

## ANALYSIS OF PERFORMANCE INDICATORS DR-12 - INVESTMENTS IN STRENGTHENING THE HOLDINGS OF YOUNG ESTABLISHED FARMERS AND RECENTLY ESTABLISHED FARMERS

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**Abstract.** This statement is addressed to stakeholders involved in the financial planning and management of the state's programs, particularly those overseeing the financial year 2023-2027. This includes government officials, policymakers, budgetary committees, and program managers responsible for allocating resources and ensuring the success of social and economic initiatives.

In the financial year 2023-2027, a significant shift has occurred in the state's commitment to supporting various programs. The state contribution has increased from 15% to 25%, signaling a consistent and intensified financial effort. However, this financial commitment should not be merely a numerical adjustment. It should be underpinned by a clear and transparent presentation of how these resources will be allocated across selected projects.

Performance planning takes on a heightened significance in this context. It's not enough to allocate funds; it's crucial to ensure that these resources are used efficiently and effectively. To achieve this, performance metrics must be meticulously defined, monitored, and evaluated. Moreover, these metrics should be aligned with the goals and objectives of the state's financial commitments. In essence, the performance of projects should be assessed not just in terms of outputs but also from the perspective of how they contribute to the financing source.

Another core principle guiding the state's approach is the sustainability of the social economy. This principle extends beyond the simple hiring of the workforce from vulnerable groups. It also involves a more comprehensive strategy, such as the state purchasing or taking over a set quantity of products at a basic rate. This move serves a dual purpose:

**Economic Sustainability:** By purchasing products from social economy enterprises at a basic rate, the state supports the growth and stability of these businesses. This approach helps create a sustainable ecosystem where vulnerable groups find meaningful employment opportunities, contributing to their economic well-being.

**Provision of Essential Services:** The state's purchase of products can be tied to the provision of packages of food for beneficiaries. This not only fulfills a critical social need but also aligns with the state's broader commitment to social welfare. It ensures that the state's financial effort isn't just an abstract allocation of funds but directly translates into tangible benefits for those in need.

**Keywords:** performance, farm consolidation, strategic value, indicator, market, farmers

### INTRODUCTION

In an era marked by evolving agricultural landscapes and the imperative of sustainable food production, DR-12 represents a critical facet of our commitment to nurturing the future of agriculture. This analysis delves into the performance indicators associated with Investments in Strengthening the Holdings of Young Established Farmers and Recently Established Farmers.

Our agricultural sector stands as the backbone of our nation's economy, and its sustenance relies on the dynamic and innovative contributions of young, established farmers and recent entrants to the field. Recognizing their pivotal role in driving growth, food security, and environmental stewardship, DR-12 was conceived as a strategic investment.

As we delve deeper into the data, we will uncover the impact, effectiveness, and potential areas for enhancement of this vital initiative. Our aim is not merely to disburse funds, but to empower, equip, and inspire the next generation of farmers. DR-12 not only serves as an investment in the prosperity of our youth and recent entrants to the farming community but

also stands as a testament to our dedication to fostering innovation, resilience, and growth within the agricultural sector.

This analysis will scrutinize key performance indicators, shedding light on the program's ability to catalyze positive change. Join us in exploring the metrics that gauge the success of this program, from increased yields and enhanced sustainability practices to the economic and social empowerment of our future farming leaders. Together, we aim to illuminate the path toward a more sustainable, vibrant, and inclusive agricultural landscape, securing a prosperous future for both farmers and the nation.

### MATERIAL AND METHODS

We start from the financial data distributed by measure as a distribution system as follows:

- Budget allocation: 169,589,647.00 euros
- Maximum amount: 200,000 euros/project
- Average amount: 180,000 euros/project
- Maximum number of projects: 942 projects,

If we should take these indicators literally, in an optimized model we have the following objective as a quantifiable result.

