



IFRS[®]
Accounting

Educational Module 34
Specialised Activities

IFRS for SMEs[®]

Accounting Standard

Third Edition



International Accounting Standards Board

IFRS[®] Foundation
Supporting Material for the
***IFRS for SMEs[®]* Accounting Standard**

including the full text of
Section 34 *Specialised Activities* of the
IFRS for SMEs Accounting Standard issued by
the International Accounting Standards Board in February 2025

with extensive explanations, self-assessment questions and a case study

This document is not part of the *IFRS for SMEs* Accounting Standard or IFRS Accounting Standards and does not add to or otherwise change the requirements in the Standards. It was developed to aid stakeholders' understanding of our Standards. Views expressed in the document do not necessarily reflect those of the International Accounting Standards Board or the IFRS Foundation. The document should not be relied upon as professional or investment advice.

Copyright © 2026 IFRS Foundation

All rights reserved. Reproduction and use rights are strictly limited. No part of this publication may be translated, reprinted, reproduced or used in any form either in whole or in part or by any electronic, mechanical or other means, now known or hereafter invented, including photocopying and recording, or in any information storage and retrieval system, without prior permission in writing from the IFRS Foundation.

The IFRS Foundation has trade marks registered around the world including 'FSA[®]', the 'Hexagon Device' logo[®], 'IAS[®]', 'IASB[®]', 'IFRIC[®]', 'IFRS[®]', the 'IFRS[®] logo', 'IFRS for SMEs[®]', 'ISSB[®]', 'International Accounting Standards[®]', 'International Financial Reporting Standards[®]', 'International Financial Reporting Standards Foundation[®]', 'IFRS Foundation[®]', 'NIIF[®]', 'SASB[®]', 'SIC[®]', 'SICS[®]', and 'Sustainable Industry Classification System[®]'. Further details of the IFRS Foundation's trade marks are available from the IFRS Foundation on request.

The IFRS Foundation is a not-for-profit corporation under the General Corporation Law of the State of Delaware, USA and operates in England and Wales as an overseas company (Company number: FC023235) with its principal office in London.

Contents	<i>from page</i>
INTRODUCTION	5
What is the <i>IFRS for SMEs</i> Accounting Standard?	5
What does this module cover?	5
Which version of the Standard does the module refer to?	6
What is in the requirements?	6
What has changed in the third edition of the Standard?	7
REQUIREMENTS AND EXAMPLES	8
Scope of this section	8
Agriculture	8
Exploration for and evaluation of mineral resources	45
Service concession arrangements	51
SIGNIFICANT ESTIMATES AND OTHER JUDGEMENTS	64
TRANSITION REQUIREMENTS	66
COMPARISON WITH FULL IFRS ACCOUNTING STANDARDS	67
TEST YOUR KNOWLEDGE	69
APPLY YOUR KNOWLEDGE	74
Case study	74
Answer to Case study	76

The requirements of Section 34 *Specialised Activities* of the *IFRS for SMEs* Accounting Standard are set out in this module and shown with grey shading. Appendix B of the *IFRS for SMEs* Accounting Standard contains the glossary (Glossary) and is part of the requirements. Terms defined in the Glossary are reproduced in **bold type** the first time they appear in the text of Section 34.

This module has been prepared by the International Accounting Standards Board (IASB) technical staff. The educational notes and examples inserted by the staff are not shaded. These educational notes and examples do not form part of the *IFRS for SMEs* Accounting Standard and have not been approved by the IASB.

INTRODUCTION

What is the *IFRS for SMEs*® Accounting Standard?

The *IFRS for SMEs* Accounting Standard (Standard) is intended for use by small and medium-sized entities that publish general purpose financial statements and that do not have public accountability—see Section 1 *Small and Medium-sized Entities* of the Standard.

The objective of general purpose financial statements is to provide financial information about an entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity.

More information about the Standard and its supporting materials is available on the IFRS Foundation website: www.ifrs.org.

What does this module cover?

This educational module supports the requirements for accounting and reporting by small and medium-sized entities (SMEs) that are involved in agriculture, extractive activities and service concession arrangements, in accordance with Section 34 *Specialised Activities* of the Standard.

The module:

- provides explanations and examples to improve understanding of the requirements in Section 34;
- identifies the significant judgements required to account for and report agricultural activities, extractive activities and service concession arrangements;
- includes questions designed to test your understanding of the Section 34 requirements; and
- includes a case study that provides a practical opportunity to apply the Section 34 requirements.

After completing the module, you should be able:

- to identify whether an activity is in the scope of Section 34;
- to identify when a biological asset or agricultural produce should be recognised in the financial statements;
- to identify when a biological asset is a bearer plant;

-
- to understand how to measure biological assets and the agricultural produce harvested from biological assets, and be able to determine whether the fair value of a biological asset is readily determinable without undue cost or effort;
 - to determine when a bearer plant can be measured separately from the produce on it without undue cost or effort;
 - to present and disclose biological assets in the financial statements;
 - to account for exploration and evaluation expenditures incurred by an entity engaged in the exploration for, or evaluation of, mineral resources;
 - to account for service concession arrangements, including being able to determine whether the service concession operator has a financial asset, an intangible asset, or both; and
 - to demonstrate an understanding of the significant judgements that are required in the accounting for the three types of specialised activities that are addressed in Section 34.

Which version of the Standard does the module refer to?

Any reference in this module to ‘the *IFRS for SMEs* Accounting Standard’ is to the third edition of the Standard, issued in February 2025.

What is in the requirements?

Section 34 of the *IFRS for SMEs* Accounting Standard specifies the accounting and reporting requirements for three types of specialised activity—agriculture, extractive activities that involve the exploration for and evaluation of mineral resources, and service concession arrangements. These activities are not considered to be related and there are consequently no common requirements. Each activity is dealt with separately in Section 34 and in this module.

Agriculture (paragraphs 34.2 to 34.10)

Agricultural activity as defined in the Glossary is the management by an entity of the biological transformation of biological assets for sale, into agricultural produce or into additional biological assets. An entity that is engaged in agricultural activity determines its accounting policy for each class of its biological assets in the scope of Section 34 by:

- (a) using the fair value model for those biological assets for which fair value is readily determinable without undue cost or effort; and
- (b) using the cost model for all other biological assets.

Agricultural produce harvested from an entity’s biological assets is measured at its fair value less costs to sell at the point of harvest.

A bearer plant is defined in the Glossary as a living plant that is used in the production or supply of agricultural produce; is expected to bear produce for more than one period; and has a remote likelihood of being sold as agricultural produce, except for incidental scrap sales.

Section 34 does not apply to bearer plants that, at initial recognition, can be measured, both initially and on an ongoing basis, separately from the produce on them without undue cost or effort (see Section 17 *Property, Plant and Equipment*). However, Section 34 applies to the produce on those bearer plants.

Exploration for and evaluation of mineral resources (extractive activities) (paragraphs 34.11 to 34.11G)

An entity that is engaged in the exploration for, or evaluation of, mineral resources applies its judgement in determining an accounting policy that specifies which expenditures are recognised as exploration and evaluation assets that result in information that is relevant and reliable (in accordance with paragraph 10.4 of Section 10 *Accounting Policies, Estimates and Errors*). However, in making this judgement, it is exempt from considering the requirements and guidance of the Standard for similar and related issues, and from considering Section 2 *Concepts and Pervasive Principles* (in accordance with paragraph 10.5 of Section 10).

Exploration and evaluation assets are initially measured at cost. Subsequently, an entity applies Section 17 and Section 18 *Intangible Assets other than Goodwill* to those assets, according to the nature of the assets acquired.

When an entity has an obligation to dismantle or remove an item, or to restore the site, such obligations and any associated costs are accounted for in accordance with Section 17 and Section 21 *Provisions and Contingencies*.

Exploration and evaluation assets are assessed for impairment when facts and circumstances suggest that the carrying amount of an exploration and evaluation asset may exceed its recoverable amount. An entity determines an accounting policy for allocating exploration and evaluation assets to cash-generating units or groups of cash-generating units and then performs an impairment test in accordance with Section 27 *Impairment of Assets*. An entity treats exploration and evaluation assets as a separate class of assets and makes the disclosures required by either Section 17 or Section 18 consistent with how the assets are classified.

Service concession arrangements (paragraphs 34.12 to 34.16)

A service concession arrangement is an arrangement whereby a government or other public sector body (the grantor) contracts with a private operator to develop (or upgrade), operate and maintain the grantor's infrastructure assets, such as roads, bridges, tunnels, airports, energy distribution networks, prisons or hospitals. There are two principal categories of service concession arrangements. Either the operator receives a financial asset or an intangible asset. Sometimes, a single contract may contain both types. Categorisation (as a financial asset, an intangible asset, or both) determines the accounting policy adopted by the operator.

What has changed in the third edition of the Standard?

The IASB changed Section 34 in the third edition of the Standard by:

- adding a requirement to account for bearer plants that, at initial recognition, can be measured separately without undue cost or effort, in accordance with Section 17 (see paragraphs 34.2–34.2B);
- removing guidance on fair value measurement as a consequence of the new Section 12 *Fair Value Measurement* (see paragraph 34.6) and relocating to the new Section 12 some of the disclosure requirements relating to the fair value measurement of biological assets (see paragraph 34.7(b)); and
- adding a requirement to treat exploration and evaluation assets as a separate class of assets and make the disclosures required by either Section 17 or Section 18 (see paragraph 34.11G).

Transition requirements for these changes are explained on page 66.

REQUIREMENTS AND EXAMPLES

Scope of this section

- 34.1 This section provides guidance on financial reporting by SMEs involved in three types of specialised activities—agriculture, extractive activities, and service concessions.

Educational notes

Section 34 of the Standard is applied by small and medium-sized entities that have agricultural or extractive activities or are operators in service concession arrangements. An entity engaged in any of the following activities is required to apply Section 34:

- agricultural activities, defined as the management by an entity of the biological transformation of biological assets for sale, into agricultural produce or into additional biological assets. A biological asset is a living animal or plant.
- extractive activities, defined as activities that involve the exploration for, or evaluation of, mineral resources (for example, oil, natural gas and similar non-regenerative resources).
- service concession arrangements, defined as arrangements in which a government or other public sector body (the grantor) contracts with a private operator to develop (or upgrade), operate and maintain the grantor's infrastructure assets, such as roads, bridges, tunnels, airports, energy distribution networks, prisons or hospitals.

Entities whose activities are within the scope of Section 34 are required to apply all the other relevant sections of the Standard.

Agriculture

- 34.2 An entity applying this Standard that is engaged in **agricultural activity** shall determine its accounting policy for each class of its **biological assets**, except for **bearer plants** that can be measured separately from the produce on them without undue cost or effort (see paragraph 34.2A), as follows:
- (a) the entity shall use the **fair value** model in paragraphs 34.4–34.7 for those biological assets for which fair value is readily determinable without undue cost or effort; and
 - (b) the entity shall use the cost model in paragraphs 34.8–34.10 for all other biological assets.

-
- 34.2A This section does not apply to bearer plants that, at initial **recognition**, can be measured, both initially and on an ongoing basis, separately from the produce on them without undue cost or effort (see Section 17 *Property, Plant and Equipment*). However, this section applies to the produce on those bearer plants. If, at initial recognition, an entity determines that bearer plants cannot be measured separately from the produce on them without undue cost or effort initially or on an ongoing basis, this section applies to the entire plant.
- 34.2B Examples of plants that are not bearer plants:
- (a) plants cultivated to be harvested as **agricultural produce** (for example, trees grown for use as lumber or trees that are cultivated both for their fruit and for their lumber); and
 - (b) annual crops (for example, maize and wheat).

Definitions

The following definitions are reproduced from the Glossary:

Agricultural activity is the management by an entity of the biological transformation of biological assets for sale, into agricultural produce or into additional biological assets.

Agricultural produce is the harvested product of the entity's biological assets.

A **biological asset** is a living animal or plant.

A **bearer plant** is a living plant that:

- (a) is used in the production or supply of agricultural produce;
- (b) is expected to bear produce for more than one period; and
- (c) has a remote likelihood of being sold as agricultural produce, except for incidental scrap sales.

Educational notes

Agricultural activity

For an entity's biological assets to be in the scope of Section 34, the entity must be engaged in the management of the biological transformation of biological assets for sale, into agricultural produce or into additional biological assets (agricultural activity). Such management distinguishes agricultural activity from other activities. For example, harvesting from unmanaged sources (such as ocean fishing and deforestation) is not agricultural activity. Agricultural activities do not include using animals for competitions, racing or exhibitions.

Bearer plants

A bearer plant is a class of biological asset that is held by an entity solely to grow produce over its productive life. After this time, the plants are usually scrapped. Consequently, the only significant future economic benefits from bearer plants arise from selling the agricultural produce that they create.

To be a bearer plant, a biological asset must meet all of these conditions:

- it is a living plant;
- it is used in the production or supply of agricultural produce;
- it is expected to bear produce for more than one period; and
- it has a remote likelihood of being sold as agricultural produce, except for incidental scrap sales.

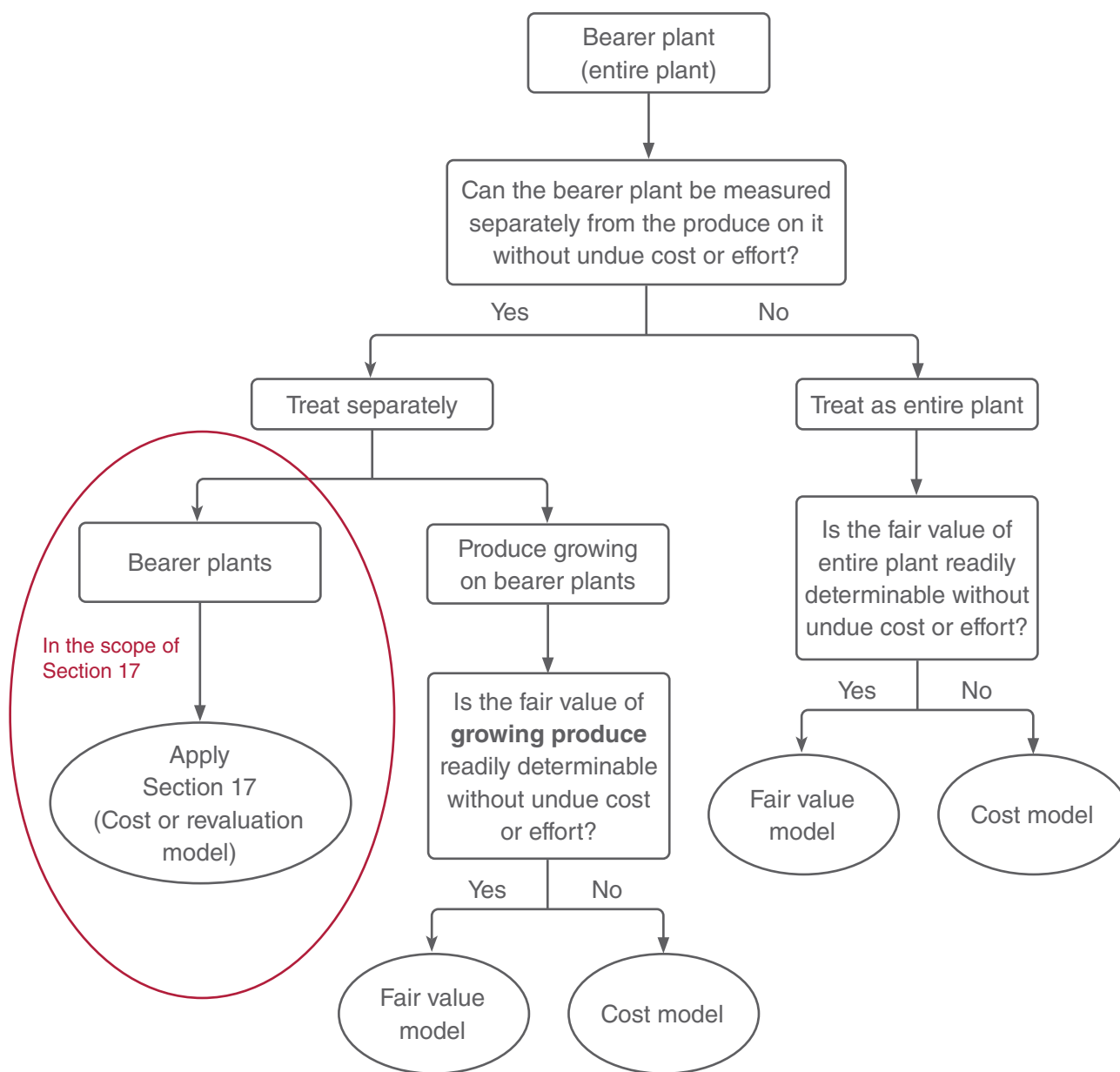
When bearer plants are no longer used to bear produce, they might be cut down and sold as scrap—for example, for use as firewood. Incidental scrap sales would not prevent a plant from satisfying the definition of a bearer plant.

Bearer plants meet the definition of property, plant and equipment. The use of mature bearer plants to produce agricultural produce is similar to the use of production plant and equipment to manufacture goods. An entity derives economic benefits from bearer plants and production plants in a similar way, which is unlike the way an entity derives economic benefits from biological assets harvested for sale. The progressive decline in the future earning potential of a bearer plant over its life is also similar to other depreciable assets like plant and machinery.

