### FINANCIAL REPORTING Accounting for Agriculture under FRS 102





Robert Kirk, CPA, is Professor of Financial Reporting at the University of Ulster. Robert is also author of the CPA Ireland Skillnet's recent publication A new era for Irish & UK GAAP – A quick reference guide to FRS102 which is available on www.cpaireland.ie.

### Introduction

The 14th March 2013 was not only a great day out at the Cheltenham Festival but also saw the long awaited publication of FRS 102 The FRS Applicable in the UK and *Republic of Ireland* which sees the final death of local accounting standards and their replacement by a single 340 page standard based on international financial reporting standards. It is substantially the same as the International Accounting Standards Board's (IASB) IFRS for SMEs but there are a number of important differences particularly in reintroducing many of the options that currently exist in UK/Irish accounting standards to meet the needs of local users and also to ensure compliance with Company Law as most other countries in Europe are not introducing the IFRS for SMEs and thus the EU 4th and 7th Directives still remain in force through our Companies Acts.

### Background to the development of Section 34 Specialised Activities (Agriculture) FRS 102

There have never been any specific local accounting standards in the UK/Ireland for the agricultural sector but for a number of years the IASB have had a unique standard, IAS 40 Agriculture under the full IFRSs. The IASB also incorporated a summarised version of that standard in their own IFRS for SMEs and so the Financial Reporting Council (FRC) have felt compelled to include the topic in FRS 102 as well.

# Accounting for Agriculture under FRS 102

In this edition of Accountancy Plus Robert Kirk examines the implications of the new standard on the agricultural sector which is so important to the Irish economy.

One has to remember that the FRS only applies to those reporting entities that intend to provide a fair presentation (i.e. a true and fair view) of their financial statements. Thus it is compulsory for limited companies within the agricultural industry but it is still best practice for sole traders and partnerships as well.

The standard will be applied to those entities that are engaged in agricultural activity when determining their accounting policies for each class of biological asset and agricultural produce.

# Recognition

There are a number of important definitions in the FRS relating to agriculture and it is important that these are clearly defined at the outset as follows:

# Agricultural activity

The management by an entity of the biological transformation of biological assets for sale, into agricultural produce or into additional **biological assets**.

### Agriculture produce

The harvested product of the entity's **biological assets**.

# **Biological asset**

A living animal or plant.

### Fair value

The amount for which an asset could be exchanged, a liability settled, or an equity instrument granted could be exchanged, between knowledgeable, willing parties in an arm's length transaction.

The recognition principles have been significantly changed since the original exposure draft which was proposing to adopt the fair value model where fair values could be obtained without undue cost or effort. A number of commentators felt that making the fair value compulsory would be unduly arduous. FRS 102, however, now gives entities a clear policy choice between the cost model and the fair value model.

Following the same principles for other assets and in line with the basic concepts and principles in Section 2 of the FRS an entity can only recognise a biological asset or an item of agricultural produce when, and only when:

- (a) the entity controls the asset as a result of past events;
- (b) it is probable that future economic benefits associated with the asset will flow to the entity: and
- (c) the **fair value or cost** of the asset can be **measured reliably**.

Examples of biological assets and agriculture produce are provided below:

Biological assets	Agricultural produce	Products that are the result of processing agricultural produce after harvest
Sheep	Wool	Yarn, carpet
Trees in a plantation	Felled trees	Logs, lumber
forest	Cotton	Thread, clothing
Plants	Harvested cane	Sugar, alcohol
Dairy cattle	Milk	Cheese, butter
Pigs	Carcass	Sausages, cured hams
Bushes	Leaves	Tea, cured tobacco
Vines	Grapes	Wine, juice, raisins
Fruit trees	Picked fruit	Processed fruit
Cacao trees	Cacao pods and beans	Chocolate liquor, chocolate

# Measurement

For each class of biological asset and its related agricultural produce, therefore, an entity must choose as its accounting policy either:

- (a) the fair value model; or
- (b) the cost model

However, If an entity has chosen the fair value model for a class of biological asset and its related agricultural produce, it is not subsequently permitted to change its accounting policy back to the cost model.