EUROSTA	Field crops	SO 2013 euro/ha	amortizat ion 20%	equipment (8 years)	NERAMB SUPPORT 300000	PROJECT VALUE	TOTAL SO	SO TOTAL	ALLOCATION MEASURE DR 12		
		1	2	EURO	EURO/HA	HA	EUR/INV	pns/PROI	PROJECT	SO	HA
0										100,000,000.00	
B_1_1_1	Common wheat (including seed)	614.09	123	983	305.33	461,538.46	187,500.00	288,461.54	144,230,769.23	234,869.11	
B_1_1_2	Durum wheat (including seeds)	432.81	87	692	433.22	461,538.46	187,500.00	288,461.54	144,230,769.23	333,242.69	
B_1_1_3	Rye (including seeds)	354.27	71	567	529.26	461,538.46	187,500.00	288,461.54	144,230,769.23	407,121.04	
B_1_1_4	Barley+Orzoaica (including seeds)	529.44	106	847	354.15	461,538.46	187,500.00	288,461.54	144,230,769.23	272,421.37	
B_1_1_5	Oats (including seeds)	331.88	66	531	564.96	461,538.46	187,500.00	288,461.54	144,230,769.23	434,587.11	
B_1_1_6	Corn kernels (including seeds)	641.8	128	1027	292.15	461,538.46	187,500.00	288,461.54	144,230,769.23	224,728.53	
B_1_1_7	Rice (including seeds)	913.26	183	1461	205.31	461,538.46	187,500.00	288,461.54	144,230,769.23	157,929.58	
B_1_1_99	Other cereals (sorghum, triticale, millet, b -banana, others) (including seeds)	452.74	91	724	414.14	461,538.46	187,500.00	288,461.54	144,230,769.23	318,573.06	
B_1_2_1	Green peas, green beans, sweet lupine	533.77	107	854	351.27	461,538.46	187,500.00	288,461.54	144,230,769.23	270,211.46	
B_1_2_2	Lentils, beans, chickpeas and chickpeas (it mediate	454.79	91	728	412.28	461,538.46	187,500.00	288,461.54	144,230,769.23	317,137.07	
		526	105	841	356.54	461,538.46	187,500.00	288,461.54	144,230,769.23	274,262.95	

I took into account the following formula starting from SO:

- SO excludes direct payments and includes production costs;
- the fodder requirement in the case of some characteristics of the animals is included in the SO calculation;
- the amortization value in the agricultural field is a maximum of 20% of SO for the type of culture, which means a larger percentage of the value of production costs.
- Sectoral gross margin on average is 30% of the SO value, at the level of primary marketing in a value equivalent to direct subsidies per hectare including decoupled support
- Optimizing the investment cost is carried out only in relation to the non-reimbursable support, in order to directly evaluate the impact of the financing.

### RESULTS AND DISCUSSIONS

Taking into account the targets proposed in the DR 12 intervention measure sheet of 180,000 euros, the amount of support per project, we made the following calculation based on the grain sector average, because crop rotation is carried out during the project's implementation and monitoring interval.

- 180,000 euros calculated as 841 euros/ha results in an average of 214 ha minimum per farmer.

- the market value of the project is 526 SO/ha \* 214 ha = 112,564 SO/farm

The proposed performance criterion is related to the economic capacity to produce added value within the farm, value that is quantified in taxes and payments to the state.

Another indicator to achieve is the operating profit to be at least 10%.

In our case, the minimum profit should exceed 11,256 euros/year.

- 180,000 euros \* 30% = 54,000 euros during the implementation period, i.e. 10,800 euros / year, 900 euros / month, 4,500 ron / month

Also, the project must ensure at least 1 employee as income assimilated to wages, that is:

- 3,000 ron gross, of which 2,250 net and

- 725 is CAS,

- 67 RON CAM contribution to the insurer's work

The total cost is 3,067 ron/month, i.e. 613 euros/month, 7,360 euros/year.

This cost in the amount of values expressed as production costs is higher on small farms and decreases once the technologies and equipment owned contribute to labor productivity.

For farms up to 100 ha, the number of employees is between 2-3 including the installed farmer.

At 200 hectares, the minimum area for granting the aid of 200,000 euros, a number of 4 employees must be taken into account.

The calculation formula 7,360 euros/year \* 40% (the amount in the production cost assimilated to the salary cost) leads to 18,400 SO, that is to 21 hectares.

The proposal for the economic performance criterion is:

- through the project, 1 employee is hired for a minimum of 50 hectares with the increase of the score to 40 hectares, 30 hectares.

This criterion attracts between 4 and 7 employees per project value, which means approximately 725 + 67 ron = 792 ron/month, i.e. 158 euros/employee/month, the principle attracts an amount of 633 – 1108 euros/month, resulting in a tax amount of 37,980 - 66,480 euros during the monitoring period.

What this means? It means a public aid reimbursement rate during the monitoring period between 21-37% of the financed value.

This minimum commitment has a beneficial impact on the state budget in several ways:

- the percentage of 21-38% covers the participation from the state budget in the part of the non-refundable aid as well as the integrated component, because the non-refundable amount is the sum of the FEADR contribution + the state budget.

At the national level, the support program addresses a number of 1,188,852 beneficiaries. The packages weigh 24 kilograms and contain food worth approximately 300 lei.