If a biological asset meets the definition of a bearer plant and it can be measured separately from the produce growing on it without undue cost or effort then it is in the scope of Section 17, not Section 34 (see paragraph 34.2A). Plants such as tea bushes, grape vines, oil palms and rubber trees often meet the definition of a bearer plant. Nevertheless, the produce growing on the bearer plant is always in the scope of Section 34. For example, the tea leaves, grapes, oil palm fruit and latex are within the scope of Section 34 while they are attached to the bearer plant.

If a bearer plant cannot be measured separately from the produce growing on it without undue cost or effort, then the entire bearer plant (including the produce on it) is within the scope of Section 34.

The flow diagram below shows how to identify the appropriate accounting treatment for bearer plants:

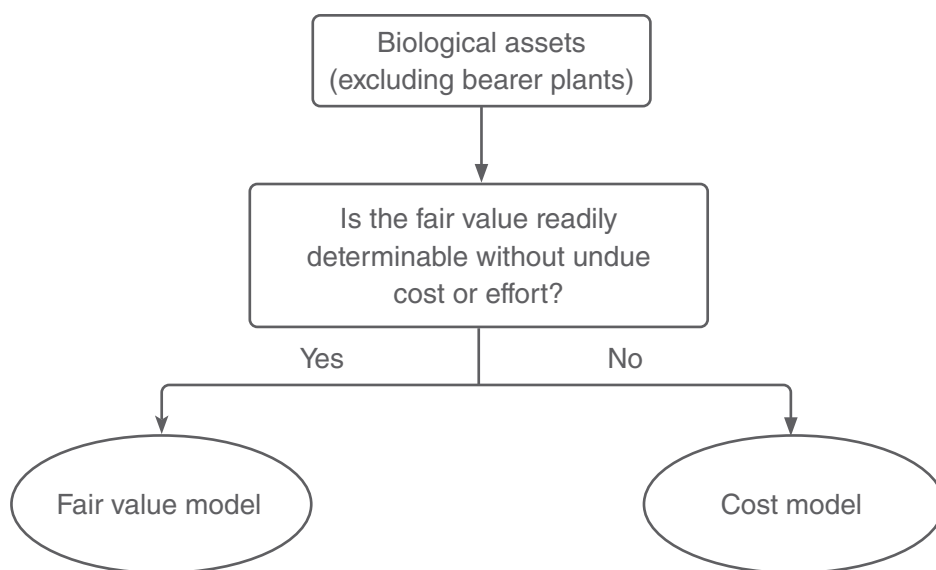


Bearer livestock

Livestock used in the production or supply of agricultural produce are always in the scope of Section 34 (for example, animals used for breeding purposes or cows used to produce milk).

Accounting policy for biological assets in Section 34

An entity does not have a free choice in measuring its biological assets in the scope of Section 34. It must use the fair value model for all classes of biological assets for which fair value is readily determinable without undue cost or effort. All other classes of biological assets are measured using the cost model.



Undue cost or effort exemptions in Section 34

Entities with agricultural activities may need to make an undue cost or effort assessment in two situations:

- when initially recognising a bearer plant—making an assessment of whether the plant can be measured separately (both initially and on an ongoing basis) from the produce growing on it without undue cost and effort. This assessment determines whether the bearer plant is in the scope of Section 17 or Section 34.
- when determining the accounting policy for each class of biological assets in the scope of Section 34—making an assessment of whether fair value is readily determinable without undue cost or effort. This assessment determines whether the fair value model is used for measurement of a class of biological assets.

An entity's determination of whether applying a requirement in the Standard would involve undue cost or effort depends on the entity's specific circumstances and on its judgement in assessing the costs and benefits. To make this judgement, an entity applies paragraphs 2.28–2.30 of the Standard and considers how users' decision-making could be affected by not having the related information.

An entity would spend undue cost or effort applying a requirement if the incremental cost (for example, valuers' fees) or additional effort (for example, endeavours by employees) substantially exceeds the benefits users would receive from having the information. If an entity already has, or could easily and inexpensively acquire, the information necessary to comply with a requirement, any related undue cost or effort exemption would not be applicable. In that case, the benefits to the users of the financial statements of having the information would be expected to exceed any further cost or effort by the entity.

Initial recognition of bearer plants

An entity makes an upfront assessment of whether a bearer plant can be measured separately (initially and on an ongoing basis) from the produce growing on it at initial recognition, based on information about the costs and benefits of applying the requirement at the time of initial recognition.

This upfront assessment on initial recognition of the bearer plant will determine whether the plant is in the scope of Section 17 or Section 34.

The entity would need to assess the costs and benefits of measuring the bearer plant separately at initial recognition, even if the plant does not have produce on it, to determine whether to apply Section 34 or Section 17.

For common bearer plants, there are likely to be known valuation methods used in the market to separately measure the bearer plant and the produce—for example, by entities applying full IFRS Accounting Standards. Produce will ultimately be detached from the bearer plants and sold separately, meaning it normally has a market value on its own enabling such separate measurement. Nevertheless, an entity applying the Standard will still need to assess the costs and benefits of separate measurement based on their own circumstances. Furthermore, it could be difficult to make the upfront assessment for new or niche bearer plants.

Accounting policy for a class of biological assets in the scope of Section 34

An entity is required to assess whether fair value is readily determinable without undue cost or effort for a class of biological assets to determine the accounting policy for that class.

Section 12 *Fair Value Measurement* provides requirements for measuring the fair value which apply to biological assets and agricultural produce. These requirements are explained in the Educational Module supporting Section 12. The IASB concluded, both because of the measurement problems in inactive markets and developing economies and for cost–benefit purposes, that entities should be required to use the fair value model only when fair value is readily determinable without undue cost or effort. When that is not the case, the IASB concluded that entities should follow the cost model (see paragraph BCZ34.5 of the Basis for Conclusions on the Standard). In practice, it could be difficult to determine and measure the fair value of some biological assets and agricultural produce (for example, new or niche products). Section 4 *Statement of Financial Position* requires the separate presentation in the statement of financial position of biological assets in the scope of Section 34 carried at cost minus accumulated depreciation and impairment (paragraph 4.2(h)) and biological assets in the scope of Section 34 carried at fair value through profit or loss (paragraph 4.2(i)).

Examples—Agricultural activity

Ex 1 An SME grows cacao to sell to chocolate factories. Its statement of financial position at 31 December 20X8 presents two tractors, three computers and software to manage the cultivation of cacao on its farmland, which is planted with 10,000 cacao-bearing trees. The SME's assets also include 1,000 pods of recently harvested cacao.

The SME is engaged in agricultural activity, as defined in the Standard, relating to the cacao-bearing trees—the SME manages the biological transformation of the cacao-bearing trees into agricultural produce (harvested cacao) for sale. The cacao-bearing trees are biological assets (living plants). Cacao-bearing trees are also likely to meet the definition of bearer plants. Therefore, the SME will need to determine whether the trees are in the scope of Section 17 or Section 34. Section 34 will apply to the cacao pods growing on the trees even if the trees are in the scope of Section 17.

The following assets are not biological assets (neither living animals nor living plants), so the SME does not account for them in accordance with Section 34. Instead, the SME accounts for:

- the harvested cacao after initial recognition in accordance with Section 13 *Inventories*;
- the tractors, farmland and computers in accordance with Section 17 (and, if they are under leases, Section 20 *Leases*); and
- the software in accordance with Section 18.

Ex 2 An SME holds 400 beef cattle for meat production, 85 dairy cattle for milk production and 10 mules for pulling carts to distribute feed to its cattle.

Female calves are retained by the SME to maintain and expand its herds.

Male dairy calves are sold soon after birth. Male beef calves are sold when they are two years old.

Mature dairy cows are sold for meat after they have produced milk for five years. Mature beef cows are sold in the meat trade when they are nine years old.

The SME is engaged in agricultural activity, as defined in the Standard. The cattle and the mules are biological assets (living animals). The SME accounts for the 400 beef cattle and the 85 dairy cattle as biological assets in accordance with Section 34. The biological transformation of the cattle is managed by the SME for sale or for agricultural produce (milk and carcasses from the dairy cattle and carcasses from the beef cattle) or for additional biological assets (offspring of the beef cattle and the dairy cattle).

The SME also accounts for the 10 mules in accordance with Section 34, because the SME as a whole is engaged in agricultural activity.

Ex 3 An SME provides security services to local businesses. The security services deploy guard dogs and their handlers at the clients' premises. The guard dogs are purchased by the SME when they are puppies and are trained by the handlers, who are employees of the SME.

Although the guard dogs are biological assets (living animals), the SME does not account for them in accordance with Section 34 because it is not engaged in agricultural activity (the SME is not a breeder that manages the biological transformation of the dogs for additional biological assets). The dogs are property, plant and equipment and are accounted for in accordance with Section 17.

The salaries payable to the dog handlers as they perform services for the SME are employee benefits. The SME accounts for those benefits in accordance with Section 28 *Employee Benefits*.

Examples—Bearer plants

Ex 4 An SME grows cacao to sell to chocolate factories. The cacao trees bear cacao for about 30 years before being replaced. When trees are removed from the ground and scrapped, new, young seedlings are planted to maintain the productivity of the cacao orchard.

The cacao trees meet the definition of a bearer plant because they are living plants used in the production of cacao for more than one period (up to 30 years) and the trees are not themselves sold.

If the cacao trees can be measured separately from the cacao pods growing on them without undue cost or effort then they are in the scope of Section 17, not Section 34.

The cacao pods are harvested throughout the year and are in the scope of Section 34 while they are attached to the trees, and treated as inventory once harvested in accordance with Section 13.

Ex 5 An SME grows sugar cane to sell to food and beverage companies. The roots of the sugar cane are retained for future harvests. The SME will harvest crops from one planting for four years.

The sugar cane is a perennial plant because its roots remain in the ground for several years. If the SME retains the roots to bear sugar cane for more than one period and the roots are not later sold, the roots would meet the definition of a bearer plant.

If the roots can be measured separately from the sugar cane attached to them without undue cost or effort then they are in the scope of Section 17, not Section 34.

If the roots cannot be measured separately from the sugar cane attached to them without undue cost or effort then the entire plant (roots and sugar cane) is a single biological asset in the scope of Section 34, not Section 17.

The sugar cane is always in the scope of Section 34 while it is attached to the roots because it is harvested for sale as agricultural produce during the year.

Ex 6 An SME grows apples to sell to supermarkets. An apple tree bears fruit for about 50 years before being replaced. The trees are not sold themselves.

The apple trees meet the definition of a bearer plant because they are living plants used in the production of apples for more than one period and the trees are not sold themselves.

Therefore, if the trees can be measured separately from the apples on them without undue cost or effort then the trees are in the scope of Section 17, not Section 34.

The apples are harvested for sale as agricultural produce throughout the year. Therefore, the apples are in the scope of Section 34 while they are attached to the tree.

Examples—Not bearer plants

Ex 7 An SME cultivates a softwood timber plantation and sells the timber to local tradesmen.

The trees do not meet the definition of a bearer plant because the tree in its entirety is sold as agricultural produce (timber). The trees are in the scope of Section 34 (see paragraph 34.2B(a)).

Ex 8 An SME grows apples to sell to supermarkets. The apple trees bear fruit for about 20 years before being cut down and sold for their timber.

The SME makes a judgement that the apple trees do not meet the definition of a bearer plant because they are sold as agricultural produce (timber).

Even though the trees are used in the production of apples for more than one period the SME will also harvest and sell the trees as agricultural produce, other than as incidental scrap sales, the trees are not a bearer plant (see paragraph 34.2B(a)). The entire apple tree (including the apples) is accounted for as a single biological asset in the scope of Section 34.

Ex 9 An SME cultivates wheat. Wheat seeds are planted in the autumn and harvested in the following summer.

Wheat is an annual crop that is grown to be harvested and sold as agricultural produce. Annual crops such as wheat do not meet the definition of bearer plants (see paragraph 34.2B(b)). The growing wheat is accounted for as a biological asset in the scope of Section 34.

Examples—Use of fair value model or cost model for biological assets in Section 34

Ex 10 An SME cultivates a single species of fast-growing softwood timber in a 10-year growth cycle. The SME is one of many farmers growing the same species of pine in an extensive area of similar land.

The SME (like many of its competitors) uses the services of local pine planting specialists to plant its land. The specialists prepare the land, supply the saplings, fertiliser, water and other chemicals, and plant the saplings. After the trees are planted, the SME manages and maintains its plantations (fertilising and watering, chemical-spraying and thinning) to optimise timber growth.

There are frequent sales of essentially homogeneous pine plantations (trees and the land on which they are planted) in the local market. Sales are conducted by online auction and the prices are published on the local pine growers' website, listed per acre by age of plantation sold (as 'newly planted', 'one year', 'two years', 'three years' and so on). Sales of recently harvested land (that is, land without pine trees) in the same area are also quoted per acre.

The SME classifies its pine plantations as either mature (four years or older) or immature (three years or younger).

The SME is engaged in agricultural activity, as defined in the Standard. The SME applies the fair value model to measure its pine forest biological assets (mature and immature) because the fair values of the biological assets are readily determinable without undue cost or effort. The SME's management can readily obtain the fair value of the pine forests by age (including the land on which the trees are planted) and deduct from that amount the fair value of the land to measure the fair value of its trees.

Section 12 provides guidance on measuring the fair value of biological assets (see paragraph 34.6).

Ex 11 An SME cultivates a wide variety of species of slow-growing softwood timber trees in forests. The growth cycles of the species range from 10 to 20 years and because of the unique and varied topography of the forests, the growth cycles for individual species vary considerably. The SME is the only entity that cultivates timber in the jurisdiction in which it operates.

The SME manages and maintains its forests by planting saplings (grown in its nursery) to replace harvested trees, nurturing the growth of saplings and removing invasive alien plant species. This optimises timber growth and maintains the integrity of the forest. The SME classifies its softwood timber as either mature (five years or older) or immature (four years or younger).

The SME harvests trees when they reach harvesting age. The harvested timber is sold in international timber markets. There is an active market for all of the types of timber that are harvested by the SME.

For each species the SME harvests from the forest, it maintains detailed management records of growth rates, costs to maintain the nursery, planting costs, maintenance costs, felling costs and costs of transporting the harvested timber to market. Based on these historical records, adjusted for recent trends, management forecasts future income and expenses by species of tree harvested. In addition, the forecasts help management decide which species to propagate and manage for harvest in the future.

The SME is engaged in agricultural activity, as defined in the Standard. An active market does not exist for the SME's standing softwood biological assets in their present location and condition.

The lack of an active market means that the SME's management must apply its judgement to determine whether the fair value of the SME's standing softwood biological assets can be readily determined without undue cost or effort. In making that judgement, management would consider whether fair value could be measured without undue cost or effort in a way other than with reference to an active market for the SME's standing softwood biological assets in their present location and condition.

For example, management might evaluate whether a reliable measure of fair value is readily determinable without undue cost or effort by using a valuation technique based on future income and expenses, such as a present value technique (see Section 12). In this example, management appears already to have obtained relevant sector benchmarks for management purposes, such as the current market price of harvested logs for each type of softwood under cultivation, as well as many of the inputs to measure the fair value (for example, present value of the expected net cash flows) from its standing softwood biological assets (management has forecasts of expected future income and expenses by species of tree harvested). Because all of this information is already available to management, it is unlikely that it would require undue cost or effort to determine the fair value of the standing softwood.

Ex 12 The facts are the same as in Example 11. However, in this example, the SME has only recently begun cultivating plantation timber in the jurisdiction where it operates. Plantation timber cultivation has not previously been undertaken in this jurisdiction.

The environmental conditions in the jurisdiction are different from those in other areas where softwoods are grown. Management has not forecast the future income and expenses by species of tree harvested.

As in Example 11, an active market does not exist for the SME's standing softwood biological assets in their present location and condition.

The SME's management would apply judgement to determine whether the fair value of the SME's standing softwood biological assets can be readily determined without undue cost or effort. In the absence of an active market for the standing softwood biological assets, management might consider whether it could calculate the present value of the assets applying Section 12.

In this example, unlike in Example 12 where management has access to good information, there are significant unknown factors (for example, absence of historical information and forecasts on which to base future cash flow estimates). Therefore management might conclude that fair value is not readily determinable without undue cost or effort, and would in this case need to use the cost model.

Recognition

- 34.3 An entity shall recognise a biological asset or 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 without undue cost or effort.

Educational notes

Paragraph 34.3 requires recognition of an asset only if it is more likely than not that future economic benefits associated with the asset will flow to the entity. In such cases, the outcome is binary—if the probability of the inflow is greater than 50% the item is recognised. Conversely, if the probability of the inflow is 50% or less, the item is excluded from the entity's statement of financial position.

The recognition requirements are inconsistent with Section 2 but as specified in paragraph 2.2 of the Standard, the requirements in Section 34 take precedence over the more general requirements in Section 2.

In many cases, the cost or fair value of an asset is known. In other cases, it must be estimated. The use of reasonable estimates is an essential part of the preparation of financial statements and does not undermine their reliability.

