation of parcels under different crops, or bunch of farms involved in plant and livestock production and agri-food products processing, based on local creativity, entrepreneurial initiatives and inclusion of overall social potential, rural space has started to

change into more viable areas able to compete the urban areas (Satterthwaite et al., 2010; Brauer & Dymitrow, 2014; Bedrač et al., 2018; De Luca et al., 2020).

So, rural communities are mainly linked to food production. But, opposing the depopulation trends and trying to raise the level of quality of life for current community members and newcomers, they require proper equipping with elements of physical and social infrastructure. Further they make step forward to other business opportunities as usually are rural tourism, different crafts, small-scale retailing and manufacturing, or even launching the SME industrial production facilities (Steiner, Atterton, 2014; Jeločnik et al., 2018; Jeločnik et al., 2020; Subić et al., 2025).

Creating the value added to rural community out the agriculture and food processing usually corresponds to broader consensus of local residents and local authorities. At one side, local rural community strives to complete the rural space with missing elements that make it decent for living, while at other side, local or even regional authorities intend to develop the area balanced to whole region, while avoiding its economic lag behind the urbanized territories, i.e. they aspire to make community economically less independent, and capable to retain or even attract new, especially young population (Kraybill et al., 1989; Douglas, 2005; Subić et al., 2011; Njegovan & Jeločnik, 2013; Flora, 2018; Ivolga, 2018; Martinidis et al., 2021).

Who can all be the actors of performing entrepreneurial initiatives in rural space, due to value added implication to overall community? By adequate state or local support, the main participants in creation and further investment and implementation of mentioned activities could be physical persons or legal entities usually active in rural areas, such are farms, entrepreneurs, small or medium enterprises, scientific-research institutions, different cooperatives and associations, or even units of local self-government, etc. (Coltrain et al., 2000; Ivolga & Molchanenko 2014; Egedy et al., 2015; Shelenko et al., 2024). Who is investing in such activities? Before all mentioned actors by themselves, while partially or fully supported by certain national or local funds or programs. The most often official support (financing or crediting) could be IPARD program, or national measures of the Ministry of Agriculture, certain programs of Ministry of Rural Welfare, or Development Fund of Republic of Serbia, some FAO, UNDP or WB programs, available funds of foreign developmental agencies, etc. (Bogdanov et al., 2007; Paraušić et al., 2015; Radović et al., 2024).

What could be potential solution with positive benefits for local rural community, i.e. entrance into the new business opportunity? There are number of options, as there are number of products or services that could be offered or produced in rural space, no matter if there are consumption need for them in rural community. In recent time in developed, or developing countries there are more and more organized or supported business activities in rural settlements, especially those close to urban centers, as their performing is usually more cost effective for business owner, while locally very beneficial in many senses. Of course, these requires well equipped space with essential, but functional infrastructural contents. For example, it could involve providing IT services, organizing various repair shops, warehouses and retail centers, implementation of different production and processing facilities, or running various touristic, cultural and recreational contents, etc. Mentioned initiatives in long term supports gender equality, or rejuvenate and empower the local rural communities, while make closer their inhabitants. Also, they make available to local population various contents that recently have been characteristic just to urban communities, what makes them more resilient and sustainable (Gladwin et al., 1989; Moseley, 2003; Donovan et al., 2008; Li et al., 2019; De Guzman et al., 2020; del Arco et al., 2021).

As positive example could be presented one supporting model active in Serbia, primarily turned to revival and renewal of villages at national level. By its establishment, Ministry of Rural Welfare has been launched few programs that aim to protect and strengthen the rural settlements in Serbia. One of programs is financing (reimbursement) of limited part of investment in new entrepreneurial initiatives

made by cooperatives active in rural areas, titled as „500 cooperatives for 500 villages“. Intention of state authorities is to save the villages from disappearing through continuous financing of new business adventures performed by different kind of cooperatives that economically (rise in earned incomes, paid taxes and overall consumption) and socially (new employments) strengthen certain rural community, while does not initiate any environmental issue. Cooperatives are in focus, as they are considered as certain kind of SMEs active in rural areas, that truly interconnects (employ) at least few (five) farms form some administrative territory, having in that way direct economic impact both on several families settled in certain rural community, as well as overall community. Program helps cooperatives to implement interesting and beneficial business ideas, that also impacted wider territory out the specific community. So, in this case, by strengthening the cooperatives' investment potential, they are able to develop both themselves and rural community, while practicing certain activity that could be not performed without co-financing (Subić & Jeločnik, 2021; Jeločnik et al., 2022a; Jeločnik et al., 2023).