If we transform these data, the PNS must be thought in such a way that the amount of 199,727 tons during the program period is supported by this program.

Correlated with the social categories that require food aid, starting from the income per head of family, according to the number of them included according to the law, only 2.4 million people would benefit from aid, which, in this case, would mean 625 euros/year.

In Romania, this category already benefits from food cards in the amount of 250 ron in 6 annual installments, i.e. 1,500 ron, the equivalent of 300 euros.

Is it an integrated approach to this desired?

Given that through sM 6.1, 2015-2018, 10,229 young farmers were installed, who exceed the five years since installation, i.e. before submitting the request for support for this intervention, having the age of up to 45 at the time of submitting the request of financing and are heads of the holding, so a maximum of 10% will benefit from this field of intervention.

As such, eligible applicants are only from the transition period, after the length of time in which there were no sessions,

Objectives SO2, partially SO4 and XCO, CSP04, 05, 06 and partially 12 are strictly related to the efficiency of investments in the farm's capital.

I have posted this table in all the Eurostat code structures agreed by Romania only as an example within this measure, because it is not a sectoral one but includes all the agricultural sectors in which the beneficiaries can intervene by requesting funding.

EUROSTAT codes	Field crops	SO 2013 euro/ha	12.000 SO	minimum area
0	1	2	3	4
B_1_1_1	Common wheat (including seed)	614.09	12000	19.54
B_1_1_2	Durum wheat (including seeds)	432.81	12000	27.73
B_1_1_3	Rye (including seeds)	354.27	12000	33.87
B_1_1_4	Barley+Orzoaica (including seeds)	529.44	12000	22.67
B_1_1_5	Oats (including seeds)	331.88	12000	36.16
B_1_1_6	Corn kernels (including seeds)	641.8	12000	18.70
B_1_1_7	Rice (including seeds)	913.26	12000	13.14
B_1_1_99	Other cereals (sorghum, triticale, m	452.74	12000	26.51
B_1_2_1	Bean peas, bean beans, sweet	533.77	12000	22.48
B_1_2_2	Lentils, beans, peas and chickpeas	454.79	12000	26.39
B_1_3	Potatoes	3167.88	12000	3.79
B_1_4	Sugar beet (excluding seeds)	1449.74	12000	8.28
B_1_5	Root plants for fodder	1101.45	12000	10.89
B_1_6_1	Tobacco	1696.83	12000	7.07
B_1_6_2	Hop	4105.24	12000	2.92
B_1_6_4	Rapeseed (including seeds)	647.72	12000	18.53
B_1_6_5	Sunflower (including seeds)	564.52	12000	21.26
B_1_6_6	Soy (including seeds)	611	12000	19.64
B_1_6_7	Flax for oil (including seeds)	1563.56	12000	7.67
B_1_6_8	Other plants for oil	374	12000	32.09
B_1_6_9	In textile (exclusive of seeds)	307.17	12000	39.07
B_1_6_10	Hemp (exclusive of seeds)	518.11	12000	23.16
B_1_6_12	Medicinal and aromatic plants	937.85	12000	12.80
B_1_6_99	Other industrial plants	717.56	12000	16.72
B_1_7_1_1	Fresh vegetables, melons and	6196.49	12000	1.94
B_1_7_1_2	Fresh vegetables, melons and	7176.16	12000	1.67
B_1_7_2	Fresh vegetables, melons and	27507.66	12000	0.44
B_1_8_1	Flowers in the field	25527.46	12000	0.47
B_1_8_2	Flowers in greenhouses and soil	83743.81	12000	0.14
B_1_9_1	Fodder plants	266.22	12000	45.08
B_1_9_2_1	Fodder plants for silage	1029.19	12000	11.66
B_1_9_2_2	Fodder plants	476.13	12000	25.20
B_1_9_2_99	Other clover fodder plants	662.78	12000	18.11
B_1_10	Seeds and seedlings	2993.73	12000	4.01
B_1_11	Other plants (crops of little econom	592.99	12000	20.24
B_3_1	Permanent pastures and hay	295.04	12000	40.67
B_3_2	Permanent pastures and hayfields	92.33	12000	129.97
B_4_1_1_1	Fruits, trees and shrubs	2812.04	12000	4.27
B_4_1_2	Orchards of currant, fig, raspberry,	3958.34	12000	3.03
B_4_1_3	Fruits, trees and shrubs	1754.4	12000	6.84
B_4_4_3	Vines - table grapes	2170.52	12000	5.53
B_4_5	nurseries	5614.25	12000	2.14
B_4_6	Other permanent crops: wicker, po	487.35	12000	24.62
B_6_1	Mushrooms per 100 square meters	4456.78	12000	2.69