A distinction should be made between biological assets, agricultural produce and products that are the result of processing agricultural produce.

The table below provides examples of these.

<i>Biological assets</i>	<i>Agricultural produce</i>	<i>Products that are the result of processing agricultural produce after harvest</i>
Sheep	Sheared wool	Yarn, carpet
Dairy cattle	Milk	Cheese, butter
Pigs	Carcasses	Sausages, cured hams
Trees in a timber plantation	Felled trees	Logs, lumber
Cotton plants	Harvested cotton	Thread, clothing
Sugar cane	Harvested cane	Sugar, alcohol
Tobacco plants	Picked leaves	Cured tobacco
Tea bushes	Picked leaves	Tea
Grape vines	Picked grapes	Wine, juice, raisins
Fruit trees	Picked fruit	Processed fruit
Cacao trees	Harvested cacao pods and beans	Chocolate liquor, chocolate
Oil palms	Picked fruit	Palm oil
Rubber trees	Harvested latex	Rubber products

This classification is relevant when determining which section of the Standard the entity must apply. Biological assets of an entity engaged in an agricultural activity are in the scope of Section 34, both initially and subsequently (paragraph 34.4), except for bearer plants that can be measured separately from the produce on them without undue cost or effort, which are accounted for in accordance with Section 17 (see paragraph 34.2A). For example, tea bushes, grape vines, oil palms and rubber trees usually meet the definition of a bearer plant. However, the produce growing on bearer plants—for example, tea leaves, grapes, oil palm fruit and latex—is always within the scope of Section 34 until harvest.

Agricultural produce is accounted for in accordance with Section 34 only at the point of harvest, and subsequently in accordance with Section 13 or another applicable section of the Standard (paragraph 34.5). Products that are the result of processing agricultural produce after harvest are outside the scope of Section 34 both during and after processing. They are accounted for in accordance with Section 13 or with another applicable section of the Standard.

Example—Recognition

Ex 13 An SME owns an oil palm plantation and sells palm oil extracted from the fresh pulp of the fruit bunches. The oil palms meet the definition of a bearer plant.

If the oil palms can be measured separately from the fruit growing on them without undue cost or effort, then the oil palms are in the scope of Section 17, not Section 34 (see paragraph 34.2A).

The fresh fruit bunches growing on the oil palms are in the scope of Section 34. The SME controls the fruit bunches because it controls the oil palms. Furthermore, economic benefits from previous harvests provide evidence that it is probable future economic benefits associated with the fruit bunches will flow to the SME. If the fair value of the fruit bunches can be measured reliably without undue cost or effort, then the fruit should be recognised and measured at fair value while it grows, not only once it is harvested.

Once harvested, the picked fruit is accounted for in accordance with Section 34 only at the point of harvest, and subsequently in accordance with Section 13.

Measurement—fair value model

34.4 An entity shall measure a biological asset on initial recognition and at each **reporting date** at its fair value less costs to sell. Changes in fair value less costs to sell shall be recognised in **profit or loss**.

Educational notes

Section 12 provides guidance on fair value measurement. The expected costs to sell are deducted from this fair value measurement.

When biological assets are measured in accordance with the fair value model, the change in fair value less costs to sell is recognised in profit or loss during the period in which the change occurs.

Costs to sell are incremental costs associated with the sale transaction itself. For example, they include commissions paid to brokers and dealers, auctioneers' fees, transfer taxes and duties and fees paid to regulatory agencies or commodity exchanges.

Section 34 is silent on the treatment of subsequent expenses for agricultural activity (for example, feeding, veterinary services, planting, weeding, irrigation, fertilisation, harvesting and slaughtering costs). Consequently, when applying the fair value model, an entity may choose either to capitalise these costs or to recognise these costs as an expense in the period incurred (for example, as costs of production).

Examples—Fair value model—Biological assets

Ex 14 An SME cultivates cattle as livestock for meat and sells the cattle to slaughterhouses. At 31 December 20X0 the fair value less costs to sell of the SME's livestock is CU10,000.¹

In its statement of financial position as at 31 December 20X0, the SME presents its livestock at fair value less costs to sell of CU10,000.

Ex 15 The facts are the same as in Example 14. At 31 December 20X1 the fair value less costs to sell of the livestock is CU15,000. The SME neither bought nor sold any cows in 20X1. No calves were born in 20X1. The SME has chosen to recognise all costs incurred in maintaining the herd (such as feed and veterinary services) as expenses.

At 31 December 20X1 the SME measures the livestock at CU15,000 and recognises the CU5,000 increase in fair value less costs to sell in profit or loss for the year ended 31 December 20X1.

Journal entries:

Dr	Asset—Biological assets at fair value through profit or loss	CU5,000	
	Cr	Income—Profit or loss: fair value gain (biological assets)	CU5,000

To recognise the increase in the fair value less costs to sell of the cattle

Ex 16 The facts are the same as in Example 14. However, in this example, in 20X1 eight calves were born and the SME sold 10 heifers for CU200 each, incurring selling costs of CU10 per heifer. The fair value less costs to sell of the herd at 31 December 20X1 is CU14,000.

In 20X1, upon sale of the heifers, the SME recognises an increase in cash of CU1,900 (CU2,000 selling price minus CU100 selling cost). Because the livestock is accounted for using the fair value model, the changes in fair value less costs to sell are recognised in profit or loss.

At 31 December 20X1 the SME measures the herd including the eight calves born during the period at CU14,000 and recognises the increase of CU5,900 (CU14,000 closing fair value plus CU1,900 realised through sale minus CU10,000 opening fair value) in fair value less costs to sell in profit or loss.

¹ In this example, and in all other examples in this module, monetary amounts are denominated in 'currency units (CU)'.

Journal entries:

Dr	Asset—Cash	CU1,900	
Dr	Expenses—Cost of sales	CU1,900	
Dr	Expenses—Selling expense	CU100	
	Cr Asset—Biological assets carried at fair value through profit or loss		CU1,900
	Cr Revenue		CU2,000

To recognise the sale of the heifers

Dr	Asset—Biological assets carried at fair value through profit or loss	CU5,900	
	Cr Income—Profit or loss: fair value gain (biological assets)		CU5,900

To recognise the increase in fair value of the herd

Note: There are a number of different approaches that could be used to record these events in the SME's journals. These could include revaluing the heifers immediately before sale or recognising the fair value of the calves at birth. Whichever approach is taken, the total increase in fair value less costs to sell during the year is CU5,900. Some of this figure relates to the 10 heifers sold, some to the birth of the calves and the balance to the increase in the calves and remaining livestock.

The disclosure requirements of the Standard require separate disclosure of increases resulting from purchases (see paragraph 34.7(c)(ii)) but they do not require separate disclosure of increases resulting from biological assets born during the period. Consequently, the two journal entries provided are sufficient to enable the disclosure and presentation requirements of Section 34 to be met.

Ex 17 At 31 December 20X1 the fair value less costs to sell of a timber plantation is CU11,500. The initial cost of the plantation, purchased earlier in 20X1, was CU10,500.

The SME measures the plantation (the biological asset) at fair value less costs to sell as CU11,500. The CU1,000 (CU11,500 minus CU10,500) change in fair value is recognised in profit or loss in 20X1.

Journal entries:

Dr	Asset—Biological assets carried at fair value through profit or loss	CU1,000	
	Cr Income—Profit or loss: fair value gain (biological assets)		CU1,000

To recognise the increase in the fair value less costs to sell of the timber plantation

Ex 18 An SME grows grapes for sale. At the start of the reporting period the SME has bare vines (a bearer plant) with a carrying amount in accordance with Section 17 of CU1,400,000. At the end of the reporting period the vines bear partially developed grapes. The fair value less costs to sell of the grapes is CU250,000 at the end of the reporting period. The SME has chosen an accounting policy to recognise all costs incurred in maintaining the grapes and vines (such as fertiliser and pruning) as an expense as they are incurred.

At the end of the reporting period, the SME recognises the increase in the fair value less costs to sell of the grapes.

Although the vines are in the scope of Section 17, the grapes growing on the vines are in the scope of Section 34.

Journal entries:

Dr	Asset—Biological assets carried at fair value through profit or loss (grape vines)	CU250,000	
	Cr	Income—Profit or loss: fair value gain (biological assets)	CU250,000

To recognise the increase in fair value of the grapes

34.5 Agricultural produce harvested from an entity's biological assets shall be measured at its fair value less costs to sell at the point of harvest. Such measurement is the cost at that date when applying Section 13 *Inventories* or another applicable section of this Standard.

Examples—Measurement of agricultural produce

Ex 19 An SME grows tomatoes for sale. At the end of the reporting period (31 December 20X1) the SME's vines bear developed ripe tomatoes. On 31 December 20X1, the fair value less costs to sell of the vines with the soon-to-be harvested tomatoes attached is measured at CU24,000. The initial cost of the vines was CU5,500 and the cost of growing them during 20X1 (planting, irrigation and fertilisation) was CU7,250. The SME harvests its tomatoes on 3 January 20X2. There was no significant change in the fair value less costs to sell of the vines between 31 December 20X1 and 3 January 20X2.

The cost of harvesting the tomatoes is CU1,000. The quoted price per kilogram of tomatoes is CU50 and costs to sell are estimated at 1% of quoted price. The SME harvests 500 kilograms of tomatoes.

The life of a tomato vine is about six months. After harvest, the vine has come to the end of its life and its fair value is negligible.

The SME has chosen an accounting policy to recognise all costs incurred in maintaining the tomatoes and vines (such as fertiliser and pruning) as an expense as they are incurred.

The SME should treat its tomato vines as an annual crop because the life of the vine is only six months and the vine only bears one harvest. Therefore, both the vine and the fruit it bears are in the scope of Section 34 and are accounted for as a single biological asset until the point of harvest. At 31 December 20X1, the SME recognises the increase in the biological assets due to tomatoes growing on the vines.

Journal entries:

During 20X1

Dr	Asset—Biological assets carried at fair value through profit or loss	CU5,500	
	Cr Asset—Cash		CU5,500

To recognise the purchase of the tomato vines

Dr	Expense—Profit or loss: planting, irrigation and fertilisation costs	CU7,250	
	Cr Asset—Cash		CU7,250

To recognise the expenses of growing the tomato vines

31 December 20X1

Dr	Asset—Biological assets carried at fair value through profit or loss	CU18,500	
	Cr Income—Profit or loss: fair value gain (biological assets)		CU18,500

To recognise the increase in fair value of the tomato-bearing vines

3 January 20X2

Dr	Expense—Profit or loss: cost of harvesting	CU1,000	
	Cr Asset—Cash		CU1,000

To recognise the costs of harvesting (not a cost of sale)

Dr	Asset—Inventory: tomatoes (500 × CU50 × 99%)	CU24,750	
	Cr Income—Profit or loss: fair value gain (on recognition of agricultural produce)		CU750
	Cr Asset—Biological assets carried at fair value through profit or loss		CU24,000

To recognise the inventory of tomatoes at the point of harvest at its fair value less costs to sell. The entire fair value of the tomato vine is transferred to the tomato inventory, because the decomposing vine remaining in biological assets has negligible fair value

Ex 20 The facts are the same as in Example 19. However, in this example, the tomato crop is not harvested on 3 January 20X2. On 4 January 20X2 a hailstorm destroys many of the SME's competitors' crops. The SME harvests its tomatoes on 5 January 20X2 when the fair value less costs to sell of the SME's tomato vines immediately before harvest is measured at CU50,000, because of anticipated tomato supply shortages.

The cost of harvesting the tomatoes is CU1,000 and is recognised as an expense as incurred.

The quoted price per kilogram of tomatoes is CU103.03 and costs to sell are estimated at 1% of the quoted price. The SME harvests 500 kilograms of tomatoes.

The tomatoes and the vine are accounted for as a single biological asset until the point of harvest. At 31 December 20X1, the SME recognises the increase in the biological assets due to the tomatoes growing on the vines.

Journal entries:

During 20X1

Dr	Asset—Biological assets carried at fair value through profit or loss	CU5,500	
	Cr	Asset—Cash	CU5,500

To recognise the purchase of the tomato vines

Dr	Expense—Profit or loss—Planting, irrigation and fertilisation costs	CU7,250	
	Cr	Asset—Cash	CU7,250

To recognise the expenses of growing the tomato vines

31 December 20X1

Dr	Asset—Biological assets carried at fair value through profit or loss	CU18,500	
	Cr	Income—Profit or loss: fair value gain (biological assets)	CU18,500

To recognise the increase in fair value of the tomato-bearing vines

5 January 20X2

Dr	Asset—Biological assets carried at fair value through profit or loss ^(a)	CU26,000	
	Cr	Income—Profit or loss: fair value gain (biological assets)	CU26,000

To recognise the tomato vines and the fruit that they bear immediately before harvest at fair value less costs to sell

Note: in this example, the change in fair value of the biological asset (the tomato-bearing vines) before harvest is significant due to the hail damage to many competitors' tomato crops.

Dr	Expense—Profit or loss: cost of harvesting	CU1,000	
	Cr	Asset—Cash	CU1,000

To recognise the costs of harvesting (not a cost of sale)

Dr	Asset—Inventory: tomatoes (500 × CU103.03 × 99%)	CU51,000	
	Cr	Income—Profit or loss: fair value gain (on recognition of agricultural produce) ^(b)	CU1,000
	Cr	Asset—Biological assets carried at fair value through profit or loss	CU50,000

To recognise the inventory of tomatoes at the point of harvest at its fair value less costs to sell. The entire fair value of the tomato vines is transferred to the tomato inventory as the decomposing vines remaining in biological assets have negligible fair value

(a) Value of tomatoes = 500 × CU103.03 × 99% = CU51,000. Costs = CU1,000. Movement in fair value of biological assets = CU51,000 – CU1,000 – CU24,000 = CU26,000.

(b) The CU1,000 could also be recognised as part of the fair value gain (biological assets).

Ex 21 An SME grows grapes for sale. On 1 July 20X1, the start of the SME's financial year, the vines are bare and the fair value less costs to sell of the grapes is CU0. The bare vines are bearer plants in the scope of Section 17.

On 30 September 20X1 the vines bear fully developed grapes and are ready for harvest. The fair value less costs to sell of the grapes they bear is CU480,000. The grapes are harvested on 30 September 20X1. The cost of harvesting the grapes is CU2,000 and is recognised as an expense as incurred. The quoted price per kilogram of grapes is CU492 and costs to sell are estimated at 2% of the price. The SME harvests 1,000 kilograms of grapes.

At the end of the reporting period, the SME recognises in profit or loss the increase in the biological asset in the scope of Section 34.

Journal entries:

30 September 20X1

Dr	Asset—Biological assets carried at fair value through profit or loss	CU480,000	
	Cr	Income—Profit or loss: fair value gain (biological assets)	CU480,000

To recognise the grapes immediately before harvest at fair value less costs to sell

Dr	Asset—Inventory: grapes (1,000 × CU492 × 98%)	CU482,160	
	Cr	Income—Profit or loss: fair value gain (on recognition of agricultural produce)	CU2,160
	Cr	Asset—Biological assets carried at fair value through profit or loss: grapes	CU480,000

To recognise the grape inventories at the point of harvest measured at fair value less costs to sell

Dr	Expense—Profit or loss: cost of harvesting	CU2,000	
	Cr	Asset—Cash	CU2,000

To recognise the costs of harvesting (not a cost of sale)

Ex 22 An SME rears cattle for the fresh meat industry. It slaughters its cattle and butchers the meat into cuts before selling them to its meat wholesaler customers.

The SME's statement of financial position at 31 December 20X1 reported cattle at their fair value less costs to sell of CU10,000.

At 31 December 20X2, when the fair value less costs to sell of the SME's herd is CU15,000, the SME slaughters 40% of its herd (10 cattle) incurring slaughter costs of CU50. The quoted price of a carcass is CU700 and the costs to sell are estimated at CU2 per carcass.

On 31 December 20X2 the SME also incurs CU300 direct costs in processing the carcasses into meat cuts ready for sale to its customers.

For simplicity, assume that the SME does not sell the hide, bone or any other component of the cattle—only the meat. The slaughtering costs are recognised as an expense as they are incurred. Section 34 does not specify the treatment of these costs.

At 31 December 20X2 the SME should:

- measure the cattle at CU15,000, recognising the CU5,000 increase in fair value less costs to sell in profit or loss;
- recognise CU50 of slaughter costs;

- reclassify CU6,000 of biological assets (livestock) to inventory (carcasses);
- recognise the inventory (carcasses) at CU6,980 (their fair value less costs to sell) and recognise the gain of CU980 in profit or loss; and
- recognise the CU300 meat processing costs.

Journal entries:

31 December 20X2

Dr	Asset—Biological assets carried at fair value through profit or loss: cattle	CU5,000	
	Cr	Income—Profit or loss: fair value gain (biological assets)	CU5,000

To recognise the increase in fair value of the SME's cattle

Dr	Asset—Inventory (10 × (CU700 – CU2))	CU6,980	
	Cr	Income—Profit or loss: fair value gain (on recognition of agricultural produce)	CU980
	Cr	Asset—Biological assets carried at fair value through profit or loss: cattle	CU6,000 ^(a)

To recognise the reclassification of slaughtered cattle at the point of harvest

(a) CU15,000 (fair value less costs to sell of cattle at the date of harvest) × 40% (proportion of cattle slaughtered) = CU6,000.