The paper aims to assess the economic justification, i.e. economic effectiveness of investing in one of possible entrepreneurial initiatives in rural space (e.g. production of greenhouses' structures), that later potentially benefits the whole rural community and its overall development. Estimation is general, and could be linked to any rural community active within the Western Balkans, or some similar developing region worldwide. Research also aims to encourage corresponding initiatives in rural space, showing their approximate profitability potential.

Literature review

Financing the core business and investments of cooperatives are important segment of their work (Rey & Tirole, 2000; Jeločnik et al., 2017). Economic assessment of investments in entrepreneurial initiatives in rural areas, as are not deeply considered in Serbia and Western Balkans. There are several investment analyses worldwide that primarily researched economic justification of running construction business (building houses and certain production facilities) in rural space (Azhaman & Petryshchenko, 2019), or implementing and managing the wheat processing facility (Jeločnik et al., 2022a), investment in empowering the credit potential of credit cooperatives (Musau, 2016; Kebiro, 2019), investment in facilities and equipment for grains storing (Subić & Jeločnik, 2023), investment in facility and equipment for vegetables processing (Subić & Jeločnik, 2022), in facilities and equipment for medicinal herbs processing (Subić & Jeločnik, 2021), in cooperative agro-retail chain (Lanfranchi et al., 2016), in facilities and equipment for meat processing (Alho, 2016), in wine sector (Fazzini & Russo, 2014), in rural infrastructure (Subic et al., 2025), etc. Meanwhile, there are no analytical reconsiderations of investment in facilities and equipment for producing the greenhouse structures at cooperative level, while this survey could definitely serve as vector for mentioned business idea transfer within and out the Serbia cooperative audience.

Methodological framework

Performed survey implies agricultural cooperative located in rural areas of Western Serbia, that besides vegetable and seedlings production wants to be additionally specialized in greenhouse structures production. Investment analysis are performed according to previously developed business idea. Reconsidering the economic effects gained from mentioned investment, research try to prove the investment realization, i.e. reaching the maximal financial benefits per invested Euro. As in some previous surveys, investment analysis involves appliance of commonly used static and dynamic methods for investment assessment appropriate in agriculture (Jeločnik, Subić, 2020; Jelocnik et al., 2022a;

Jelocnik et al., 2022b; Subić et al., 2025). All gained results are linked to one investment cycle, while they cover five years period, and they are exposed in EUR through adequate tables.

Results with discussion

Business idea lies on intensive market request for offering greenhouses of unstandardized dimensions (mainly smaller than usually used in plant production, i.e. less than 1 ar) what have been missing at that time at national market. By force, experiencing and later mastering the production process of small greenhouses construction, cooperative wants to enter their production, enabling to cooperative members cheap, but hi-quality greenhouses, that will be used in their usual plant and seedlings production lines, while later could be reimbursed through different state subsidy schemes. Additional orders for greenhouses will be realized at local market with farms out the cooperative.

Since the cooperative was unable to rent adequate production facility, there was decided to use the production space owned by one of cooperative members for free, but after its detail reconstruction. The main cooperative goal was to increase annual incomes, to create new jobs (employment of two external persons), to enter the new business activity by introducing the more advanced and cost-effective production technology that enable innovative products. Production facility will involve two production objects. In the first one, metal elements would be roughly cut, then bent and sandblasted, while assembled into the larger elements, furtherly painted and stored. In the second object, the previously cut elements would be fine-tuned and cleaned, while plasticized, and carefully baked in oven (at 160-200°C). As certain social effect, investment realization will engage the two external workers from local rural community, while its exploitation will not have negative impact on the local nature. Besides the economic effect for the cooperative, it could be also expected for the state and local rural community throughout the paid income taxes and salary contributions, or at the end through the rise in overall local consumption. Planed business venture involves adaptation of production facility and purchasing adequate equipment (Table 1. and 2). Investment will be completed during the period 2023-2024. It has been planned to finance just the permanent working capital (PWC) with cooperatives' own assets (Table 3.).

