

STUDY ON THE INTEGRATION OF SUSTAINABLE DEVELOPMENT EXERCISES IN THE ACCOUNTING MODEL OF A PUBLIC INSTITUTION FOR FORESTRY DOMAIN IN THE SOUTH-MUNTENIA REGION

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Abstract: *Despite the fact that the topic of sustainable development has been dealt with in many international norms and standards, there are very few papers in accounting research that deal with the interconnection between the accounting model and sustainable development, respectively the extent to which the accounting of economic entities reflects the requirements of sustainable development. In this article we have proposed to answer the following questions: "To what extent is labor productivity influenced by integrating the requirements of sustainable development?", "How could the degradation of human capital in an institution be stopped?". In order to know the answers, I have undertaken a qualitative research on the members of the public forestry institution. Thus, we noticed the managerial team's desire for an increase in the satisfaction of our employees and we proposed an accounting model for integrating the requirements of sustainable development. At the local level, this integration can result in a competitive advantage of the institution on the local market, respectively in the improvement of the human development indicators.*

Key words: *employee, sustainable development, exigency, added value.*

JEL Classification: *M41.*

1. Introduction

In this article we have proposed to answer the following questions:

- "To what extent is labor productivity influenced by integrating the requirements of sustainable development?"
- "How could the degradation of human capital be stopped?"

In order to know the answers, I have undertaken a qualitative research on the members of the public forestry institution. I think that the requirements of sustainable development can and should be integrated in the labor productivity. That movement will become an advantage for the entity.

we start from the premise that: the degradation of human capital can't be stopped.

One reason why this entity was selected was that the Dâmbovița Forestry Directorate is in the rankings of the FSC-owned schools (Forest Stewardship Council) in Romania. Worldwide, the FSC-certified area is about 183 million ha, currently Romania has only the FSC system. Romsilva holds a FSC forest management certificate, "within 215 forest hills (323) subordinated to 28 forestry departments (out of 41) located in various areas of Romania, "with a certified total area of approximately 2.32 million hectares of state-owned forest fund¹".

As an area owned in 2015, the Dâmbovița Forestry Directorate had 55075 hectares of forest in its patrimony. The largest share is held by oak hardwoods.

Now we will know the amount of wood that is cut each year from the forests belonging to the Dâmbovița Forestry Directorate. In 2015, the National Forest Company - Romsilva has a harvesting program of 9412 thousand cubic meters. In 2014, a volume of 9076.5 thousand cubic meters of wood was harvested from the public property fund of the state managed by the National Forest Administration - Romsilva. In other words, in 2015 it cut 335,5 cubic meters more than in 2014.

¹ For more details you can access site-ul: <http://www.puterea.ro/economie/romania-are-una-din-cele-mai-mari-suprafete-de-padure-certificata-din-europa-116220.html>, 30.06.2015.

The situation of the private forests in Dâmbovița County on 30 April 2014 is detailed in Table 1, which is 3171594 hectares.

Table no.1. Areas of forest land in possession

Individuals (ha)	Associative forms of ownership (ha)	Religious / Educational Units (ha)	Administrative-territorial units (ha)
1299107	744150	148332	980005

We will continue to present the financial situation of the Dâmbovița Forestry Directorate during 2011-2012 to verify the Romsilva Engineer's statement regarding the profitability of the institution, but also to highlight the ways in which the requirements of sustainable development are integrated into the institution's accounting. This case study was possible by analyzing the financial statements of the institution.

Although the public institution records a net loss of 19047 lei (for 2011) and 17759lei (for 2012), this does not prevent it from wanting to integrate the sustainable development requirements into the accounting model.

Sustainable development requirements that can easily be integrated into the accounting model used by Dâmbovița Forestry Directorate are as follows:

- 1) arranging the workplace for the comfort of the employee and diminishing the working time in order to obtain the maximum efficiency of the employee;
- 2) rethinking the technological process so that the environment and employees are privileged, promoting measures to prevent the degradation of the two types of capital.

2. Integration of the Sustainable Development Exigency Requirement for Employee Comfort in the Accounting Model of the Dâmbovița Forestry Directorate

An example of integrating into the accounting model of the component the cost of sustainable development of headquarters, and the layout of employees' relaxation, will be described in detail below. Silvic Dâmbovița SRL bought flowers in the amount of 206,65lei in 2014, created banks for the place of relaxation of employees worth 500 lei, created a football field worth 2000 lei.