Dr	Expense—Profit or loss: slaughter expenses	CU50	
	Cr	Asset—Cash	CU50

To recognise the costs of slaughter (not a cost of sale)

Dr	Asset—Inventory	CU300	
	Cr	Asset—Cash or Liability—Accounts payable	CU300

To recognise costs of converting carcasses into meat cuts inventory. Note: this is not an incremental cost of sale of the carcasses; it is a cost of processing agricultural produce after harvest into meat cuts. Consequently, it is not deducted from the fair value of the carcasses at the point of harvest; instead, it forms part of the cost of inventory.

Once harvested, the meat is accounted for in accordance with Section 13. Assuming that, at the end of the period, the SME did not hold any other meat inventory, the closing balance of meat inventory at 31 December 20X2 would be CU7,280 (CU6,980 fair value less estimated costs to sell of the carcasses (agricultural produce at the point of harvest from an SME's biological assets, in accordance with paragraph 34.5) plus CU300 costs of converting the carcasses into meat cuts (paragraphs 13.5 and 13.8)).

34.6 Section 12 *Fair Value Measurement* provides guidance on fair value measurement.

Educational notes

As emphasised by paragraph 34.2, an entity does not choose which measurement model (fair value or cost model) to apply in accounting for its biological assets in the scope of Section 34. An entity must use the fair value model if fair value can be readily determined without undue cost or effort (see paragraphs 2.28–2.31). Otherwise, the entity uses the cost model.

Guidance on measuring fair value is in Section 12.

Once an entity has measured the fair value of a biological asset, it deducts the expected disposal costs of the biological asset (costs to sell) from that fair value. The entity will deduct disposal costs relevant for the market from which the fair value was estimated.

Costs to sell are incremental costs associated with the sale transaction itself (for example, commissions paid to brokers, transfer taxes and duties). Costs to sell are deducted from fair value. Consequently, they are not also deducted in measuring fair value by entities applying Section 12.

Changes in the fair value less costs to sell of biological assets are included in profit or loss for the period in which the change arises (paragraph 34.4).

Costs to sell are deducted from fair value when biological assets are first recognised and so they can give rise to an immediate loss. For example, if an asset is purchased for its fair value of CU1,000, and it is estimated that a 5% commission would be payable to the dealer if the asset were ever sold, then the asset is initially recognised at CU950. A CU50 loss is recognised in profit or loss for the expected dealer's commission. This is recognised irrespective of whether the entity expects to sell the asset in the future or make a profit on the sale of that asset.

Disclosures—fair value model

34.7 An entity shall disclose the following with respect to its biological assets measured at fair value:

- (a) a description of each class of its biological assets.
- (b) [deleted]
- (c) a reconciliation of changes in the **carrying amount** of biological assets between the beginning and the end of the current period. The reconciliation shall include:
 - (i) the gain or loss arising from changes in fair value less costs to sell;
 - (ii) increases resulting from purchases;
 - (iii) decreases resulting from harvest;
 - (iv) increases resulting from **business combinations**;
 - (v) net exchange differences arising on the translation of **financial statements** into a different **presentation currency**, and on the translation of a **foreign operation** into the presentation currency of the **reporting entity**; and
 - (vi) other changes.

This reconciliation need not be presented for prior periods.

Example—Disclosures—Fair value model

Ex 23 SME A owns an apple orchard, selling apples and timber. SME A could disclose information about its biological assets as follows:

Extract from SME A's notes to the financial statements for the year ended 31 December 20X1

Note 1. Operations and principal activities

SME A is engaged in the business of growing apples for supply to grocery stores and the supply of applewood timber to carpenters.

Note 2. Accounting policies

Biological assets and agricultural produce

Biological assets consist of apple trees. Apple trees are measured at fair value less costs to sell, with changes in fair value less costs to sell recognised in profit or loss in the period of the change. Until the point of harvest, the fair value less costs to sell will be the amount for the entire tree including the developing apples.

continued ...

Note 2. Accounting policies

At the point of harvest, the harvested apples are measured at fair value less costs to sell, which is the cost of the apples as they are transferred to inventories. The fair value of apples at the point of harvest is based on market prices in the local market where the apples are expected to be sold. This market is determined to be the principal market.

During the winter months, the trees are pruned for their wood. The fair value of the wood at the point of harvest is based on market prices in the local market where the wood is expected to be sold. This market is determined to be the principal market.

...

Note 3. Biological assets

SME A classifies apple trees as mature trees (trees aged between six and 15 years, the average fruit-bearing life of SME A's apple trees) or immature trees (trees younger than six years, which generally do not bear apples). When trees are mature, SME A prunes the trees for their wood and harvests the apples. At the end of their fruit-bearing life, the trees are cut down and sold in their entirety as wood.

Reconciliation of the carrying amounts of apple trees:

	<i>Mature trees</i>	<i>Immature trees</i>	<i>Total</i>
	<i>CU</i>	<i>CU</i>	<i>CU</i>
Balance at 1 January 20X0	30,950	3,450	34,400
Increase resulting from planting new trees	–	1,400	1,400
Reclassification	1,350	(1,350)	–
Decrease resulting from harvesting	(4,900)	–	(4,900)
Gains arising from changes in fair value less costs to sell	3,200	400	3,600
Balance at 31 December 20X0	30,600	3,900	34,500
Increase resulting from planting new trees	–	900	900
Reclassification	2,890	(2,890)	–
Decrease resulting from harvesting	(5,890)	–	(5,890)
Gains arising from changes in fair value less costs to sell	4,600	1,500	6,100
Balance at 31 December 20X1	32,200	3,410	35,610

continued ...

Note 3. Biological assets

Notes:

- The reconciliation (required by paragraph 34.7(c)) shows the two classes of apple trees separately to provide more information. Showing the two classes is not required by paragraph 34.7. The two columns could be combined into one.
- SME A need not provide the comparative figures presented in this reconciliation (see paragraph 34.7). However, in this example SME A has chosen to provide the comparative information.
- This example illustrates the requirements of paragraph 34.7. It does not present the information required by other paragraphs of the Standard. For example, SME A would also need to make any disclosures required in accordance with Section 12 on the fair value measurements, paragraph 8.7 regarding key assumptions concerning the future and paragraph 13.22 regarding its inventory of apples.

Measurement—cost model

- 34.8 The entity shall measure at cost less any accumulated **depreciation** and any accumulated **impairment** losses those biological assets whose fair value is not readily determinable without undue cost or effort.

Educational notes

Section 34 does not provide requirements on how to measure the cost of a biological asset. Consequently, in accordance with paragraph 10.4, management uses its judgement in developing and applying an accounting policy that results in information that is reliable and relevant to the economic decision-making needs of users (for example, owners who are not involved in managing the business, potential owners, existing and potential lenders and other creditors). In doing so, management refers to, and considers the applicability of, the requirements and guidance in the Standard that deal with similar and related issues (see paragraph 10.5). Consequently, an entity would consider how a cost model is applied to other similar or related assets.

Some biological assets, like plant and equipment, are used by an entity even though they do not meet the definition of a bearer plant (for example, bearer livestock such as cows held for many years to produce offspring and milk) and other biological assets are used like inventory in a manufacturing entity (for example, carrots growing in the ground for a few months before they are harvested and sold or beef cattle held for a year before they are sold for meat). The way a biological asset is used would typically be considered when determining whether the asset is similar to the assets accounted for under the requirements in Section 13 or Section 17.

The requirements of Section 17 are discussed in the following section with consideration of how they might be applied to biological assets identified as being similar to property, plant and equipment. Section 13 provides requirements for cost allocations—for example, the allocation of production overheads to assets which may be useful even when an entity is looking to Section 17 to determine the cost of its biological assets. Following the discussion of the requirements of Section 17, there is a discussion of the requirements of Section 13 with consideration of how they might be applied to biological assets identified as similar to inventories.

Application of Section 17 to biological assets similar to property, plant and equipment

Elements of cost (see paragraphs 17.10–17.12)

The cost of a biological asset may comprise:

- (a) its purchase price, including legal and brokerage fees, import duties and non-refundable purchase taxes, after deducting trade discounts and rebates (by analogy to paragraph 17.10(a)); and
- (b) any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. These can include the costs of initial delivery and handling (by analogy to paragraph 17.10(b)). For a dairy cow, for example, directly attributable costs could include initial delivery costs, as well as feed, vaccines and other medicines up to the date on which the dairy cow is first capable of producing milk (that is, capable of operating in the manner intended by management).

Borrowing costs would not however be included in the cost of a biological asset because this is explicitly disallowed in paragraph 25.2.

Measurement of cost (see paragraphs 17.13–17.14)

The cost of a biological asset is the cash price equivalent at the recognition date. If payment is deferred beyond normal credit terms, the cost is the present value of all future payments.

If a biological asset is acquired in exchange for a non-monetary asset or assets, paragraph 17.14 should be considered.

Depreciation (see paragraphs 17.16–17.23)

An entity depreciates a biological asset from the date it is available for use—that is, when it is in the location and condition necessary for it to be capable of operating as intended by management (by analogy to paragraph 17.20). For a dairy cow, for example, the date on which it is capable of operating as intended by management could be when the dairy cow is first capable of producing milk.

For those biological assets, an entity allocates the depreciable amount of a biological asset on a systematic basis over its useful life (by analogy to paragraph 17.18). Consequently, management must estimate the useful life, the residual value and the most appropriate depreciation method for each of its biological assets measured under the cost model. Management does this by:

- selecting a depreciation method that reflects the pattern in which the entity expects to consume the biological asset's future economic benefits. In other words, the depreciation method must reflect the pattern in which the entity expects to consume the biological asset's service potential (by analogy to paragraph 17.22). For example, it may be appropriate to allocate more depreciation during a dairy cow's prime milk-bearing years than during other years.
- estimating the useful life of a biological asset as the period over which the asset is expected to be available for use by the entity or the number of production or similar units expected to be obtained from the asset by the entity (see the Glossary). For example:
 - a horse stud farmer could determine the useful life of a mare according to the number of foals that the mare is expected to give birth to over its life.
 - a dairy farmer could determine the useful life of dairy cows depending on their breed and management practices, which can vary greatly.²
- estimating the residual value of a biological asset at the estimated amount the entity would currently obtain from the disposal of the biological asset, after deducting the estimated costs of disposal, if that asset were already of the age and in the condition expected at the end of its useful life (see the Glossary).³
- reviewing its previous estimates, if indicators suggest that a biological asset's residual value, useful life or the pattern in which the entity expects to consume that biological asset's future economic benefits has changed from those previously determined. If current expectations differ, they should amend the residual value, depreciation method or useful life and account for the change as a change in accounting estimate in accordance with Section 10 (by analogy to paragraphs 17.19 and 17.23).

Application of Section 13 to biological assets similar to inventory

For some biological assets, such as carrots growing in the ground, the asset is being 'developed' similarly to how a manufacturing entity manufactures goods for sale. Assets that are reared for sale as agricultural produce are used by an entity in a way similar to inventory under production, and so the cost model in Section 13 is more likely to be appropriate.

2 Dairy farmers generally first milk dairy cows when they are about two years old. Farmer A might keep dairy cows in milk production for only two years while Farmer B keeps them in production for eight years. Both farmers sell their cows to the meat trade at the end of their respective useful milking lives (ie Farmers A and B sell cows when they are four and 10 years old respectively). On the basis of the period during which the cows are able to be milked, the useful life of Farmer A's cows is two years and Farmer B's cows is eight years.

3 In the dairy cow example in footnote 2, Farmer A would determine the residual value of a two-year-old cow to be the amount for which he could currently sell a four-year-old dairy cow, less his estimated costs of disposal. Similarly, Farmer B would determine the residual value of a two-year-old cow to be the amount for which he could currently sell a 10-year-old cow, less estimated costs of disposal.

Costs of purchase (paragraphs 13.6–13.7)

The costs of purchase comprise the purchase price, import duties and other taxes (other than those subsequently recoverable by the entity from the taxing authorities) and transport, handling and other costs directly attributable to the acquisition of finished goods, materials and services. Trade discounts, rebates and other similar items are deducted in determining the costs of purchase.

Costs of conversion (see paragraph 13.8)

The costs of conversion include costs directly related to the units of production, such as direct labour. They also include a systematic allocation of fixed and variable production overheads that are incurred in converting materials into finished goods. For carrots growing in the ground this might include the cost of labour and supplies used to care for the carrots while they are growing.

Allocation of production overheads (paragraph 13.9)

An entity allocates fixed production overheads to the costs of conversion on the basis of the normal capacity of the production facilities.

Application of Section 27 to all biological assets measured at cost

At each reporting date, an entity applies Section 27 to determine whether there is any indication that a biological asset (or group of biological assets) measured using the cost model is impaired and, if there is, the entity performs an impairment test (with reference to the recoverable amount) and recognises and measures any impairment loss.

The scope exemption in paragraph 27.1(e) for biological assets does not apply to biological assets that are measured using the cost model.

Section 27 explains when and how an entity should estimate the recoverable amount of an asset to see if the asset is impaired and when an impairment loss should be recognised or reversed.

Undue cost or effort

Whether the fair value of a particular type of biological asset can be measured reliably without undue cost or effort will depend on the specific facts and circumstances relating to that asset; for example, the jurisdiction in which the asset is sold, the current market conditions, the asset's specific condition and the entity's own resources. Consequently, the biological assets used in the examples below are not intended to be examples of biological assets that will always have a fair value that is not readily determinable without undue cost or effort.

Examples—Cost model

Ex 24 An SME has recently begun to raise a rare breed of chickens for meat. On 1 January 20X0, the SME buys 310,000 one-day-old chicks for CU1 each. When the chickens are 45 days old the SME slaughters the chickens, processes the meat and sells it to supermarkets.

For the purposes of this example, it is assumed that the fair values of all of the SME's biological assets are not readily determinable without undue cost or effort due to the rarity of the breed of chickens and the lack of historical data.

One farm worker is employed to look after the chickens at CU1,000 per day. The farm worker's supervisor oversees the farm worker and supervision of the farm worker takes 20% of the supervisor's time. The rest of the supervisor's time is related to dealing with the sale of the chicks to the supermarket, marketing and customer relationships. The supervisor is paid an annual salary of CU1,000,000.

On 14 February 20X0 the SME holds 300,000 44-day-old chicks. As well as labour costs, the SME incurred direct costs of CU250,000 to raise the chicks (cost of feed and medicine) and an appropriate allocation of farm overheads of CU100,000, including depreciation of the SME's chicken-farming equipment (such as chicken runs).

Between 1 January and 14 February 20X0, 10,000 chickens died, a mortality rate within management's expectations.

The fair value of an immature chicken is not readily determinable without undue cost or effort, so the SME accounts for these biological assets using the cost model.

Management observed that assets that are reared for sale as agricultural produce are used by the SME like inventory under production, so it applies paragraph 10.5 and chooses to analogise to the cost model in Section 13. Consequently, the costs incurred during the 45 days should be recognised as follows:

Dr	Asset—Biological assets accounted for by the cost model (chickens)	CU729,658	
	Cr	Asset—Cash or liability	CU729,658

To recognise the costs incurred in raising chickens. This means each chicken has a cost of CU2.43 (CU729,658 ÷ 300,000) at 14 February 20X0

Calculation

- Direct costs: purchase price + direct labour + other direct costs = CU310,000 + (CU1,000 × 45) + CU250,000 = CU605,000
- Allocated costs: indirect labour + other indirect costs = 20% of CU1,000,000 × 45 ÷ 365 + CU100,000 = CU124,658
- Total cost: CU729,658

Ex 25 An SME rears dairy cattle for milk and sells the unprocessed milk to cheese producers. The SME milks dairy cows for five years and uses dairy bulls for breeding for two years. Subsequently, all animals are sold in the meat trade.

On 1 January 20X0 the SME:

- bought 100 mature dairy cows for CU350 each;
- bought two mature dairy bulls for CU400 each;
- sold 10 dairy cows that had reached the end of their milking lives for CU150 each; and
- sold a dairy bull that had reached the end of its breeding life for CU180.

In 20X0:

- 40 female calves were born (all the female calves were kept for replacement of the herd); and
- 60 male calves were born at the end of December 20X0 (a few calves will be kept for breeding and the others will be sold in the bob veal trade in 20X1).

There were no indicators that the useful life or residual value of the cows and bulls changed during the year 20X0.

There is no active market for dairy livestock in the SME's jurisdiction, except for newly born male calves in the bob veal trade. There is a quoted price of CU90 per calf at 31 December 20X0 for newly born male calves in the bob veal trade. Costs to sell are CU7 per calf. The SME determines that the fair values of the dairy livestock excluding the male calves (the dairy herd) are not readily determinable without undue cost or effort.

The fair value of male calves is readily determinable, so the SME is required to account for these calves at fair value. The fair values of the dairy livestock excluding the male calves (the dairy herd) are not readily determinable without undue cost or effort, so the SME accounts for the dairy herd using the cost model. Management notes that assets that are retained for ongoing production of agricultural produce are used by the SME like property, plant and equipment and so, applying paragraph 10.5, chooses to analogise to the cost model in Section 17.