EUROSTAT codes	Name of animal species	SOC 2017 euro/cap	12000 SO	minimum effective SO
0	1	2	3	4
A2010	Cattle under 1 year	265.23	12000	45.24
A2120	Cattle between one and less than	354.73	12000	33.83
A2220	Cattle between one and less than	335.31	12000	35.79
A2130	Cattle of at least two years - males	820.14	12000	14.63
A2230	Cattle at least two years old and	810.32	12000	14.81
A2300F	Cows for milk	1232.7	12000	9.73
A2300G	Cows, other than dairy cows	505.8	12000	23.72
A2410	buffalo	920.02	12000	13.04
A4100	Sheep	96.07	12000	124.91
A4110K	Sheep - ewes for breeding -	59.14	12000	202.91
A4120	Other sheep: lambs, rams,	25.68	12000	467.29
A4210K	Goats - Females for breeding -	124.52	12000	96.37
A4220	Other goats - kids, goats, reformed	38.64	12000	310.56
A3110	Pigs - piglets weighing less than 20	47.37	12000	253.32
A3120	Pigs - sows and breeding gilts	287.21	12000	41.78
A3130	Other pigs - pigs for fattening,	385.79	12000	31.11
A5140	Broiler*	486.59	12000	24.66
A5110O	Laying hens*	2212.42	12000	5.42
A5230	Turkeys*	4558.84	12000	2.63
A5210	Installments*	2775.66	12000	4.32
A5220	Geese*	3810.82	12000	3.15
A5410	Ostriches*	29893.25	12000	0.40
A5240_5300	Other poultry (including quail,	975.14	12000	12.31
A6111	domestic rabbits - females for	15.32	12000	783.29
A6710R	Bee families	69.79	12000	171.94

## CONCLUSIONS

What do we understand from this:

For the field crops sector, we have an average of 13 hectares of rice to 36 hectares of oats, that is, a ratio of 1: 2.7 hectares.

If we take the vegetable sector, we have from 0.4 ha to 1.94 ha, that is, a ratio of 1:4.2 ha.

Keeping the logic of the performance framework, the project selection principles should take into account the profitability of the financial instrument.

The recovery period recommended in the financial indicators is a maximum of 8 years, which largely coincides with the lifetime of agricultural machinery.

- the encouragement and development of holdings managed by young farmers with an appropriate qualification level should be supplemented by including it in incomes assimilated to salaries.

- regarding their membership in the associative structures, I consider that the associative form is not mature enough in Romania in such a way as to represent a path of

success or at least a guarantee of the sale of the product. In general, cereal production does not offer a mature market for capitalization, it is extremely unpredictable to the external production conditions on the markets where the big producers make the price worldwide.

The reorientation of producers must be towards:

- reconfiguration of production on other sectors directly or as a supplier: animal husbandry, vegetable growing, fruit growing, high value forage crops. The SO of the farm increases through this formula, but above all, although it is not stipulated here, these distributions of multi-sector production distribute the risks on several markets that are balanced by price and consumption, so the balance of incomes at the farm level have a consolidated resilience.

- regarding the promotion of modern production technologies and techniques with low impact on the environment, I consider that it is a principle that is based on the acquisition of technology more than technologies as a functioning process, the criterion is rather one that must be correlated with that of knowledge transfer along with technology transfer

- the efficiency of the use of natural resources as well as actions for the purpose of the proper management of risks at the exploitation level should be based on an environmental audit and measures to follow, otherwise only a commitment that can no longer be identified in the evaluation action is scored project quality on efficiency commitments.

- when encouraging the ownership of the holding, a step is taken towards the capitalization of the farm. Productivity, however, is found in the ability to combine land for the use and creation of integrated infrastructure

Complementary to the intervention aimed at setting up young farmers, support will be given to consolidate the holdings of those young farmers who have implemented their business plan for obtaining support for setting up.

With a minimum eligibility of the wheat field crop sector for example, we have a minimum eligibility SO of 11,304,000 across the board. If we look at the 2014-2020 PNDR financing average, we see that the average per hectare financed by machinery was 3,200 euros/ha.

We make a comparative calculation:  $169,589,647 \text{ euros} / 3,200 \text{ euros} = 52,997$  hectares can benefit from financing.

Through the performance model analyzed, in which the financing value per hectare is re-established according to the principle of economic efficiency, we reach an area of 119,674 hectares, that is 225%, we practically double the area and the resulting SO is 40,941,064. Additional SO.

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