# Fair value model

### Measurement

Biological assets should be measured at fair value less costs to sell, both on initial recognition and at each reporting date. Any changes in fair value less costs to sell are reported in profit or loss.

Agricultural produce harvested from an entity's biological assets must be measured at the point of harvest at its fair value less costs to sell. That then becomes the cost at that date when applying Section 13 *Inventories* or another applicable section of the FRS.

In determining fair value, an entity effectively applies the fair value hierarchy by maximising the use of quoted prices in active markets, if applicable, but it may have to resort to more subjective benchmarks as follows:

- (a) If an active market exists for a biological asset or agricultural produce in its present location and condition, the quoted price in that market. If an entity has access to different active markets, it should adopt the price existing in the market that it expects to use.
- (b) If an active market does not exist, an entity uses one or more of the following, when available, in determining fair value:
  - (i) the most recent market transaction price, provided that there has not been a significant change in economic circumstances between the date of that transaction and the end of the reporting period;
  - (ii) **market prices** for **similar assets** with adjustment to reflect differences; and
  - (iii) sector benchmarks e.g. the value of an orchard expressed per export tray, bushel, or hectare, and the value of cattle expressed per kilogram of meat.
- (c) If the sources in (b) suggest different conclusions as to fair value, an entity should consider the reasons for those differences, to arrive at the most reliable estimate of fair value within a relatively narrow range of estimates.
- (d) In some circumstances, fair value may be readily determinable from calculating the present value of expected net cash flows from the asset discounted at a current market determined rate as long as it is a reliable measure

However, if the fair value cannot be measured reliably, the entity must apply the cost model to that biological asset until such time that the fair value can be reliably measured.



# Exchequer Software Ireland Complete Business Solutions

...the missing piece in your organisation

- Exchequer Accounting Software, Fast access to accurate information
- Exchequer CRM, Outstanding Customer & Sales Management
- Dependable and Easy to use Earnie Payroll
- Integrated eCommerce & Web Solutions
- Solutions for all industries, including Distribution, Financial, Retail, Service, Engineering, Construction, Corporate, IT and many more...



To find out more... phone: (01) 450 6820 email: info@exchequer.ie visit: www.exchequer.ie

► Continued on Page 12

### FINANCIAL REPORTING Accounting for Agriculture under FRS 102

BY Robert Kirk

Continued from Page 11

### Example

Moneyrea Ltd raises cattle for the beef industry. At 31 December 2015 the entity's herds included 800 18-month-old cattle. At 31 December 2015 the quoted price for live cattle delivered to the local slaughterhouse to which the entity delivers its livestock is €400 per 18-month-old animal.

The slaughterhouse is located 25 miles from the entity's farmland where the cattle are raised. Carriers providing cattle transport services to the entity charge €120 per trip from the entity's farm to the slaughterhouse using a 10-cow carrier. No incremental selling costs arise on the sale to the slaughterhouse. At 31 December 2015 the fair value less costs to sell of the herd of cattle (biological assets) is determined as €310,400.

# Solution:

The fair value of cattle sold to the slaughterhouse is the quoted price less transport costs to the slaughter house:

Fair value	800 units of cattle × €400 quoted price per live animal	= €320,000
Transport costs:	€120 cost per trip × 80 trips (800 units ÷ 10 cattle per truck)	= €9,600

### €310,400

However, assume the facts are the same as above except that Moneyrea Ltd sells the cattle to slaughterhouses located in two different cities. City A is 30 miles away from the farm where the cattle are raised. The carrier charges  $\in$ 120 per trip for a 10-cow carrier. City B is 80 miles away from the farm and the carrier charges  $\in$ 200 per trip for a 10-cow carrier. At 31 December 2015 the quoted price for a live animal delivered in City A is  $\in$ 400 and  $\in$ 340 in City B. No incremental selling costs arise in either market.

The entity expects to sell 80% of its production in City A and 20% in City B.

Because the entity expects to sell 80% of its herd of cattle in City A and 20% in City B, it measures the fair value less costs to sell in each market based on the expected usage of the two markets (ie 80% City A and 20% City B). Consequently, at 31 December 2015 the fair value less costs to sell of its cattle (biological assets) is determined to be €299,520.