The cost of dairy cattle purchased on 1 January 20X0 is CU35,800 (100 mature dairy cows × CU350 each) and CU800 (2 bulls × CU400 each).

The SME expects to dispose of dairy cows after milking them for five years, so the useful life of the SME's dairy cows is five years. The SME can currently sell dairy cows at the end of their five-year useful lives for CU150 each and so the residual value of the cows purchased on 1 January 20X0 is estimated to be CU150. Assuming that the SME expects dairy cows to produce approximately the same amount of milk in each of the five years over which they are in milk production, the straight-line depreciation method would be an appropriate method to depreciate dairy cows. Consequently, the SME recognises depreciation for the 100 dairy cows purchased on 1 January 20X0 at CU4,000 per year ((CU350 cost minus CU150 residual value) ÷ 5 years × 100 cows).

The SME expects to use dairy bulls for two years before selling them, so their useful life is two years. The SME can currently sell dairy bulls at the end of their two-year useful lives for CU180 each and so their residual value is estimated to be CU180. Assuming that the SME expects dairy bulls to sire a similar number of calves in each of the two years over which they are breeding, the straight-line depreciation method would be an appropriate method to depreciate the bulls. Consequently, the SME recognises depreciation for the two dairy bulls purchased on 1 January 20X0 at CU220 per year $((\text{CU}400 \text{ cost} - \text{CU}180 \text{ residual value}) \div 2 \text{ years} \times 2 \text{ bulls})$.

The 60 male calves are biological assets. Because there is an active market for the calves at 31 December 20X0, the SME measures the calves at fair value less costs to sell and records a gain in profit or loss. Consequently, the SME recognises a CU4,980 gain for the male calves born in December 20X0 $(60 \text{ male calves} \times (\text{CU}90 \text{ fair value} - \text{CU}7 \text{ costs to sell}))$. Even though some male calves will be kept for breeding rather than sold in the bob veal trade, they will still be measured at the fair value less costs to sell of newly born male calves in the bob veal trade.

Once the male calves that will be kept for breeding have been identified, their measurement basis changes. The fair value less costs to sell at that date becomes their cost, and any subsequent directly attributable costs will be added until the bulls are suitable for breeding purposes. At this stage the bulls are available for their intended purposes and they will be depreciated over their expected useful lives of two years from that point.

For female calves, if the fair value cannot be readily determined without undue cost or effort, the cost model must be used. In applying the cost model, management must, by analogy to the requirements of Section 17, develop an accounting policy to measure and account for the calves. The initial cost of each calf should include direct and allocated costs. This allocation requires estimates and judgements. The costs of getting the calves ready for use as intended by management would include expenses such as feed, vaccines, other medicines, an allocation of the depreciation of the calf sheds and an allocation of the depreciation charge of the calves' parents. These costs are included in the cost of the female calves up until the point a female calf reaches maturity and becomes a cow that is ready to be milked. Consequently, the SME may conclude that the expense of determining the fair value of an animal could be less than the expense of determining the cost. In deciding whether to apply the undue cost or effort exemption, the SME should also consider the costs related to the other alternative.

Ex 26 An SME grows a rare, new breed of purple tomatoes, which it plans to sell to local fine-dining establishments. The SME accounts for its tomato vine as an annual crop because the life of the vine is only 10 months and the vine only bears one harvest.

The initial cost of the vines was CU5,500 and the direct costs of growing the purple tomatoes during 20X1 (direct labour costs and other direct costs, including fertilisation) were CU7,250. In addition to the direct costs to grow the tomatoes, an appropriate allocation of farm overheads would be CU2,000, including depreciation of the greenhouse.

The SME determines that due to its rarity, the fair value of the purple tomato vine is not readily determinable without undue cost or effort.

As the fair value of the purple tomato vines is not readily determinable without undue cost or effort, the SME accounts for these biological assets using the cost model.

Management observes that the tomatoes that are grown for sale as agricultural produce are used like inventory under production and so, applying paragraph 10.5, the SME chooses to analogise using the cost model in Section 13.

Consequently, the costs incurred before harvest should be recognised as follows:

Dr	Asset—Biological assets accounted for by the cost model (purple tomato vines)	CU14,750	
	Cr	Asset—Cash or liability—Outstanding liabilities	CU14,750

To recognise the costs incurred in growing the purple tomatoes

Calculation

- Direct costs: purchase price + direct costs + allocated costs = CU5,500 + CU7,250 + CU2,000 = CU14,750

34.9 The entity shall measure agricultural produce harvested from its biological assets at fair value less estimated costs to sell at the point of harvest. Such measurement is the cost at that date when applying Section 13 or other sections of this Standard.

Educational notes

Irrespective of whether an entity measures a biological asset under the fair value model or the cost model, it measures any agricultural produce harvested from that biological asset, at the point of harvest, at fair value minus estimated costs to sell.

Agricultural produce usually meets the definition of inventory and is accounted for in accordance with Section 13 after the point of harvest. Consequently, the fair value minus estimated costs to sell, measured at the point of harvest, will be the deemed cost of the inventory for subsequent accounting under Section 13.

Examples—Measurement at the point of harvest of agricultural produce

Ex 27 The facts are the same as in Example 24.

On 15 February 20X0 the SME slaughters all of its 45-day-old chickens using a local butchering service costing CU100,000. The fair value of a chicken carcass at this stage (with no further processing), is estimated to be CU5 per unit. A non-refundable duty of 10% is payable by the seller of a chicken carcass.

On 16 February, after slaughter, the SME packages the meat into cuts for sale, incurring processing and packaging costs of CU200,000. It is expected that the meat will be sold to supermarkets on 20 February 20X0 for an estimated selling price of CU7 per unit.

At the point of slaughter the carcass becomes agricultural produce (no longer a biological asset). In accordance with paragraph 34.9, the carcass is measured at fair value less costs to sell. After harvest, it is recognised as inventory and the fair value less costs to sell at the point of harvest is the cost on application of Section 13.

The fair value less costs to sell per carcass is CU4.5 per unit (CU5 fair value per unit minus CU0.50, 10% expected costs to sell) and 300,000 chickens are slaughtered. Consequently, the SME recognises the following journal entry:

Dr	Asset—Inventory: chicken carcasses	CU1,350,000 ^(a)	
	Cr	Asset—Biological assets accounted for at cost (chickens)	CU729,658 ^(b)
	Cr	Asset—Cash or liability—Payables (cost of slaughter)	CU100,000
	Cr	Income—Profit or loss: fair value gain (on recognition of agricultural produce)	CU520,342

To recognise the harvesting, remeasurement to fair value and transfer to inventory

(a) $CU1,350,000 = 300,000 \text{ chickens} \times (CU5.00 \text{ minus } (CU 5.00 \times 10\%))$.

(b) From Example 24.

The costs incurred after the point of harvest (CU200,000 processing and packaging costs) are included in the cost of inventory in accordance with Section 13.

Ex 28 The facts are the same as in Example 25. In addition, the SME produced 580,000 litres of milk. There is an active market for unprocessed milk. The quoted price throughout 20X0 was CU0.1 per litre and the costs to sell are CU0.01 per litre.

The 580,000 litres of milk collected in 20X0 is agricultural produce (inventory) harvested from the cows (biological assets). At the date of milking (harvest) the SME recognises the milk at its fair value less costs to sell of CU52,200 (580,000 litres $\times$ (CU0.1 fair value minus CU0.01 costs to sell)).

Disclosures—cost model

34.10 An entity shall disclose the following with respect to its biological assets measured using the cost model:

- (a) a description of each class of its biological assets;
- (b) an explanation of why fair value cannot be measured reliably without undue cost or effort;
- (c) the depreciation method used;
- (d) the useful lives or the depreciation rates used; and
- (e) the gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the period.

Example—Disclosures—Cost model

Ex 29 SME A is a salmon farmer. SME A could disclose information about its biological assets as follows:

Extract from SME A's notes to the financial statements for the year ended 31 December 20X1

Note 1. Operations and principal activities

SME A's operations consist primarily of salmon farming in Country A and sea bream farming in Country B. SME A recently began farming the fast-growing marine species cobia in Country C (also known as 'ling'—a white-meat fish that lives in tropical waters). Cobia is a new species in the fish-farming industry. SME A does not breed fish. It acquires newly hatched fish from a specialist supplier.

Note 2. Accounting policies

Biological assets

Biological assets consist of three species of fish: salmon, sea bream and cobia. Biological assets whose fair value is readily determinable without undue cost or effort are measured at fair value less costs to sell, with changes in fair value less costs to sell recognised in profit or loss in the period of the change. All other biological assets are measured using the cost model.

Mature salmon (4kg and over) and mature sea bream (350g and over) are measured at fair value less costs to sell at the end of each reporting period, with changes in that value recognised in profit or loss in the period of the change. The fair value of these fish is determined with reference to the most advantageous active local market to which SME A has access, because no principal market has been identified. In these markets, prices are quoted daily by the size of fish.

continued ...

Note 2. Accounting policies

An active market price is not readily available for SME A's other fish and management has determined that estimating fair value would involve undue cost. For immature salmon and sea bream, SME A would have to incur substantial costs to change its farming methods in order to establish the weight of its immature fish stocks of salmon and sea bream more accurately. Prices can vary significantly with fish size. Cobia, mature and immature, is measured at cost because it has only recently been farmed by any entity. Consequently, SME A measures all other fish at the lower of cost and net realisable value. Cost is determined on an average basis including both direct costs and an allocation of indirect costs.

Note 3. Biological assets

SME A physically separates fish stocks by breed (salmon, sea bream and cobia) and by size and age. For accounting purposes, SME A differentiates between mature and immature fish stocks for salmon and sea bream. Salmon is categorised mature when it reaches 4kg, and sea bream when it reaches 350g.

Reconciliation of the carrying amounts of mature salmon and sea bream held at fair value:^(a)

	<i>Mature salmon</i>	<i>Mature sea bream</i>	<i>Total</i>
	<i>CU</i>	<i>CU</i>	<i>CU</i>
Balance at 1 January 20X1	15,000	4,810	19,810
Reclassification from immature fish measured at cost	1,225	1,380	2,605
Decrease resulting from harvesting	(3,260)	(2,310)	(5,570)
Gains arising from changes in fair value less costs to sell	2,300	800	3,100
Balance at 31 December 20X1	15,265	4,680	19,945

continued ...

Note 3. Biological assets

Reconciliation of the carrying amounts of immature salmon, sea bream and cobia held at cost:^(a)

	<i>Immature salmon</i>	<i>Immature sea bream</i>	<i>Cobia</i>	<i>Total</i>
	<i>CU</i>	<i>CU</i>	<i>CU</i>	<i>CU</i>
Costs				
Balance at 1 January 20X0	7,865	3,280	2,545	13,690
Fish purchased	800	760	855	2,415
Costs incurred during the year	50	40	45	135
Reclassification to mature fish	(1,000)	(1,220)	0	(2,220)
Decrease resulting from death	(215)	(105)	(45)	(365)
Balance at 31 December 20X0	7,500	2,755	3,400	13,655
Fish purchased	445	662	1,248	2,355
Costs incurred during the year	55	38	52	145
Reclassification to mature fish	(1,225)	(1,380)	0	(2,605)
Decrease resulting from death	(250)	(150)	(50)	(450)
Balance at 31 December 20X1	6,525	1,925	4,650	13,100

(a) The classes in each of these tables may be combined for disclosure purposes.

Exploration for and evaluation of mineral resources

- 34.11 An entity using this Standard that is engaged in the exploration for, or evaluation of, mineral resources shall determine an accounting policy that specifies which expenditures are recognised as exploration and evaluation assets in accordance with paragraph 10.4 and apply the policy consistently. An entity is exempt from applying paragraph 10.5 to its **accounting policies** for the recognition and measurement of exploration and evaluation assets.

Educational notes

An entity that is engaged in the exploration for, or evaluation of, mineral resources applies Section 34 in accounting for its exploration and evaluation expenditures. Section 34 does not address other aspects of accounting by entities engaged in the exploration for and evaluation of mineral resources. For example, Section 34 does not apply to:

- expenditures that take place before the exploration and evaluation stages, such as expenditure incurred before obtaining the legal rights to explore a specific area; or
- expenditures that take place after the exploration and evaluation stage, such as expenditure on the extraction and refining of mineral resources.

Paragraph 34.11 requires an entity to develop an accounting policy for which expenditures are recognised as exploration and evaluation assets in accordance with paragraph 10.4 and to apply the policy consistently. Paragraph 10.4 states that when the Standard does not specifically address a transaction, other event or condition, the entity's management uses its judgement in developing an accounting policy that results in information that is relevant to the economic decision-making needs of users and is reliable.

However, paragraph 34.11 states that an entity is exempt from applying paragraph 10.5 to its accounting policies for the recognition and measurement of exploration and evaluation assets. Paragraph 10.5 would otherwise require that management considers the requirements and guidance in the Standard dealing with similar and related issues or the concepts and pervasive principles in Section 2.

34.11A The following are examples of expenditures that might be included in the initial measurement of exploration and evaluation assets (the list is not exhaustive):

- (a) acquisition of rights to explore;
- (b) topographical, geological, geochemical and geophysical studies;
- (c) exploratory drilling;
- (d) trenching;
- (e) sampling; and
- (f) activities in relation to evaluating the technical feasibility and commercial viability of extracting a mineral resource.

Expenditures related to the development of mineral resources shall not be recognised as exploration and evaluation assets.

Educational notes

Paragraph 35.11A provides a non-exhaustive list of examples of expenditures that may be within the scope of the section. The list is not definitive nor complete and should be considered an indication of types of expenditures to consider. The paragraph also makes clear that development activities are not part of exploration and evaluation activities. Development activities would typically be accounted for applying either Section 2 or Section 18.

Examples—Scope: extractive activities

Ex 30 An SME is granted a licence to a specified location. The licence allows the SME to undertake efforts to establish whether, and to what extent, commercially extractable crystals are present.

This is a type of extractive activity addressed by Section 34. The SME determines an accounting policy for which exploration and evaluation expenditures are recognised as exploration and evaluation assets in accordance with paragraph 34.11.

Ex 31 An SME is a multinational company involved in the exploration for, and extraction and refining of, oil and gas in the Pacific Ocean.

Exploration for oil and gas is a type of extractive activity covered by Section 34. The SME determines an accounting policy for which exploration and evaluation expenditures are recognised as exploration and evaluation assets in accordance with paragraph 34.11.

However, Section 34 does not address other aspects of accounting by entities engaged in the exploration for and evaluation of mineral resources (see Example 33).

Ex 32 An SME formed by three mining engineers provides consulting services to entities that explore for mineral resources. The consulting SME itself does not explore for or extract minerals.

Although the SME provides consulting services to the mining business, it is not engaged in extractive activities. Consequently, the SME does not account for the services it provides, or any of its expenditures, in accordance with paragraph 34.11.

Ex 33 An SME is a multinational company involved in the exploration for, and extraction and refining of, oil and gas in the Pacific Ocean. Due to low oil and gas prices, the SME has in recent years ceased its exploration activities to concentrate on the extraction of its already identified reserves.

Exploration for oil and gas is a type of extractive activity covered by Section 34. However, Section 34 does not address other aspects of accounting by entities engaged in the exploration for and evaluation of mineral resources. For example, it does not apply to expenditures involved in the extraction and refining of oil and gas after the exploration and evaluation stage.

Even though the SME has previously engaged in exploration activities, it would not apply Section 34 because it has not engaged in exploration activities in the current period.

34.11B Exploration and evaluation assets shall be measured on initial recognition at cost. After initial recognition, an entity shall apply Section 17 and Section 18 *Intangible Assets other than Goodwill* to the exploration and evaluation assets according to the nature of the assets acquired subject to paragraphs 34.11D–34.11F. If an entity has an obligation to dismantle or remove an item, or to restore the site, such obligations and costs are accounted for in accordance with Section 17 and Section 21 *Provisions and Contingencies*.

Educational notes

This paragraph stipulates the initial measurement requirements for assets within the scope of paragraph 34.11. The assets are measured at cost.

Section 34 does not provide requirements on how to measure the initial cost of an exploration or evaluation asset. Consequently, in accordance with paragraph 10.4, management uses its judgement in developing and applying an accounting policy that results in information that is reliable and that is relevant to the economic decision-making needs of users (for example, owners who are not involved in managing the business, potential owners, existing and potential lenders and other creditors). In doing so, management refers to, and considers the applicability of, the requirements and guidance in the Standard that deal with similar and related issues (see paragraph 10.5).

If an entity has an item of property, plant and equipment, such as a drilling rig that it has purchased or constructed, the entity would classify that asset as property, plant and equipment in accordance with Section 17. If that asset were to be used, for example, for two years on an exploration and evaluation project and then be used on another project, the depreciation of that asset during the two years would be exploration and evaluation expenditure and the entity would apply its accounting policy (in accordance with paragraph 34.11) to determine whether it was capitalised as part of the exploration and evaluation asset.

After initial recognition, paragraph 34.11B requires that an entity apply Section 17 and Section 18 to the exploration and evaluation assets according to the nature of the assets acquired (that is, tangible versus intangible) subject to the requirements in paragraphs 34.11D–34.11F. Some exploration and evaluation assets are clearly tangible in nature and others are clearly intangible in nature (for example, drilling rights and exploration licences). For other assets, judgement may be required as to whether the costs relate to a physical item (for example, property, plant or equipment) or an intangible item (for example, information about the site).