Table 1. Investment in fixed assets, in EUR

No.	Element	Value (with VAT)
I	Production facilities	32,111.61
1.	Adaptation of two production facilities	32,111.61
II	Equipment and mechanization	39,954.33
1.	Electric saws with cutting emulsion concentrate	5,707.76
2.	Owen for polymerization	5,707.76
3.	Equipment for plastic powder appliance	5,707.76
4.	Mobile sandblaster	5,707.76
5.	Pump at wheelchair	5,707.76
6.	Machine for pipe bending (electro)	5,707.76
7.	Equipment for production of plastic and other constructions applied in agriculture	5,707.76
Total		72,065.94

Source: Authors' calculation according to IAE, 2024.

Table 2. Overall value of investment, in EUR

No.	Description	Entered assets	New investment	Overall Investment	Share in overall investment (%)
I	Fixed assets	3,910.63	72,065.94	75,976.58	90.91
1.	Facilities	3,910.63	32,111.61	36,022.24	43.10
1.	Equipment and mechanization	0.00	39,954.33	39,954.33	47.81
II	PWC	391.06	7,206.59	7,597.66	9.09
Total		4,301.69	79,272.54	83,574.23	100.00

Source: Authors' calculation according to IAE, 2024.

Table 3. Source of financing, in EUR

No.	Description	Entered assets	New investment	Overall investment	Share in overall investment (%)
I	Own sources	4,301.69	7,206.59	11,508.29	13.77
1.	Fixed assets	3,910.63	0.00	3,910.63	4.68
2.	PWC	391.06	7,206.59	7,597.66	9.09
II	External sources	0.00	72,065.94	72,065.94	86.23
1.	Fixed assets	0.00	72,065.94	72,065.94	86.23
Total		4,301.69	79,272.54	83,574.23	100.00

Source: Authors' calculation according to IAE, 2024.

Formation of total incomes that derive from business idea realization are visible in Table 4. As it could be seen, implemented investment will locally offer small size greenhouses, useful and affordable to small scale agricultural producers, mainly those involved in seedlings production. In order to simplify the economic analysis, there are assumed constancy in number of produced green houses and their local market prices, i.e. constancy in gained annual incomes derived from investment exercising.

Table 4. Formation of total incomes, in EUR

No.	Product	UM	Years														
			I			II			III			IV			V		
			Price per UM	Annual quantity	Total	Price per UM	Annual quantity	Total	Price per UM	Annual quantity	Total	Price per UM	Annual quantity	total	Price per UM	Annual quantity	total
0	1	2	3	4	5=3x4	6	7	8=6x7	9	10	11=9x10	12	13	14=12x13	15	16	17=15x16
1.	Sale income				72,107.23			72,107.23			72,107.23			72,107.23			72,107.23
1.1	Green house (15*6*2,5m), (plasticized structure)	Pcs	528.51	86.00	45,451.91	528.51	86.00	45,451.91	528.51	86.00	45,451.91	528.51	86.00	45,451.91	528.51	86.00	45,451.91
1.2	Green house (15*6*2,5m), (painted structure)	Pcs	459.57	58.00	26,655.32	459.57	58.00	26,655.32	459.57	58.00	26,655.32	459.57	58.00	26,655.32	459.57	58.00	26,655.32
Total			72,107.23			72,107.23			72,107.23			72,107.23			72,107.23		

Source: Authors' calculation according to IAE, 2024.

Business realization generates certain level of costs of production with their adequate structure (Table 5.). As could be seen, sum of material costs (costs of direct material are dominating, while they account to almost 70% of overall costs of production) is more than doubled compared to the sum of non-material costs (labor costs are dominating, while they are almost 65% of overall non-material costs), what is expected in managing such a line of production. As in case of gained incomes, there is assumed the constancy in costs level over the period of investment exploitation (constancy in volume and prices of used material and labor). Further, by generating the income statement (Table 6.), there could be seen that investment use is profitable over the whole period of investment exploitation.

