

Valuation of Biological Assets

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Introduction

'Green Acre Farms PLC' is a listed company on Colombo Stock Exchange, which has the largest and most modern poultry hatcheries and breeder farms in Sri Lanka. In performing the operations, selective breeding, hatching and sale of commercial day old chicks are provided by the Green Acre Farms (GAF). Following the ruling issued by Institute of Chartered Accountants of Sri Lanka (ICASL), on 2nd March 2012 on bearer Biological Assets, cost basis was used by the company in measuring their biological assets. However, company had to change their policy of measuring the biological assets from cost basis to fair value basis, due to the request by the company's main investor and the auditors.

Discussion of the Issue

The issue aroused with the above mentioned policy change of the company in relation to the measurement of biological assets. According to IAS 41 (Paragraph 12), 'biological assets should be initially and at end of each reporting period has to be measured at fair value less cost to sell price', which is the main reason behind the company's decision to follow the fair value method.

According to the standard, several alternatives are available in determining the fair value of a livestock. Since there is no active market price for the livestock at its current condition, it is recommended to choose the "present value of expected net cash flows from the asset discounted at a current market-determined rate in arriving at the fair value". (IAS 41 - Paragraph 20)

Company has selected the 'Treasury Bill rate' as its current market determined rate, since it is said to be more reliable.

TB rate (risk free) 364 days	6.00%
Adjustment for match with lifetime of livestock	0.50%
Adjustment for risk (risk Premium)	2.00%
Discount rate	8.50%
Discount rate as per client	8.00%
Difference	0.50%

Primarily focused areas by the auditors are as follows;

- Verifying the assumptions (mortality, hatchability, average eggs per week, average cost per week and average prices) used in the calculations by analyzing the past trends of the company and current

market details.

- Physical verification of the biological assets in order to verify the existence as at the reporting date.

Implication of the Issue

Due to the inaccurate assumptions made by the company in obtaining mortality rate and discount factor;

	Growing Stage			Breeding Stage		
Weeks	0	25	26	70
<u>Cash Flows</u>						
Purchase cost of birds	(XXX)					
Feed and other variable cost		(XXX)	(XXX)	(XXX)	(XXX)	(XXX)
Sale of DOC				XXX	XXX	XXX
Sale of Cull Birds						XXX
Net Cash Flows	(XXX)	(XXX)	(XXX)	XXX	XXX	XXX
Discount Factor	1	$1/(1+i)^n$	$1/(1+i)^n$	$1/(1+i)^n$	$1/(1+i)^n$	$1/(1+i)^n$
PV	(XXX)	(XXX)	(XXX)	XXX	XXX	XXX
NPV	XXX					

- Underestimation of Live Stocks
- Underestimation of Differed Tax Liability

Company also failed in making adequate disclosures as required by IAS 41 in the respective financial statements.

E.g.: Methods and assumptions used in determining the fair value.

Conclusion and Recommendations

According to IAS 41, any living plant or an animal can be referred as biological assets, which have to be identified initially as well as at the end of each reporting period based on the fair value; unless otherwise in situations where the fair value cannot be reliably measured by the company, cost method can be used. GAF changed its policy on measuring biological assets (Live Birds) to fair value method. Since the company cannot obtain a quoted price to arrive in to the fair value, present value of future cash inflows and outflows according to IAS 41(paragraph 20) was selected.

This is the first time of adopting this method by the company. Their assumptions on mortality and discount rates were significantly differ from the actual. Therefore the livestock was understated and it is requested to make

adjustments to correct the value of the livestock, profit for the year and differed tax.

Since this change of adopting fair value method from cost method is classified as a 'policy change', value of the livestock is adjusted for 3 years as follows. (IAS 8 Paragraph 19(b))

<u>1st Year 2014</u>	2 nd Year - 2013 (Comparative year)	3 rd Year - 2012
Live Stock Dr Cost of Sales Cr	Live Stock Dr Cost of Sales Cr	Live Stock Dr Retain Earnings Cr