The classification of exploration and evaluation assets as either tangible or intangible will form the basis for the subsequent measurement, presentation and disclosure of those assets in accordance with Section 17 or Section 18.

Many entities engaged in the exploration for, or evaluation of, mineral resources will incur an obligation in relation to site restoration and decommissioning because of their exploration and evaluation activities. If an entity has an obligation to dismantle or remove an item (such as a drilling rig) or restore the exploration site, such obligations and costs are accounted for in accordance with Section 17 and Section 21.

Example—Initial measurement of exploration and evaluation assets

Ex 34 An SME operates in the extraction and refining of oil and gas. The SME operates upstream activities that comprise the exploration for and extraction of crude oil and natural gas and midstream and downstream activities that include the transportation of crude oil and gas, the refining of crude oil and the sale of the refined products.

On 1 January 20X1, the SME acquired a five-year exploration licence at a cost of CU5,000,000 to explore for new oil deposits in a region under the Pacific Ocean. Initial surveys of the licence area indicate that there are oil deposits present but further surveys are required to establish the extent of the deposits and whether they will be commercially viable.

The SME incurred the following additional costs in the year ended 20X1:

	CU'000
Rentals for an operating lease of a drilling rig	5,000
Exploratory drilling costs probing the extent of potential oil fields	20,000
Administrative expenses directly attributable to exploration of the Pacific Ocean	3,000

In 20X1, the SME also constructed an offshore loading platform for CU30,000,000 close to producing fields. Local legislation requires it to dismantle the platform at the end of production.

The SME considers these costs when determining an accounting policy for which expenditures are recognised as exploration and evaluation assets.

In determining its accounting policy, the SME would first need to evaluate whether and which of its activities are within the scope of paragraph 34.11; paragraph 34.11A provides additional guidance. In this case the SME determines that:

- the cost of the licence is within the scope of exploration and evaluation expenditure because it is incurred by the SME to acquire rights to explore (see paragraph 34.11A(a));
- the operating lease rentals for the drilling rig are within the scope of exploration and evaluation expenditure;
- exploratory drilling costs are within the scope of exploration and evaluation expenditure (see paragraph 34.11A(c));
- administrative expenses directly attributable to exploration of the area of the Pacific Ocean incurred during the period of exploration and evaluation are within the scope of exploration and evaluation expenditure; and
- the offshore loading platform is close to producing fields and is used in the SME's normal production activities, so it is not within the scope of exploration and evaluation expenditure.

Having identified that some of its activities are within the scope of paragraph 34.11, the SME must then decide on an accounting policy that specifies which of those qualifying expenditures are recognised as exploration and evaluation assets. In determining that policy, the SME should apply the requirements of paragraph 10.4, which state that the policy should result in information that is reliable and relevant to the economic decision-making needs of users of the SME's financial statements (owners who are not involved in managing the business, potential owners, existing and potential lenders and other creditors). In making this determination, the SME would consider, for example, whether the capitalisation of some expenditure, which is included in the scope of paragraph 34.11, would nonetheless result in less useful information.

Paragraph 34.11 requires that once developed, such a policy be consistently applied.

The cost of the offshore loading platform is not exploration or evaluation expenditure and so is not included in the measurement of exploration and evaluation assets. The offshore loading platform would be accounted for in accordance with Section 17 and the obligation to dismantle the platform would be accounted for in accordance with Section 17 and Section 21.

34.11C Exploration and evaluation assets shall be assessed for impairment when facts and circumstances suggest that the carrying amount of an exploration and evaluation asset may exceed its **recoverable amount**. An entity shall measure, present and disclose any resulting impairment loss in accordance with Section 27 *Impairment of Assets*, except as provided by paragraph 34.11F.

34.11D For the purposes of exploration and evaluation assets only, paragraph 34.11E shall be applied instead of paragraphs 27.7–27.10 when identifying an exploration and evaluation asset that may be impaired. Paragraph 34.11E uses the term ‘assets’ but applies equally to separate exploration and evaluation assets or a **cash-generating unit**.

34.11E One or more of the following facts and circumstances indicate that an entity should test exploration and evaluation assets for impairment (the list is not exhaustive):

- (a) the period for which the entity has the right to explore in the specific area has expired during the period, or will expire in the near future, and is not expected to be renewed;
- (b) substantive expenditure on further exploration for, and evaluation of, mineral resources in the specific area is neither budgeted nor planned;
- (c) exploration for and evaluation of mineral resources in the specific area have not led to the discovery of commercially viable quantities of mineral resources and the entity has decided to discontinue such activities in the specific area; or
- (d) sufficient data exists to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale.

The entity shall perform an impairment test, and recognise any impairment loss, in accordance with Section 27.

34.11F An entity shall determine an accounting policy for allocating exploration and evaluation assets to cash-generating units or groups of cash-generating units for the purpose of assessing such assets for impairment.

34.11G An entity shall treat exploration and evaluation assets as a separate **class of assets** and make the disclosures required by either Section 17 or Section 18 consistent with how the assets are classified.

Educational notes

Paragraph 34.11C requires exploration and evaluation assets to be assessed for impairment when facts and circumstances suggest that the carrying amount of an exploration and evaluation asset may exceed its recoverable amount; this is similar to the requirements for the impairment assessment in Section 27. Paragraph 34.11E provides a list of facts and circumstances that indicate that an entity should test exploration and evaluation assets for impairment. This list is tailored to exploration and evaluation assets and so differs from the indicators listed in Section 27 that apply more broadly to other assets (see paragraph 27.9). However, like the list in paragraph 27.9, the list in paragraph 34.11E is not intended to be exhaustive and so the entity should consider if there are any other indicators that the exploration and evaluation assets are impaired.

Service concession arrangements

34.12 A **service concession arrangement** is an arrangement whereby a government or other public sector body (the grantor) contracts with a private operator to develop (or upgrade), operate and maintain the grantor's infrastructure assets such as roads, bridges, tunnels, airports, energy distribution networks, prisons or hospitals. In those arrangements, the grantor controls or regulates what services the operator must provide using the assets, to whom, and at what price, and also controls any significant residual interest in the assets at the end of the term of the arrangement.

Educational notes⁴

In many jurisdictions, infrastructure for public services—such as roads, bridges, tunnels, prisons, hospitals, airports, water distribution facilities, energy supply and telecommunication networks—has traditionally been constructed, operated and maintained by the public sector and financed through public budget appropriation.

In some jurisdictions, governments have introduced contractual service arrangements to attract private sector participation in the development, financing, operation and maintenance of such infrastructure. The infrastructure may already exist or may be constructed during the period of the service arrangement. An arrangement within the scope of Section 34 typically involves a private-sector entity (an operator) constructing the infrastructure used to provide the public service or upgrading it (for example, by increasing its capacity) and operating and maintaining that infrastructure for a specified period. The operator is paid for its services over the period of the arrangement.

⁴ The background information in this note has been taken from paragraphs 1–3 of IFRIC 12 *Service Concession Arrangements*.

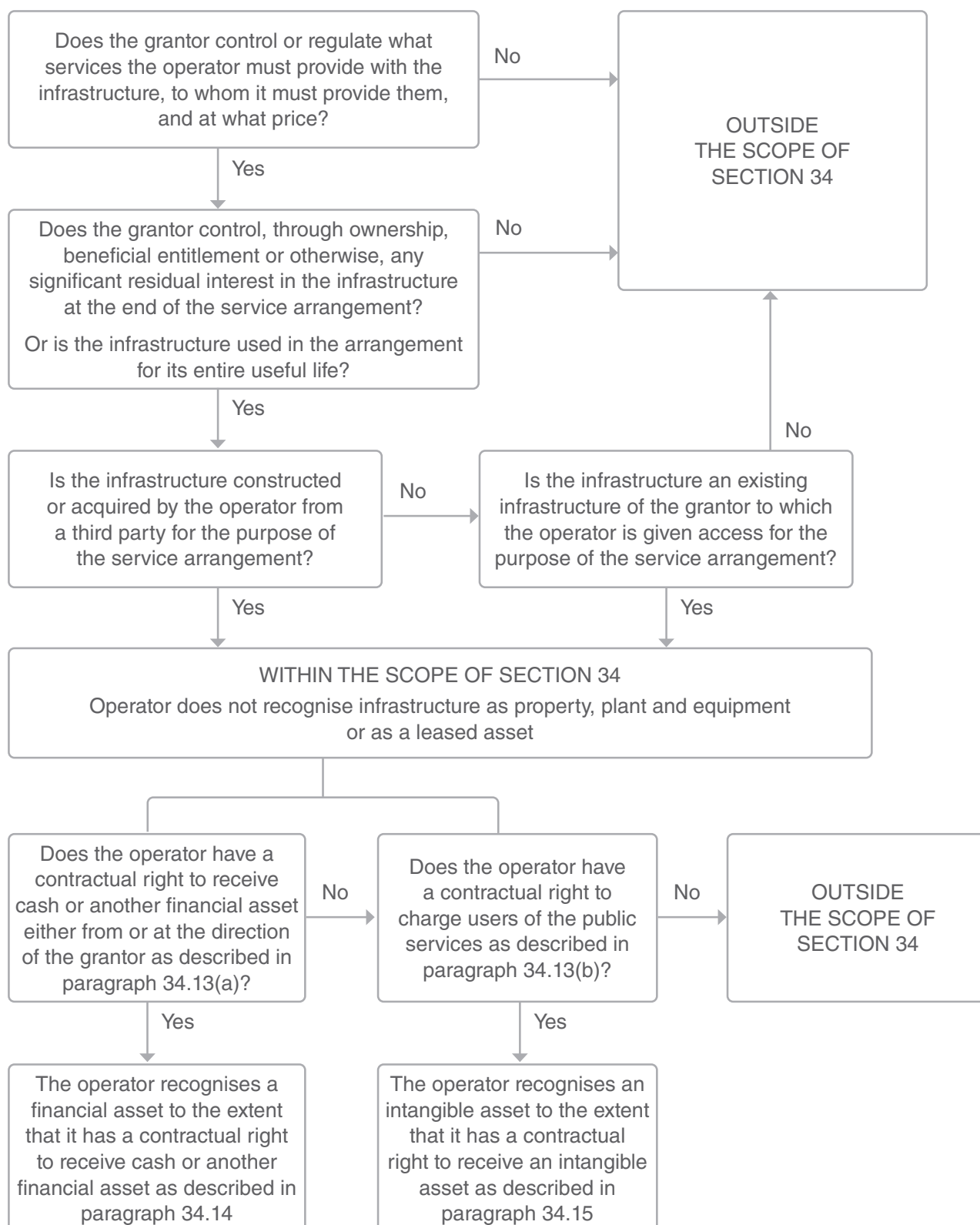
The arrangement is governed by a contract that sets out performance standards, mechanisms for adjusting prices and arrangements for arbitrating disputes. Such an arrangement is often described as a 'build-operate-transfer', a 'rehabilitate-operate-transfer' or a 'public-to-private' service concession arrangement. The arrangements are mostly long-term contracts but are typically shorter than the life of the asset being provided. The asset normally reverts, fully operational, to the grantor at little or no cost at the end of the contract.

A feature of these service arrangements is the public service nature of the obligation undertaken by the operator. Public policy is for the services related to the infrastructure to be provided to the public, irrespective of the identity of the party that operates the services. The service arrangement contractually obliges the operator to provide the services to the public on behalf of the public sector entity. Other common features are:

- the party that grants the service arrangement (the grantor) is a public sector entity, including a governmental body, or a private sector entity to which the responsibility for the service has been devolved;
- the operator is responsible for at least some of the management of the infrastructure and related services and does not merely act as an agent on behalf of the grantor;
- the contract sets the initial prices to be levied by the operator and regulates price revisions over the period of the service arrangement; and
- the operator is obliged to hand over the infrastructure to the grantor in a specified condition at the end of the period of the arrangement, for little or no incremental consideration, irrespective of which party initially financed it.

Diagram 1 is based on material accompanying IFRIC 12 *Service Concession Arrangements*, and provides guidance on how to identify service concession arrangements and therefore determine whether an arrangement should be accounted for under Section 34. It also shows how to determine the appropriate accounting under Section 34.

Diagram 1—Identifying service concession arrangements in relation to Section 34



Examples—Scope: service concession arrangements

Ex 35 An SME won a competitive bidding process and was consequently contracted by a local authority to build and operate a 100-kilometre road. In accordance with the terms of the arrangement, the SME is responsible for maintaining the road in conformity with specified quality standards and, when necessary, providing breakdown assistance to the users of the road. The local authority regulates the fee that the SME can charge the users of the road.

The SME is the operator in a service concession arrangement. The SME accounts for the service concession arrangement in accordance with Section 34.

Ex 36 An SME provides guarding and security services to a central bank. The responsibilities of each party are stated in a contract that clearly presents the terms of the service agreement.

Although the SME is engaged in an arrangement to provide services, and the other party to the contract is a public sector body, the services provided are not to develop, operate and maintain the public sector infrastructure assets. Consequently, the SME is not an operator in a service concession arrangement and the SME does not account for those services in accordance with Section 34.

34.13 There are two principal categories of service concession arrangements:

- (a) in one, the operator receives a **financial asset**—an unconditional contractual right to receive a specified or determinable amount of cash or another financial asset from the government in return for constructing or upgrading a public sector asset, and then operating and maintaining the asset for a specified period of time. This category includes guarantees by the government to pay for any shortfall between amounts received from users of the public service and specified or determinable amounts.
- (b) in the other, the operator receives an **intangible asset**—a right to charge for use of a public sector asset that it constructs or upgrades and then operates and maintains for a specified period of time. A right to charge users is not an unconditional right to receive cash because the amounts are contingent on the extent to which the public uses the service.

Sometimes, a single contract may contain both types: to the extent that the government has given an unconditional guarantee of payment for the construction of the public sector asset, the operator has a financial asset; to the extent that the operator has to rely on the public using the service in order to obtain payment, the operator has an intangible asset.

continued ...

Accounting—financial asset model

- 34.14 The operator shall recognise a financial asset to the extent that it has an unconditional contractual right to receive cash or another financial asset from or at the direction of the grantor for the construction services. The operator shall measure the financial asset at fair value. Thereafter, it shall follow Section 11 *Financial Instruments* in accounting for the financial asset.

Example—Service concession arrangements—Financial asset model

Ex 37 An SME (operator) enters into an arrangement with the local government (grantor). The terms of the arrangement require the operator to construct a hospital within three years and operate the hospital for 27 years (years 4–30), subject to certain regulations set by the grantor. The terms of the arrangement also require the operator to give the hospital to the grantor at the end of year 30. The hospital must be operational at the end of year 30 when the arrangement ends.

The payment terms of the arrangement require the grantor to pay the operator CU100,000 in year four growing at a 3% annual rate in years 5–30 for making the hospital available to the public.

The operator recognises and measures revenue from the contract with the grantor in accordance with Section 23 *Revenue from Contracts with Customers*. Revenue—the amount of consideration to which the operator expects to be entitled from the grantor for the services provided—is recognised when (or as) the promises in the contract are satisfied, in accordance with Section 23. The operator identifies two promises in the contract: to construct the hospital and to operate the hospital. The hospital is not shown as property of the operator.

The terms of the arrangement require the grantor to pay the operator for making the hospital available to the public. While the hospital is being constructed, the SME's right to consideration is conditional on the hospital being available to the public. Therefore, the amounts due from the grantor (in respect of the construction of the hospital) are conditional and the operator recognises a contract asset. The operator accounts for the contract asset in accordance with Section 23.

Once the construction is complete, the amounts due from the grantor (in respect of the construction of the hospital) are unconditional and the operator recognises a financial asset (a receivable). The receivable is measured initially at fair value and subsequently at amortised cost in accordance with Section 11.

Example 39 expands on this example and illustrates the detailed workings and resulting accounting in each of the 30 years.

Module 23 *Revenue from Contracts with Customers* provides guidance on application of Section 23.

Accounting—intangible asset model

- 34.15 The operator shall recognise an intangible asset to the extent that it receives a right (a licence) to charge users of the public service. The operator shall initially measure the intangible asset at fair value. Thereafter, it shall follow Section 18 in accounting for the intangible asset.

Example—Service concession arrangements—Intangible asset model

- Ex 38** The facts are the same as in Example 37. However, in this example the payment terms of the arrangement allow the SME (operator) to charge the patients for hospital services, with prices regulated by the government (grantor). The operator forecasts revenue from patients of CU100,000 in year four and this revenue will grow at a rate of 3% annually in years 5–30.

The operator constructs and operates the hospital for the grantor in exchange for a right to charge the clients for the hospital services in years 4–30. The right is an intangible asset. It is not an unconditional right to receive cash because the income depends on use by the patients. The operator recognises the intangible asset at fair value.

After initial recognition the intangible asset is accounted for in accordance with Section 18.

Example 41 expands on this example and illustrates the detailed workings and resulting accounting in each of the 30 years.