Table 5. Structure of overall costs, in EUR

No.	Element	Year				
		I	II	III	IV	V
I	Material costs	33,922.76	33,922.76	33,922.76	33,922.76	33,922.76
1.	Direct material	31,785.89	31,785.89	31,785.89	31,785.89	31,785.89
2.	Energy	2,136.87	2,136.87	2,136.87	2,136.87	2,136.87
II	Non-material costs	14,828.13	14,828.13	14,828.13	14,828.13	14,828.13
1.	Depreciation	4,079.99	4,079.99	4,079.99	4,079.99	4,079.99
2.	Labor	8,851.06	8,851.06	8,851.06	8,851.06	8,851.06
3.	Interest (credit)	0.00	0.00	0.00	0.00	0.00
4.	Costs of production services	975.64	975.64	975.64	975.64	975.64
5.	Other non-material costs	921.44	921.44	921.44	921.44	921.44
Total (I+II)		48,750.89	48,750.89	48,750.89	48,750.89	48,750.89

Source: Authors' calculation according to IAE, 2024.

Table 6. Profit and loss statement, in EUR

No.	Element	Years				
		I	II	III	IV	V
I	Overall incomes	72,107.23	72,107.23	72,107.23	72,107.23	72,107.23
1.	Sale incomes	72,107.23	72,107.23	72,107.23	72,107.23	72,107.23
2.	Other incomes	0.00	0.00	0.00	0.00	0.00
II	Overall expenses	48,750.89	48,750.89	48,750.89	48,750.89	48,750.89
1.	Business expenses	48,750.89	48,750.89	48,750.89	48,750.89	48,750.89
1.1.	Material costs	33,922.76	33,922.76	33,922.76	33,922.76	33,922.76
1.2.	Non-material costs without depreciation and interest	10,748.14	10,748.14	10,748.14	10,748.14	10,748.14
1.3.	Depreciation	4,079.99	4,079.99	4,079.99	4,079.99	4,079.99
2.	Financial costs	0.00	0.00	0.00	0.00	0.00
2.1.	Interest (credit)	0.00	0.00	0.00	0.00	0.00
III	Gross profit (I-II)	23,356.34	23,356.34	23,356.34	23,356.34	23,356.34
IV	Income tax	3,503.45	3,503.45	3,503.45	3,503.45	3,503.45
V	Net profit (III-IV)	19,852.89	19,852.89	19,852.89	19,852.89	19,852.89

Source: Authors' calculation according to IAE, 2024.

Now, there are determined all elements required for exercising investment analysis. Firstly, there will be created economic flow (Table 7.), while later there will be calculated the values of static and dynamic indicators for assessment of investment effectiveness. Once again, according to economic flow, there could be seen that investment is profitable.

Table 7. Economic flow, in EUR

No	Element	Zero moment	Year				
			1	2	3	4	5
I	Overall cash inflow	0,00	72,107.23	72,107.23	72,107.23	72,107.23	122,618.75
1.	Total income	0,00	72,107.23	72,107.23	72,107.23	72,107.23	72,107.23
	Salvage value	0,00	0.00	0.00	0.00	0.00	50,511.51
2.	2.1. Fixed assets	0,00					42,913.86
	2.2. PWC	0,00					7,597.66
II	Overall cash outflow	83,574.23	48,174.35	48,174.35	48,174.35	48,174.35	48,174.35
	Value of investment	83,574.23					
3.	3.1. In fixed assets	75,976.58					
	3.2. In PWC	7,597.66					
4.	Costs without depreciation and interest	0,00	44,670.90	44,670.90	44,670.90	44,670.90	44,670.90
5.	Income tax	0,00	3,503.45	3,503.45	3,503.45	3,503.45	3,503.45
III	Net cash flow (I-II)	-83,574.23	23,932.88	23,932.88	23,932.88	23,932.88	74,444.40

Source: Authors' calculation according to IAE, 2024.

