

## EVALUATION OF ACCOUNTING ACQUISITION OF BIOLOGICAL ASSETS AND PROPERTY

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### Apstrakt

The mission and purpose of agricultural enterprises' accounting is to collect data about condition and behavior of all the elements of the agricultural business system, and turning them into information. Accounting business events in enterprises involved in agricultural activities are more specific compared to classic industrial, service and other companies, which is partly the result of specific agricultural production in general, but also caused by character of the individual, primary property position (balance sheet assets) in agricultural companies that requires specific accounting treatment. The agricultural sector is a key sector in the economic development of many countries, particularly less developed countries and countries in transition. Agricultural sector has its own specifics that requires special and accounting information framework for monitoring the impact of incentives for more efficient use of agricultural resources. Accounting information framework in the agricultural sector should be based on the provisions of International Accounting Standard - 41 (Agriculture) in order to be able to compare the results achieved in various countries.

**Key words:** *accounting and information models, the efficiency of resource use, the agricultural sector, agrarian entrepreneurship, financial incentives, tax breaks, accounting standards.*

### Introduction

Agriculture is a very complex system, which derives from its highly complex, heterogeneous structure of production flows functioning, even when one considers its main activities (crop production, agriculture, viticulture, horticulture, animal production, feeding, breeding, production of separate products such as milk, eggs, wool, etc.). Agriculture is an open system, as it operates on the principles of the social environment, and not the laws of nature. Agricultural products, due to its importance for the level of prices for living standard, are in this respect under the strict supervision of the company. Therefore, the position of agriculture in the primary distribution of the economy is more unfavorable than average. Economic disadvantages due to the position of agriculture lower its accumulative and reproductive ability, which limits the rapid and balanced development of agriculture. In this paper, we want to point out the necessity of special accounting and information systems to monitor and measure the efficiency of resources' use in agriculture, which shows a significant development opportunity for Bosnia and Herzegovina as a whole. Agricultural production has a biological-genetic character. Therefore, its scope, pace and character are ongoing, and the role of certain elements of technology is to ensure the primary productive funds: soil fertility, traits of seeds and planting material, and the potential variety or race. In strategic development documents BiH has particularly emphasized the importance of increasing the efficiency of

resources' use in agriculture, because this entity has more than 2/3 of the BiH agricultural resources. Therefore, the focus of the research will be placed on defining the key characteristics of the agricultural sector, the modeling of entrepreneurship according to established specificities of the sector, monitoring and measuring the effects of encouraging innovation and entrepreneurship in the agricultural sector. Accounting for monitoring and measuring the effects of stimulating the development of agro-entrepreneurship will be critically and separately analyzed in terms of adjusting to the orientations of the International Accounting Standard-41 (Agriculture) conditions in BiH. IAS 41 - Agriculture provides so-called accounting treatment of biological assets (biological assets) during a period of growth and declining birth (conception), as well as the initial evaluation of agricultural products at the point of harvest, ie. collection.

### 1. Issues subsequent measurement of biological assets

Behavior of agricultural enterprises, as well as the influence of different environmental factors, determines the connection and operation of the elements that make up the structure of the company. These elements are in different proportions of interconnections and interactions with different behavior. Therefore, the connection should have a system of feedback, which means that the agricultural enterprise is dynamic system, the system of self-regulation. Calculation of the subsequent measurement of biological assets is presented on the following example.

#### Example 1: The subsequent measurement of biological assets

Company from Example 1 Orchard is activated due to gender. The estimated fair value of Orchard minus estimated costs of selling at the moment of activation were identical to the value of capitalized costs of raising Orchard: 55,000. The company estimated useful life of the Orchard for a period of 25 years. Linear method was adopted for the calculation of the estimated annual depreciation and amortization costs: 2.200KM (55.000KM/25god = 2.200KM). After 5 years, the fair value of the Orchard minus any selling cost is estimated at 42,000. After the fifth year, account balance of Orchards-0250 is 55,000 and the 0259-IV of perennial plants 11,000 (5 years h 2,200).

Table 1. Calculation of the effects of subsequent measurement at fair value

Ord. num.	Description	Amount	The amount to be posted
1	The fair value at the time of activation	55.000	
2	Written-off value	11.000	
3	Do not write off the value of	44.000	
4	Subsequent fair value	42.000	
5	<b>The difference (4-3)</b>	2.000	
6	<b>Reduction coefficient (4/3)</b>	0,95455	
7	<i>Diminution in value of biological assets in the account (1h6)</i>	52.500	2.500 <sup>1</sup>
8	<i>Reduction in the allowance account (2h6)</i>	10.500	500 <sup>2</sup>

Source: Izmjene u međunarodnim računovodstvenim standardima, Savez računovođa i revizora RS, april - may 2005. year, p. 150.

<sup>1</sup> Such amount represents the amount to be posted. Was obtained as the difference between the gross value of property increased the cost of a given facility (55000-52500 = 2500).

<sup>2</sup> The obtained amount represents the amount to be posted. Was obtained as the difference between the gross value of the increased allowance account and the value of biological assets that account before subsequent measurement (11000-10500 = 500).