Example—Service concession arrangements—Hybrid model

- Ex 39** The facts are the same as in Example 37. However, in this example, the payment terms of the arrangement allow the operator to charge the patients for hospital services, with prices regulated by the grantor. In addition, at the end of year 20 the grantor will pay the operator CU1,080,000, to recognise the fact that the prices will be regulated during the entire period and the hospital is located in an area that has a low population density. The operator forecasts receiving revenues from patients of CU70,000 in year four, and this revenue will grow at a rate of 3% annually in years 5–30.

The contract contains contractual rights for the operator to receive cash from the grantor and to charge users for the public services. The construction services therefore give rise to the following:

- a right to receive cash from the grantor. While the hospital is being constructed, this right is conditional on the hospital being available to the public. Therefore, the amounts due from the grantor are recognised as a contract asset. Once the hospital is constructed, the grantor's right to receive cash in return for constructing the asset is unconditional and the operator recognises a financial asset (a receivable). The receivable is initially measured at fair value and subsequently measured at amortised cost in accordance with Section 11 *Financial Instruments*.

- a right to charge patients for the hospital services. To the extent that the operator has to rely on the public using the services, the operator recognises an intangible asset. The intangible asset is initially recognised at fair value and subsequently measured in accordance with Section 18.

Operating revenue

- 34.16 The operator of a service concession arrangement shall recognise, measure and disclose **revenue** in accordance with Section 23 *Revenue from Contracts with Customers* for the services it performs.

Examples—Operating revenue

- Ex 40** An SME (operator) enters into a service concession arrangement. The terms of the arrangement require the operator to construct a hospital within three years and to operate the hospital subject to regulations set by the government (grantor) for 27 years (years 4–30). The terms of the arrangement also require the operator to give the hospital to the grantor at the end of year 30. The hospital must be operational at the end of year 30 when the arrangement ends. The terms of the arrangement require the grantor to pay the operator for making the hospital available to the public. The payment will be CU100,000 for year 4 and that sum will form the basis for payment in years 5–30, growing at a rate of 3% annually.

The estimated cost of constructing the hospital is as follows:

Year	Cost CU
1	42,000
2	44,000
3	54,000
	140,000

The annual operating costs are estimated to be CU79,500 in year 4 and it is estimated that they will grow at the rate of 3% annually in years 5–30.

All cash flows are assumed to take place at the end of the year.

The operator recognises and measures revenue from the contract with the grantor in accordance with Section 23. Revenue is recognised when (or as) the promises in the contract are satisfied in accordance with Section 23. The operator identifies two promises in the contract: construct the hospital and operate the hospital.

If the grantor paid upfront, the arrangement would cost CU3,742,056 (the current cash sale price). This amount is considered to be the discounted promised amount of consideration and is used as the transaction price.

The transaction price is allocated to the promises based on their relative stand-alone selling prices. The operator estimates the relative stand-alone selling price by reference to the expected costs plus a margin as follows:

Promise	Estimated costs	Margin	Stand-alone selling price
	CU	%	CU
Construct the hospital	140,000	30	182,000
Operate the hospital	3,236,415	10	3,560,056
Total	3,376,415		3,742,056

The costs of operating the hospital are calculated as $CU79,500 \times (((1 + 3\%)^{27} - 1) \div 3\%)$.

The operator determines that both promises are fulfilled over time and measures its progress fulfilling each promise as follows:

Promise	Method of measuring progress
Construct the hospital	Surveys of completed work
Operate the hospital	Costs incurred

The hospital is not shown as property of the operator.

The terms of the arrangement require the grantor to pay the operator for making the hospital available to the public. While the hospital is being constructed, the operator's right to consideration is conditional on the hospital being available to the public. Therefore, the amounts due from the grantor (in respect of the construction of the hospital) are conditional and the operator recognises a contract asset. The operator accounts for the contract asset in accordance with Section 23.

Once the construction is complete, the amounts due from the grantor (in respect of the construction of the hospital) are unconditional and the operator recognises a financial asset (a receivable). The operator measures the receivable initially at fair value and subsequently at amortised cost using the effective interest method, in accordance with Section 11. The operator measures the fair value of the receivable using a present value technique. Consequently, the value of the asset is equal to the carrying value of the contract asset.

The difference between the total expected consideration and the discounted value of that amount is recognised as finance income in accordance with the effective interest method and using an effective interest rate of 7.37833%.

The following table provides information about the revenues and costs in accordance with Section 23:

<i>Year</i>	<i>Receipts</i>	<i>Costs</i>	<i>Revenue</i>	<i>Contract asset/receivable at year-end</i>	<i>Finance income</i>	<i>Net profit</i>
	CU	CU	CU	CU	CU	CU
(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	–	(42,000)	50,000	50,000	–	8,000
2	–	(44,000)	52,000	105,689	3,689	11,689
3	–	(54,000)	80,000	193,487	7,798	33,798
4	100,000	(79,500)	87,450	195,213	14,276	22,226
5	103,000	(81,885)	90,074	196,690	14,403	22,592
6	106,090	(84,342)	92,776	197,888	14,512	22,946
7	109,273	(86,872)	95,559	198,775	14,601	23,288
8	112,551	(89,478)	98,426	199,316	14,666	23,614
9	115,927	(92,163)	101,378	199,473	14,706	23,921
10	119,405	(94,927)	104,420	199,206	14,718	24,211
11	122,987	(97,775)	107,553	198,470	14,698	24,476
12	126,677	(100,708)	110,779	197,216	14,644	24,715
13	130,477	(103,729)	114,102	195,392	14,551	24,924
14	134,392	(106,841)	117,525	192,942	14,417	25,101
15	138,423	(110,047)	121,052	189,807	14,236	25,241
16	142,576	(113,348)	124,683	185,919	14,005	25,340
17	146,853	(116,749)	128,423	181,207	13,718	25,392
18	151,259	(120,251)	132,276	175,594	13,370	25,395
19	155,797	(123,858)	136,244	168,997	12,956	25,342
20	160,471	(127,574)	140,331	161,326	12,469	25,226
21	165,285	(131,401)	144,541	152,485	11,903	25,043
22	170,243	(135,343)	148,877	142,370	11,251	24,785
23	175,351	(139,404)	153,344	130,868	10,505	24,445
24	180,611	(143,586)	157,945	117,858	9,656	24,015
25	186,029	(147,893)	162,682	103,207	8,696	23,485
26	191,610	(152,330)	167,563	86,775	7,615	22,848
27	197,359	(156,900)	172,590	68,409	6,403	22,093
28	203,279	(161,607)	177,768	47,945	5,047	21,208
29	209,378	(166,455)	183,101	25,206	3,538	20,184
30	215,660	(171,449)	188,594	–	1,860	19,005
Total	4,070,963	(3,376,415)	3,742,056		328,907	694,548

-
- (a) The first column shows the years in the contract period.
 - (b) The second column shows the receipts from the grantor, taking into account the 3% annual growth rate. For example, receipts from the grantor in year 6 equal CU106,090 (CU103,000 receipts in year 5 $\times (1 + 0.03)$).
 - (c) The first three years in the third column represent the construction costs. From year 4 onwards this column shows the operating costs growing at the rate of 3% annually. For example, the costs in year 6 equal CU84,342 (CU81,885 costs in year 5 $\times (1 + 0.03)$).
 - (d) The fourth column shows revenue. Revenue for constructing the hospital is recognised in years 1 to 3. The amount of revenue recognised each year is based on progress in fulfilling that promise. This is measured by reference to surveys of completed work. Revenue from operating the hospital is recognised in years 4 to 30. The amount of revenue recognised each year is based on progress in fulfilling that promise. The amount is measured with reference to the costs incurred compared to the total expected costs. For example, revenue for year 6 equals CU92,776 ((CU84,342 costs in year 6 $\div$ CU3,236,415 total expected costs) $\times$ CU3,560,056 amount of transaction price allocated to the promise).
 - (e) The fifth column shows the contract asset/receivable in respect of the construction services. It is computed as the previous year's balance multiplied by the effective interest rate (7.37833%) plus revenue recognised in the year minus receipts from the grantor. For example, the carrying amount of the receivable at the end of year 6 is CU197,888 (CU196,690 carrying amount of the receivable at the end of year 5 $\times (1 + 0.0737833)$ + CU92,776 revenue in year 6 – CU106,090 receipts in year 6).
 - (f) The sixth column shows the finance income (calculated as the contract asset/receivable of the previous year multiplied by the effective interest rate). For example, the finance income for year 6 is CU14,512 (CU196,690 (carrying amount of the receivable at the end of year 5) $\times$ 0.0737833).
 - (g) The seventh column shows the net profit computed as revenue (column (d)) minus costs (column (c)) plus the finance income (column (f)). For example, net profit for year 6 is CU22,946 (CU92,776 revenue – CU84,342 costs + CU14,512 finance income).

Note: Amounts in columns (a)–(g) have been rounded to the nearest CU1.

Ex 41 The facts are the same as in Example 37. However, in this example, the terms of the arrangement allow the operator to charge the patients for hospital services (with prices regulated by the grantor), instead of receiving income from the grantor. The operator forecasts revenue of CU100,000 in year 4, which will grow at the rate of 3% annually in years 5–30.

The estimated cost of constructing the hospital is as follows:

Year	Cost CU
1	42,000
2	44,000
3	54,000
	140,000

All cash flows are assumed to take place at the end of the year.

The operator recognises and measures revenue from the contract with the grantor in accordance with Section 23. Revenue is recognised when (or as) the promises in the contract are satisfied applying Section 23. The operator identifies the contract with the grantor containing a single promise: the construction of the hospital.

The operator provides construction services to the grantor in exchange for an intangible asset (a right to charge the patients for hospital services in years 4–30). Therefore, the operator is entitled to non-cash consideration. The non-cash consideration is measured at fair value, estimated based on the stand-alone selling price of the services. The operator estimates the relative stand-alone selling price with reference to the expected costs plus a margin of 30%. Consequently, the fair value of the non-cash consideration and transaction price is calculated as CU182,000 ($\text{CU}140,000 \times (1 + 30\%)$).

The operator determines the promise is fulfilled over time and measures its progress fulfilling the promise based on surveys of completed work. The hospital is not shown as property of the operator.

During the construction phase of the arrangement, the operator's asset (representing its accumulating right to charge the patients for hospital services in the future) is recognised as an intangible asset. The operator recognises the intangible asset at fair value, which is estimated to be equal to the fair value of the construction services delivered. Consistent with the measurement of the non-cash consideration, the operator estimates the fair value of the services delivered based on their stand-alone selling price. The intangible asset will be amortised over the period in which it is expected to be available for use by the operator (years 4–30).

The operator also recognises and measures revenue from contracts with patients to provide hospital services in accordance with Section 23. Because patients pay for hospital services shortly before receiving them, the revenue recognised is equal to the estimated payments received.

The following table provides information about the revenues and costs in accordance with Section 23:

<i>Year</i>	<i>Estimated receipts</i>	<i>Costs</i>	<i>Revenue</i>	<i>Intangible asset at year end</i>	<i>Amortisation</i>	<i>Net profit</i>
	CU	CU	CU	CU	CU	CU
(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	–	(42,000)	50,000	50,000	–	8,000
2	–	(44,000)	52,000	102,000	–	8,000
3	–	(54,000)	80,000	182,000	–	26,000
4	100,000	(79,500)	100,000	175,259	(6,741)	13,759
5	103,000	(81,885)	103,000	168,518	(6,741)	14,374
6	106,090	(84,342)	106,090	161,778	(6,740)	15,008
7	109,273	(86,872)	109,273	155,037	(6,741)	15,660
8	112,551	(89,478)	112,551	148,296	(6,741)	16,332
9	115,927	(92,162)	115,927	141,555	(6,741)	17,024
10	119,405	(94,927)	119,405	134,815	(6,740)	17,738
11	122,987	(97,775)	122,987	128,074	(6,741)	18,471
12	126,677	(100,708)	126,677	121,333	(6,741)	19,228
13	130,477	(103,729)	130,477	114,592	(6,741)	20,007
14	134,392	(106,841)	134,392	107,852	(6,740)	20,811
15	138,423	(110,047)	138,423	101,111	(6,741)	21,635
16	142,576	(113,348)	142,576	94,370	(6,741)	22,487
17	146,853	(116,748)	146,853	87,629	(6,741)	23,364
18	151,259	(120,251)	151,259	80,889	(6,740)	24,268
19	155,797	(123,858)	155,797	74,148	(6,741)	25,198
20	160,471	(127,574)	160,471	67,407	(6,741)	26,156
21	165,285	(131,401)	165,285	60,666	(6,741)	27,143
22	170,243	(135,343)	170,243	53,926	(6,740)	28,160
23	175,351	(139,404)	175,351	47,185	(6,741)	29,206
24	180,611	(143,586)	180,611	40,444	(6,741)	30,284
25	186,029	(147,893)	186,029	33,703	(6,741)	31,395
26	191,610	(152,330)	191,610	26,963	(6,740)	32,540
27	197,359	(156,900)	197,359	20,222	(6,741)	33,718
28	203,279	(161,607)	203,279	13,481	(6,741)	34,931
29	209,378	(166,455)	209,378	6,740	(6,741)	36,182
30	215,660	(171,449)	215,660	–	(6,740)	37,471
Total	4,070,963	(3,376,413)	4,252,963		(182,000)	694,550

-
- (a) The first column shows years in the contract period.
 - (b) The second column shows the estimated receipts, taking into account the annual growth rate of 3%. For example, estimated receipts for year 6 are CU106,090 (CU103,000 in year 5 $\times$ (1 + 0.03)).
 - (c) The first three years in the third column show the construction costs. From year 4 this column shows the operation costs growing at the rate of 3% annually. For example, costs for year 6 equal CU84,342 (CU81,885 costs in year 5 $\times$ (1 + 0.03)).
 - (d) The fourth column shows revenue. Revenue for constructing the hospital is recognised in years 1 to 3. The amount of revenue recognised each year is based on progress in fulfilling that promise. This is measured by reference to surveys of completed work. From year 4 this column shows revenue from providing hospital services to customers. Patients pay for services shortly before receiving them, so revenue recognised is equal to the estimated payments received. For example, revenue in year 6 equals estimated receipts in year 6 of CU106,090.
 - (e) The fifth column shows the intangible asset. For the first three years, the intangible asset is calculated as the carrying amount of the asset from the previous year plus the value of the construction services performed in the current year. From year 4, the intangible asset is computed as the carrying amount of the asset from the previous year minus annual amortisation. For example, the carrying amount of the intangible asset at the end of year 6 is CU161,778 (CU168,518 carrying amount at the end of year 5 minus CU6,741 amortisation for year 5).
 - (f) The sixth column shows the amortisation of the intangible asset. It is assumed that the intangible asset will be amortised over the period in which it is expected to be available for use by the operator (27 years on a straight-line basis). Annual amortisation is CU6,741 (CU182,000 gross amount of the intangible asset $\div$ 27 years). Note: as a result of rounding, the annual amortisation for seven of the years is CU6,740, instead of CU6,741.
 - (g) The seventh column shows the net profit computed as revenue minus costs, minus amortisation. For example, net profit in year 6 is CU15,008 (CU106,090 revenue minus CU84,342 costs, minus CU6,740 amortisation).

Note: Amounts in columns (a)–(g) have been rounded to the nearest CU1.

SIGNIFICANT ESTIMATES AND OTHER JUDGEMENTS

Applying the requirements of the Standard to transactions and events often requires an entity to use its judgement. Information about significant judgements made by an entity's management and key sources of estimation uncertainty is useful to a user of financial statements assessing an entity's financial position, performance and cash flows. Consequently, in accordance with paragraph 8.6 of Section 8 *Notes to the Financial Statements*, an entity must disclose the judgements that management has made when applying the entity's accounting policies that have the most significant effect on the amounts recognised in the financial statements.

Furthermore, in accordance with paragraph 8.7, an entity discloses information that explains key assumptions about the future and other key sources of estimation uncertainty at the reporting date that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

Other sections of the Standard may require disclosure of information about particular judgements and estimation uncertainties.

Some of the judgements in accounting for agriculture, exploration for and evaluation of mineral resources and service concession arrangements are set out below.

Agriculture

The determination of the fair value of a biological asset applying Section 12 may in some circumstances require significant judgement and estimation, particularly when there is no active market for that biological asset. Entities should consider the significant estimates and other judgements discussed in Module 12 *Fair Value Measurement*.

The assessment of whether the fair value of a biological asset is readily determinable without undue cost or effort may also require significant judgement and estimates.

The assessment at initial recognition of whether bearer plants can be measured, both initially and on an ongoing basis, separately from the produce on them without undue cost or effort may also require significant judgement and estimates. This might be true particularly for new species of bearer plants. For example, estimating when the produce starts to grow and how to allocate overhead costs between the produce and the bearer plant would require judgement.

Entities that account for biological assets under the cost model and determine cost by analogy to Section 13 or Section 17 should consider the significant estimates and other judgements discussed in Module 13 *Inventories* and Module 17 *Property, Plant and Equipment*. The allocation of costs between different biological assets and their offspring may require significant judgement; for example, the allocation of overheads between different animals that are reared together (such as cows held to produce milk or to produce offspring, compared with those sold for meat).