Based on formed economic flow there was applied usually used static methods for economic assessment of investments, such are Total Output - Total Input Ratio (Ee), Net Profit Margin (NPM), Accounting Rate of Return (ARR), and Simple Payback Period (SPP), (Tables 8–11.).

In line to derived values for Total Output - Total Input Ratio over the observed period, or in representative year (usually fifth year of exploitation), investing in production of greenhouse structures could be considered economically justified, as Ee is higher than one (Table 8.).

Table 8. Total Output - Total Input Ratio, in EUR (Ee > 1)

Year	Overall incomes	Overall expenditures	Ee
0	1	2	3 = 1/2
I	72,107.23	48,750.89	1.48
II	72,107.23	48,750.89	1.48
III	72,107.23	48,750.89	1.48
IV	72,107.23	48,750.89	1.48
V	72,107.23	48,750.89	1.48

Source: Authors' calculation according to IAE, 2024.

According calculated values for Net Profit Margin (Table 9.), in all observed years of investment use they are higher than assumed price of capital at national market ($i = 7\%$), concluding that investment could be considered economically viable ($NPM > 7\%$).

Table 9. Net Profit Margin (NPM > i), in EUR

Year	Net profit	Overall incomes	NPM
0	1	2	3 = 1/2*100
I	19,852.89	72,107.23	27.53
II	19,852.89	72,107.23	27.53
III	19,852.89	72,107.23	27.53
IV	19,852.89	72,107.23	27.53
V	19,852.89	72,107.23	27.53

Source: Authors' calculation according to IAE, 2024.

Considering gained values for Accounting Rate of Return (Table 10.), there are similar situation to previous one, as in all observed years they are higher than price of capital at national market, perceiving that investment shows economic sustainability ($ARR > 7\%$).

Table 10. Accounting Rate of Return (ARR > i), in EUR

Year	Net income	Initial outlay	ARR
0	1	2	3 = 1/2*100
I	19,852.89	83,574.23	23.75
II	19,852.89	83,574.23	23.75
III	19,852.89	83,574.23	23.75
IV	19,852.89	83,574.23	23.75
V	19,852.89	83,574.23	23.75

Source: Authors' calculation according to IAE, 2024.

In line to made calculations for Simple payback period (Table 11.), invested financial assets in establishment of production of greenhouse structures will be repaid in 3.49 years, or 3 years and 5.90 months, what could be assumed good in compare to usual crediting period for this purpose, or period of investment lifespan (SPP < n).

Table 11. Simple Payback Period (SPP < n), in EUR

Year	Net cash flow	Cumulative net cash flow
0	-83,574.23	-83,574.23
I	23,932.88	-59,641.35
II	23,932.88	-35,708.47
III	23,932.88	-11,775.59
IV	23,932.88	12,157.30
V	74,444.40	86,601.69

Source: Authors' calculation according to IAE, 2024.

In order to include in analysis, the component of time value of money (discounting the previously gained values), there are used few dynamic methods for economic assessment of investment efficiency, such are Net Present Value (NPV), Internal Rate of Return (IRR), and Dynamic Payback Period (DPP), (Tables 12–13.). In relation to the gained value for NPV (Table 12.), investment will make growth of expected profit during the facility exploitation in observed period (discounted for 7%, i.e. $i = 7\%$) for over 50 thousand EUR. Meanwhile, considering gained value for IRR (Table 12.), investment could be assumed profitable, as IRR is much higher than observed discount rate (7%).

Table 12. Net Present Value (NPV) and Internal Rate of Return (IRR), in EUR

No.	Element	Zero moment	Year					Cumulative
			I	II	III	IV	V	
0	1	2	3	4	5	6	7	8
1.	Net cash flow – economic flow (columns 3-7)	-83,574.23	23,932.88	23,932.88	23,932.88	23,932.88	74,444.40	170,175.93
2.	Discount rate (%)	7.00	7.00	7.00	7.00	7.00	7.00	
3.	Discount factor $(1+i)^{-n}$ while i = discount rate, n = lifespan of investment	1.0000	0.9346	0.8734	0.8163	0.7629	0.7130	
4.	Present value of net cash flow (column 3-7)	-83,574.23	22,367.18	20,903.91	19,536.36	18,258.28	53,077.83	134,143.55
5.	NPV (columns 2-7)	50,569.32						
6.	Relative NPV [(columns 2-7) / column 2] > i	0.61 (61%)						
7.	IRR > i	23.69%						

Source: Authors' calculation according to IAE, 2024.