Table 2. The accounting records imperative losses

Ord. num.	Date	Description	Account	Owes	Claims
5)		Impairment losses	5810	500	
		IV perennial plants	0259		500
		<u>for diminution in value of biological assets</u>			

## 2. Classification and treatment of agricultural land

The land on which agricultural activity is carried out, ie. land which the company used as the primary means, agricultural enterprises have to classify and value in accordance with IAS 16 or IAS 40, whichever is applicable. If the land is used as the main tool, then IAS 16 is applied. According to this Standard, the land is recognized in the balance sheet and valued at cost minus any land losses, or at revalued amount. On the other hand, if the land holding value increase in long-term, but not for short-term sale in the ordinary course of business, and the land held for future use is currently unknown, it is believed to be held in order to increase its value. In this case, instead of IAS 16, IAS 40 should be applied.

### Example 2: Acquisition of land

Agricultural company bought 20 acres of farmers' agricultural land for 80,000 KM. Purchased land will be used to perform the basic activities of the company.

Table 3 Purchase of land

Ord. num.	Date	Description	Account	Owes	Claims
6)		Land	0200	80.000	
		Suppliers in the land	4320		80.000
		<u>for acquired agricultural land</u>			

## 3. Billing and accounting records of growth, accretion, translation between categories, translating into categories of livestock breeding, death and emergency slaughter

At the end of each accounting period, a specific process determines the value of the increment. The procedure for calculating the value of gain includes determining the value and effects of growth and revaluation of livestock. It means the correction value of livestock is made on the basis of re-determining the value, in order to adjust the carrying value of livestock to market value. Based on data from animal leaves, the table constitutes turnover of livestock, which, in our example, is as follows:

Table 4. Turnover of livestock

Ord. num.	Description	Cows		Calves		Heifers	
		pieces	kg	pieces	kg	pieces	kg
1	Initial state	115	80.000	20	1.500	50	25.000
2	Fertilized			15	400		
3	Translated from the second category	40	25.000			15	2.500
4	Bought	5	3.750				
5	Excess	-	-				
6	Growth in weight		3.750		4.600		5.750
7	<b>All inputs (2 -6)</b>	<b>45</b>	<b>32.500</b>	<b>15</b>	<b>5.000</b>	<b>15</b>	<b>8.250</b>
8	Sold	15	11.400	-	-	-	-
9	Translated into the second category	-	-	15	2.500	40	2.500
10	Translated to fattening	30	15.000	-	-	-	-
11	Died	1	700				
12	Emergency slaughtered	1	650			1	250
13	Shortage	-	-	-	-	-	-
14	<b>All output (8 to 13)</b>	<b>47</b>	<b>27.750</b>	<b>15</b>	<b>2.500</b>	<b>51</b>	<b>2.750</b>
15	<b>Balance at end of period (1 +7-14)</b>	<b>113</b>	<b>84.750</b>	<b>20</b>	<b>4.000</b>	<b>4</b>	<b>30.500</b>

He then compiles the calculation of gain in weight of an asset based on table puerperium, which in our example is as follows:

Table 5. The calculation of second Growth flock in kilograms

Ord. num.	Description	Cows	Calves	Heifers
1	Balance at end of period(Ord. num.15)	84.750	4.000	30.500
2	Output in the period (no.. 14)	27.750	2.500	2.750
3	Initial state (Ord. num. 1)	80.000	1.500	25.000
4	Entrance to increase during the period except	28.750	400	2.500
5	<b>Growth in weight (1 +2-3-4)</b>	<b>3.750</b>	<b>4.600</b>	<b>5.750</b>

Increment value of livestock is calculated at a price that is lower cost and increase the market price if it is lower as in our example looks like this:

Table 6. Calculation of increment

Categories of livestock	kg	The average price	Total
Growth Cows	3.750	2	7.500
Growth Calves	4.600	4	18.400
Growth Heifers	5.750	3	17.250
<b>Total gain</b>			<b>43.150</b>

### Example 3. Evidence of growth of livestock

Based on data from the previously displayed tables puerperium, billing increments flock in kilograms and value, it is necessary in accounting evidenciju agricultural enterprises.

Table 7. The accounting records of growth of livestock

Ord. num.	Date	Description	Account	Owes	Claims
1)		<b>Cows</b>	02600	7.500	
		<b>Calves</b>	02601	18.400	
		<b>Heifers</b>	02602	17.250	
		Income from activities and product demand for fixed assets	6210		43.150
		<u>entry growth of livestock</u>			

### Conclusion

Agricultural resources in the Republic Srpska and Bosnia and Herzegovina as a whole in relation to the developed countries of the European Union and the United States, are used in an extensive way with very low efficiency. Through various calculations, cost accounting and bookkeeping and other methods, we find that this is a more specific type of posting and some accounts that are not present in other areas of the human economy have been basically used. Agriculture is a specific economic activity because the method in the manufacturing sector still remains at a lower level, when we compare it with other industrial companies. Entrepreneurship development which involves the use of different agricultural resources based on the application of innovation, new technologies, new production organization is in its infancy. Hence, it is necessary to improve the system of business enterprises in the agricultural sector by increasing the productivity of all production factors. Parallel to this process, it is necessary to improve accounting and tax regulations in order to be able to adequately measure the increasing efficiency of agricultural resources. Quality of accounting information enables improvement of financial and tax incentives system for the development of entrepreneurship in the agro Serbian. Due to the limited scope of this paper, some of the issues and problems could be investigated and processed and may be the subject of the further research. This applies particularly to the new forms of incentives for agricultural entrepreneurship and new complementary methods of reporting.

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