# Solution:

The fair value of the cattle sold in City A is the market price in City A less the transport costs to City A:

Market price:	800 units of cattle × 80% × €400	= €256,000
Transport costs:	€120 cost per trip × 64 trips (ie 800 units of cattle × 80% ÷ 10 cattle per truck)	= €7,680

The fair value of the 400 cattle €248,320 to be sold in City A

The fair value of the cattle sold in City B is the market price in City B less the transport costs to City B:

Market price:	800 units of cattle × 20% × €340	= €54,400
Transport costs:	€200 cost per trip × 16 trips (ie 800 units of cattle × 20% ÷ 10 cattle per truck)	= €3,200

The fair value of the 100 cattle €51,200 to be sold in City B

### Disclosures

Due to the subjective nature of the fair value model there is quite an extensive list of disclosures for each class of biological asset as follows:

- (a) A description of each class of biological asset.
- (b) The methods and significant assumptions applied in determining the fair value of each class of biological asset.
- (c) A reconciliation of changes in the carrying amount of each class of biological asset between the beginning and the end of the current period. The reconciliation should include:

(i) the gain or loss arising from changes in fair value less costs to sell;

- (ii) purchases;
- (iii) sales;
- (iv) harvest;
- (v) business combinations; and
- (vi) other changes.

A possible illustration of the reconciliation for an apple grower might be as follows:

Reconciliation of the carrying amounts of apple trees:

	Mature trees	Immature trees
	€	€
Balance at 1 January 2015	92,850	10,350
Increase resulting from planting new trees		4,200
Reclassification	4,050	(4,050)
Decrease resulting from harvesting	(14,700)	
Gains arising from changes in fair value less costs to sell	9,600	1,200
Balance at 31 December 2015	91,800	11,700
Increase resulting from planting new trees		2,700
Reclassification	8,670	(8,670)
Decrease resulting from harvesting	(17,670)	
Gains arising from changes in fair value less costs to sell	13,800	4,500
Balance at 31 December 2016	96,600	10,230

If an entity cannot measure any individual biological assets at fair value (if they cannot be reliably measured) and thus have to use the cost model, it must explain why fair value cannot be reliably measured. If the fair value becomes reliably measurable during the current period an entity must explain why fair value has become reliably measurable again and the effect of the change.

The methods and significant assumptions applied in determining fair value at the point of harvest of each class of agricultural produce must be disclosed.

# **Cost Model**

#### Measurement

Biological assets are measured at cost less any accumulated depreciation and any accumulated impairment losses. Agricultural produce harvested from an entity's biological assets are measured at the point of harvest at either:

- (a) the lower of cost and estimated selling price less costs to complete and sell; or
- (b) its fair value less costs to sell. Any gain or loss arising on initial recognition of agricultural produce at fair value less costs to sell is included in profit or loss in the period it arises.

That measurement becomes the cost at that date when applying Section 13 Inventories or another applicable section of the FRS.

### Disclosures

The following should be disclosed for each class of biological asset measured using the cost model:

- (a) a description of each class of biological asset;
- (b) the depreciation method used;
- (c) the useful lives or the depreciation rates used; and
- (d) a reconciliation of changes in the carrying amount of each class of biological asset between the beginning and the end of the current period. The reconciliation must include:
  (i) purchases;
  - (ii) sales;
  - (iii) harvest;
  - (iv) business combinations;
  - (v) impairment losses recognised or reversed; and
  - (vi) other changes.

An entity must disclose, for any agricultural produce measured at fair value less costs to sell, the methods and significant assumptions applied in determining the fair value at the point of harvest of each class of agricultural produce.

# Summary

Although the standard does introduce fair value reporting for agricultural activities it is only an option and it is likely that many entities will report under the cost model. One other change that has recently been made by the FRC is to introduce the accruals model as well as the performance model as an option when accounting for grants. That will mean that most farmers will adopt the accruals model and spread the grants against their related expenditure whereas under the performance model grants would, in most instances, be reported immediately in profit as there may not be any performance conditions attached to the grant aid.