Analyzing the gained results for DPP (Table 13.), there could be expected repayment of invested financial assets in 4.05 years, or 4 years and 0.57 months, what is shorter than usual crediting period, or period of investment lifespan ($DPP < n$).

Table 13. Dynamic Payback Period (DPP < n), in EUR

Years	Present value of net cash flow	Cumulative net cash flow
0	-83,574.23	-83,574.23
I	22,367.18	-61,207.05
II	20,903.91	-40,303.15
III	19,536.36	-20,766.79
IV	18,258.28	-2,508.50
V	53,077.83	50,569.32

Source: Authors' calculation according to IAE, 2024.

Table 14. Break-even point, in EUR

No.	Element	Year				
		I	II	III	IV	V
1.	Incomes (I)	72,107.23	72,107.23	72,107.23	72,107.23	72,107.23
2.	Variable costs (VC)	42,773.82	42,773.82	42,773.82	42,773.82	42,773.82
3.	Fixed costs (FC)	1,897.08	1,897.08	1,897.08	1,897.08	1,897.08
4.	Gross margin (GM = I - VC)	29,333.41	29,333.41	29,333.41	29,333.41	29,333.41
5.	Break-even point (relative) ($BEP_r = (FC / GM) * 100$), in %	6.47	6.47	6.47	6.47	6.47
6.	Break-even point (value) ($BEP_v = (I * BEP_r) / 100$), in EUR	4,663.38	4,663.38	4,663.38	4,663.38	4,663.38
7.	Margin of safety ($MS = (1 - (BEP_v / I)) * 100$), in %	93.53	93.53	93.53	93.53	93.53
8.	Margin of safety (value) ($MS = (I * MS) / 100$), in EUR	67,443.85	67,443.85	67,443.85	67,443.85	67,443.85

Source: Authors' calculation according to IAE, 2024.

Analyzing the investment utilization under uncertainty (Table 14.), in all observed years there are occurred same level of risk, as production volume has not fall below 6.47%, in other words, business incomes have not been below 4,663.38 EUR in observed period. In same time, margin of safety in all years is equal, meaning that production volume could decrease maximally for 93.53%, or business incomes could decrease for 67,443.85 EUR without gaining the loss.

Conclusions

Saving rural areas from devastation in economic and social sense is one of global issues. Forcing the development of entrepreneurial initiative could be one of possible models for rural communities strengthening, while these activities have to be state supported. Cooperatives have important role in keeping rural communities sustainable, as they usually gather and „feed” not just farm owners, but also all farm, or more specifically household members from certain rural territory. They could be incubator of business ideas that are realized and benefit certain rural community.

Cooperative located in western parts of Serbia wants to implement business venture, i.e. to invest in line for production of small size greenhouse structures, that will be later used by cooperative members, or sold at the local market. Prior to that, there was made investment analysis, by the appliance of commonly used static and dynamic methods for assessing the economic efficiency of investments.

According to gained results, planned investment could be considered economically viable, as the values for static and dynamic indicators ranged at satisfactory levels, i.e. Total Output - Total Input Ratio

is over the one (1.48), Net Profit Margin (27.53%), and Accounting Rate of Return (23.75%) are higher than assumed price of capital at national market (7%), while Simple Payback Period is shorter than lifespan of the investment (3.49 compared to 5 years). Similarly, investment exploitation derives Net Present Value of over 50 thousand EUR, and Internal Rate of Return (23.69%) much higher than observed discount rate (7%), while Dynamic Payback Period is also shorter than lifespan of the investment (4.05 compared to 5 years). Considering investment use under uncertainty, it could not be found risky, as production volume has possibility to fall up to 6.47%, i.e. to decrease maximally for 93.53%. Besides, economic impact to the cooperative members and local rural community, investment realization will also derive social impact, as it will employ two additional workers. Meanwhile, investment exploitation does not have any ecological issue to local natural resources.

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