1) Registering flower expenses - as ancillary materials			
	%	=	
			401
			206,65
			Providers
	3028		166,66
Other consumables			
	4426		39,99
VAT deductible			
and concurrently			
	6524.2	=	3028
Expenditure on environmental work			166,66
			Other consumables
2) Recording of expenses with banks for relaxation			
	345	=	711
Finished product			500,00
			Income related to the cost
			of product stocks
and concurrently			

	6524.2	=	345	500,00
Expenditure on environmental work			Finished product	
3) Recording of sports relaxation expenses	2112	=	404	2000,00
Landscaping			Providers of immobilizations	
and concurrently				
	6524.2	=	2112	2000,00
			Landscaping	

As a result of these records in account 652 Environmental Protection Expenditures, we have the amount of 2,666.66 lei, dated (according to Table 2).

Table no. 2. Costs of arranging the workplace for the comfort of the employee in the accounting model of Dâmbovița Forest Directorate

652 Expenditure on environmental protection		
Account symbol	Account name	Amount registered (lei)
6524.2	Expenditure on environmental work	(166,66+500+2000)=2666,66

Source: Own vision

3. Integrate the requirement of sustainable development to promote measures to prevent the degradation of human and natural capital

Next we will present the accounting operation for the registration of a qualification course offered by the Dâmbovița Forestry Department for two of its employees. The qualification is for the Engineer specialization and cost the institution 500.00 lei, the entity considering it as a way of solidifying the relations between the employees.

1) Passing spending on studies and research into internal costs of sustainable development costs

	6525.2	=	614	500,00
Expenditure on solidifying employee relationships			Expenses with studies and research	

Next we will calculate value added rates as an expression of concern to employees.

At microeconomic level, the added value highlights the level of economic power of the economic entity. In our research, we calculated the added value as that difference "between the output of the exercise (obtained by reporting the trade margin to the output of the exercise) and the consumption of goods and services supplied by third parties (intermediate consumption) for that production".

Table no. 3. Elements in the composition of value added rates

Indicator	Value for the financial year 2011	Value for the financial year 2012
Added value	13689441,00 lei	14053488,00 lei
Fiscal value	24493212,00 lei	25138763,00 lei
Gross value of intangible and tangible assets	78857911,00 lei	91720303,00 lei
Average number of employees	435	435
Staff costs	13782392,00 lei	14485935,00 lei

Source: Own processing based on data from the Income and Expenses Statement for 2012, published by Romsilva – Dâmbovița Forestry Directorate.

Knowing the information (presented in Table 3) taken from the financial statements published by the Dâmbovița Forestry Directorate, we have created Table 4 with four efficiency indicators from the prism value point.

Table no. 4. Efficiency indicators calculated on the basis of value added

Indicators	Calculation relationship	Financial exercise	
		2011	2012
Value Added Value (integration rate)	Added value /Fiscal value x 100	55,89%	55,90%
Value added to 1000 lei gross tangible and intangible assets	Value added / Gross value of tangible and intangible assets x 1000	173,59 lei	153,22 lei
Value Added by an Employee (in lei)	Added value /Average number of employees	31470,00 lei	32307,00 lei
Value added to 1 leu personnel expenses	Value Added / Staff Expenses	0,99 lei	0,97 lei

Source: Own processing based on data from the Income and Expenses Statement for 2012, published by Romsilva - Dâmbovița Forestry Directorate

The average number of employees is 435 for each presented year. Given the value of tangible and intangible fixed assets in 2011 of 78857911 lei and 2012 of 91720303 lei, an added value of 1000 lei is observed in 2012 compared to 2011 by 20,37 lei. This is influenced by a poor policy of using recently purchased assets.

As a result of these records in account 652 Environmental Protection Expenditures we have the amount of 500 lei, broken down according to table no.5.

Table no. 5. Cost of production orientation so that the environment and employees are privileged

652 Expenditure on environmental protection		
Account symbol	Account name	Amount registered (lei)
6525.2	Expenditure on solidifying employee relationships	500,00

Source: Own vision

4. Conclusion

Although at present the Dâmbovița Forestry Directorate does not calculate a cost of sustainable development, like many public institutions in Romania, our proposal aims to change this reasoning.

Following discussions with some of the employees of the forestry public institution in the South-Muntenia Region, we can say that there is a need for permanent care to improve the regeneration of forests, and for forestry as a constant task.

Thus, from the data analyzed in these case studies, we can state that the relativity of the cost estimate of sustainable development directly affects the level of calculation of sustainable development indicators.

References

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3. Public Finances Ministry, 2019. *Home*. [online] Available at: <<http://www.mfinante.gov.ro/pagina.html?pagina=acasa>> [Accessed 3 March 2019].