Exploration for and evaluation of mineral resources

Judgement will be required to determine which expenditures are recognised as exploration and evaluation assets. Section 34 refers to Section 17, Section 18 and Section 21. Consequently, entities should also be aware of the significant estimates and judgements discussed in Module 17, Module 18 *Intangible Assets other than Goodwill* and Module 21 *Provisions and Contingencies*.

Service concession arrangements

If a service concession contract contains an intangible asset, that intangible asset is recognised initially at fair value. Judgement may be required to determine the fair value of the intangible asset when fair value is based on uncertain future cash flows from customers.

Similarly, if a service concession contract contains a financial asset, judgement may be required to determine whether and which cash flows are unconditional, and then to determine the fair value of the resulting financial asset if the timing of payments from the grantor is uncertain.

Service concessions typically include multiple elements or obligations. Allocating revenue between these will also require judgement, although this is dealt with in Section 23. Consequently, entities should also be aware of the significant estimates and judgements discussed in Module 23 *Revenue from Contracts with Customers*.

TRANSITION REQUIREMENTS

The third edition of the *IFRS for SMEs* Accounting Standard is effective for annual reporting periods beginning on or after 1 January 2027. Early application is permitted. Changes made to Section 34 from the second edition of the Standard are summarised on page 7.

Paragraph A49 of the third edition of the Standard sets out the transition requirements for bearer plants.

Bearer plants

A49 An entity is permitted to measure a **bearer plant** at its fair value at the beginning of the earliest period presented and use that fair value as its deemed cost at that date. The entity shall recognise any difference between the previous carrying amount and fair value in opening balance of retained earnings at the beginning of the earliest period presented.

Educational notes

If an entity measures its bearer plants at fair value less costs to sell in accordance with the second edition of the Standard, and has not previously collected cost information, collecting the necessary information to apply the cost model in Section 17 to those bearer plants may be costly.

If the entity's bearer plants have long life cycles, it could be required to look back several decades to obtain the necessary information. Paragraph A49 provides relief from the need to collect such information by permitting the use of fair value as deemed cost for items of bearer plants at the beginning of the earliest comparative period presented in the financial statements for the purposes of applying Section 17.

COMPARISON WITH FULL IFRS ACCOUNTING STANDARDS

The requirements in full IFRS Accounting Standards (see IAS 41 *Agriculture*, IFRS 6 *Exploration for and Evaluation of Mineral Resources* and IFRIC 12 *Service Concession Arrangements*) and those in the *IFRS for SMEs Accounting Standard* (see Section 34) differ as at February 2025. The main differences are that:

- the *IFRS for SMEs Accounting Standard* is drafted in simpler language than that used in full IFRS Accounting Standards.
- paragraph 30 of IAS 41 includes a presumption that fair value can be measured reliably for a biological asset. IAS 41 specifies that an entity uses the cost model on initial recognition only for biological assets for which quoted market prices are not available and for which alternative estimates of fair value are determined to be clearly unreliable (see paragraph 30 of IAS 41). Applying the *IFRS for SMEs Accounting Standard* an entity uses the cost model for those biological assets whose fair value is not readily determinable without undue cost or effort.
- bearer plants are excluded from the scope of IAS 41. Applying full IFRS Accounting Standards they are in the scope of IAS 16 *Property, Plant and Equipment*. Applying the *IFRS for SMEs Accounting Standard*, only bearer plants that, at initial recognition, can be measured, both initially and on an ongoing basis, separately from the produce on them without undue cost or effort are excluded from Section 34 and included in the scope of Section 17.
- IAS 41 applies to biological assets (other than bearer plants) when they are related to agricultural activities, whereas Section 34 applies to all biological assets (other than bearer plants in the scope of Section 17) of an entity engaged in agricultural activity.
- applying IFRS 6, each cash-generating unit or group of units to which an exploration and evaluation asset is allocated is required not to be larger than an operating segment determined in accordance with IFRS 8 *Operating Segments*. No such requirement exists in the *IFRS for SMEs Accounting Standard*. Furthermore, IFRS 6 requires reclassification of exploration and evaluation assets when it can be shown that the extraction of a mineral resource is technically feasible and commercially viable. The *IFRS for SMEs Accounting Standard* does not include a similar requirement.
- IFRIC 12 refers to the recognition and measurement requirements of IFRS 9 *Financial Instruments* for financial assets, IAS 38 *Intangible Assets* for intangible assets and IFRS 15 *Revenue from Contracts with Customers* for the revenue of the operator. Sections 11, 18 and 23 of the *IFRS for SMEs Accounting Standard* have requirements that differ from IFRS 9, IAS 38 and IFRS 15. These differences are covered in Modules 11, 18 and 23.
- in accordance with IFRIC 12, initial measurement of an intangible asset is at cost (with reference to IAS 38) whereas in accordance with paragraph 34.15 of the *IFRS for SMEs Accounting Standard*, an intangible asset is initially recognised at fair value. However, because the cost of an intangible asset acquired in exchange for a non-monetary asset is generally measured at fair value (by reference to IAS 38) there will usually be no difference in practice.
- paragraph 22 of IFRIC 12 requires the capitalisation of particular borrowing costs attributable to an arrangement during the construction phase if the operator has a contractual right to receive an intangible asset (a right to charge users of the public service). The *IFRS for SMEs Accounting Standard* prohibits the capitalisation of borrowing costs (that is, recognition as an asset). In accordance with Section 25 *Borrowing Costs*, borrowing costs must be recognised as an expense as they are incurred.

This table sets out the disclosures in IAS 41 for agriculture compared to the disclosures in Section 34.

IAS 41 paragraph	Section 34 paragraph
40	X
41	34.7(a)
43	X
46	X
49	X
50(a), (b), (d), (e), (f), (g)	34.7(c)(i)–(vi)
50(c)	X
51	X
54(a)–(b), (d)–(f)	34.10
54(c)	X
55	X
56	X
57(a)–(b)	24.6(a)–(b)
57(c)	X

‘X’ denotes no equivalent paragraph.

This table sets out the disclosures in IFRS 6 for extractive activities compared to the disclosures in Section 34.

IFRS 6 paragraph	Section 34 paragraph
23	X
18	34.11C
24	X
25	34.11G

‘X’ denotes no equivalent paragraph.

TEST YOUR KNOWLEDGE

Test your knowledge of the requirements in Section 34 *Specialised Activities* of the *IFRS for SMEs* Accounting Standard by answering the questions provided.

Assume all amounts mentioned are material.

Once you have completed the test, check your answers against those supplied on page 73.

Mark the box next to the most correct statement.

Question 1

A biological asset used in agricultural activity (excluding a bearer plant in the scope of Section 17 *Property, Plant and Equipment*) whose fair value is readily determinable without undue cost or effort is accounted for using:

- ☐ (a) the fair value model.
- ☐ (b) the cost model or the fair value model (an accounting policy choice).
- ☐ (c) the cost model.

Question 2

An SME has an orchard of orange trees. The SME grows oranges for sale to local supermarkets. The SME can measure the trees separately from the oranges growing on them without undue cost or effort. At the end of the trees' lives, the owner of the SME uses the trees as firewood for his home. Before harvest of the oranges, an orange tree is accounted for:

- ☐ (a) as two separate assets—the tree (a bearer plant accounted for in accordance with Section 17) and the oranges attached to the tree (inventory accounted for in accordance with Section 13 *Inventories*).
- ☐ (b) as two separate assets—the tree (a bearer plant accounted for in accordance with Section 17) and the oranges attached to the tree (a biological asset accounted for in accordance with Section 34).
- ☐ (c) as two different biological assets each accounted for in accordance with Section 34.
- ☐ (d) as a single biological asset in accordance with Section 34.

Question 3

At the point of harvest an SME measures the fruit (agricultural produce) that it picks from its orchards (biological assets):

- ☐ (a) at fair value.
- ☐ (b) at fair value less costs to sell.
- ☐ (c) at cost.
- ☐ (d) at the lower of cost and estimated selling price less costs to complete and sell.

Question 4

At the end of the reporting period, a tomato grower's vines are six months old and bear fully developed ripe tomatoes (so the tomatoes will soon be harvested). The accumulated cost of the fruit-bearing vines is CU12,500 and their fair value is CU100,000. The SME expects to incur costs of CU5,000 to harvest and sell the tomato crop at market. Once the tomatoes have been harvested, the then-worthless vines will be abandoned. At the end of the reporting period:

- ☐ (a) the SME measures the biological assets (tomato-bearing vines) at CU95,000 and recognises a gain of CU82,500 for the increase from cost to fair value less costs to sell.
- ☐ (b) the SME measures the tomatoes at CU82,500 and the tomato vines at CU12,500, and recognises a gain of CU82,500 for the increase from cost to fair value less costs to sell.
- ☐ (c) the SME measures the biological assets (tomato-bearing vines) at CU100,000 and recognises a gain of CU87,500 for the increase from cost to fair value less costs to sell.
- ☐ (d) the SME measures the tomatoes at CU95,000 and the tomato vines at CU0, and recognises a gain of CU82,500 for the increase from cost to fair value less costs to sell.

Question 5

An SME that breeds exotic birds for sale in the pet trade accounts for its birds:

- ☐ (a) in accordance with Section 13 *Inventories*.
- ☐ (b) in accordance with Section 17 *Property, Plant and Equipment*.
- ☐ (c) in accordance with Section 34 *Specialised Activities*.
- ☐ (d) either as property, plant and equipment in accordance with Section 17 or as biological assets in agricultural activity in accordance with Section 34. Management must use its judgement, taking into account all facts and circumstances, to determine which classification best reflects the activities of the SME.

Question 6

An SME that buys exotic birds for immediate resale in its pet trade outlets accounts for its birds:

- ☐ (a) in accordance with Section 13 *Inventories*.
- ☐ (b) in accordance with Section 17 *Property, Plant and Equipment*.
- ☐ (c) in accordance with Section 34 *Specialised Activities*.
- ☐ (d) either as property, plant and equipment in accordance with Section 17 or as biological assets in agricultural activity in accordance with Section 34. Management must use its judgement, taking into account all facts and circumstances, to determine which classification best reflects the activities of the SME.

Question 7

An SME's business is to buy and hold exotic birds in a zoological garden for viewing by tourists. Any offspring from natural breeding while the birds are in captivity are incidental in the conduct of operations. The SME accounts for the birds:

- ☐ (a) in accordance with Section 13 *Inventories*.
- ☐ (b) in accordance with Section 17 *Property, Plant and Equipment*.
- ☐ (c) in accordance with Section 34 *Specialised Activities*.
- ☐ (d) either as property, plant and equipment in accordance with Section 17 or as biological assets in agricultural activity in accordance with Section 34. Management must use its judgement, taking into account all facts and circumstances, to determine which classification best reflects the activities of the SME.

Question 8

A zoological garden has two main revenue streams from the same group of birds: (i) proceeds from the sale of the offspring of its birds; and (ii) ticket sales to tourists who visit the zoological garden to view its birds. The SME accounts for its birds:

- ☐ (a) in accordance with Section 13 *Inventories*.
- ☐ (b) in accordance with Section 17 *Property, Plant and Equipment*.
- ☐ (c) in accordance with Section 34 *Specialised Activities*.
- ☐ (d) either as property, plant and equipment in accordance with Section 17 or as biological assets in agricultural activity in accordance with Section 34. Management must use its judgement, taking into account all facts and circumstances, to determine which classification best reflects the activities of the SME.

Question 9

Which of the following expenditures shall not be recognised as exploration and evaluation assets?

- ☐ (a) Expenditure for acquisition of rights to explore.
- ☐ (b) Expenditure for exploratory drilling.
- ☐ (c) Expenditure related to the development of mineral resources.
- ☐ (d) Expenditure for activities in relation to evaluating the technical feasibility and commercial viability of extracting a mineral resource.

Question 10

How are exploration and evaluation assets measured on initial recognition and after initial recognition?

<i>Initial recognition</i>	<i>After initial recognition</i>
☐ (a) Cost	Apply Section 17 <i>Property, Plant and Equipment</i> only
☐ (b) Cost	Apply Section 17 and Section 18 <i>Intangible Assets other than Goodwill</i> according to the nature of the assets
☐ (c) Fair value	Apply Section 17 and Section 18 according to the nature of the assets
☐ (d) Cost	Apply Section 18 only

Question 11

When should exploration and evaluation assets be tested for impairment?

- ☐ (a) When facts and circumstances suggest that the carrying amount of an exploration and evaluation asset may exceed its recoverable amount.
- ☐ (b) At the end of each reporting period.
- ☐ (c) At the end of each reporting period and when facts and circumstances suggest that the carrying amount of an exploration and evaluation asset may exceed its recoverable amount.
- ☐ (d) Such assets are not required to be tested for impairment.

Question 12

An SME enters into an arrangement with the local government. The terms of the arrangement require the SME to construct a hospital and maintain and operate the hospital for an unlimited number of years. The government does not regulate the prices and services of the hospital. The terms of the arrangement allow the SME to charge patients for the hospital services. What is the type of arrangement, and how should the SME account for it?

- ☐ (a) This is a service concession arrangement. An intangible asset should be recognised for the right relating to the income under the arrangement.
- ☐ (b) This is a service concession arrangement. A financial asset should be recognised for the right relating to the income under the arrangement.
- ☐ (c) This is not a service concession arrangement. The hospital will be accounted for as the SME's own property.

Answers

- Q1 (a)—See paragraph 34.2(a).
- Q2 (b)—See paragraph 34.2A.
- Q3 (b)—See paragraphs 34.5 and 34.9.
- Q4 (a)—See paragraph 34.4.
- Q5 (c)—See paragraph 34.2 and the definition of agricultural activity in the Glossary. The Glossary definition of agricultural activities also helps explain the answers to Q6, Q7 and Q8.
- Q6 (a)—See paragraph 13.1(a). The scope exemption in paragraph 13.2(c) does not apply because the SME is not engaged in agricultural activity.
- Q7 (b)—See paragraphs 17.1 and 17.2. The scope exemption in paragraph 17.3(a) does not apply because the SME is not engaged in agricultural activity. Any natural breeding of the birds is not a managed activity and is incidental to the main activity of providing the birds for viewing in the zoological gardens.
- Q8 (c)—See paragraph 34.2. If the SME is engaged in agricultural activity, then the SME must account for biological assets in accordance with Section 34. (Note: Paragraph 8.6 requires the SME to provide disclosures about judgements it has made in the process of applying accounting policies and have the most significant effect on the amounts recognised in the financial statements.)
- Q9 (c)—See paragraph 34.11A.
- Q10 (b)—See paragraph 34.11B.
- Q11 (a)—See paragraph 34.11C.
- Q12 (c)—The grantor does not control or regulate the services or prices and it does not control any significant residual interest in the hospital. See paragraph 34.12.

APPLY YOUR KNOWLEDGE

You can apply your knowledge of the requirements for accounting for agricultural activities in Section 34 *Specialised Activities* of the *IFRS for SMEs Accounting Standard* by completing the case study provided.

Once you have completed the case study, check your answers against those on pages 76–79.

Case study—Biological assets and agricultural produce in agricultural activity

SME A supplies milk to various supermarkets and live cows by auction to slaughterhouses for their meat.

On 31 December 20X7 SME A holds:

- a dairy herd: 850 mature dairy cows (able to produce milk) and 90 immature dairy cows (heifers) being raised to produce milk in the future. The fair value less costs to sell of the dairy herd is CU5,589,000.
- a beef herd: 423 mature beef cattle (the breeding herd) and 890 immature cows (calves) being raised to maintain the breeding herd and to be harvested for meat. The fair value less costs to sell of the beef herd is CU2,975,000.
- a milk inventory: 34,000 litres of milk to be sold to the supermarkets the next day. The fair value less costs to sell of the milk (measured at the time of milking, or harvest) is CU17,000.

In 20X8:

- 40 dairy heifers and 388 beef calves are born; and
- 52 dairy cows and 36 beef cattle die.

In 20X8 SME A:

- purchases 80 dairy cows and 240 beef cattle for CU536,000 and CU1,344,000 respectively;
- sells 200 dairy cows for CU1,072,000 (selling price of CU1,200,000 minus auctioneer's commission of CU128,000); and
- sells 600 beef cattle for CU3,450,000 (selling price of CU3,800,000 minus auctioneer's commission of CU350,000).

In 20X8 SME A produces 2,796,200 litres of milk. The following table presents the volume of milk harvested and its respective fair value less costs to sell measured at the time of harvest. Costs to sell the milk are negligible:

<i>Volume of milk harvested</i>	<i>Fair value less costs to sell</i>	<i>Total</i>
360,000 litres	CU0.55/litre	CU198,000
875,150 litres	CU0.60/litre	CU525,090
1,561,050 litres	CU0.65/litre	CU1,014,683
<u>2,796,200 litres</u>		<u>CU1,737,773</u>

In 20X8 SME A sells 2,800,200 litres of milk for CU1,735,273.

SME A measures the cost of inventories of agricultural produce (milk) using the first-in, first out (FIFO) cost formula. Consequently, the closing balance of milk is CU19,500 (30,000 litres measured at CU0.65 per litre).

In 20X8 SME A incurs and pays the following expenses:

- veterinary: CU62,000
- water and electricity: CU48,000
- salaries: CU84,000
- cattle feed: CU276,000
- wages: CU78,000

The SME can determine the fair value of all cattle without undue cost or effort. The following table shows the fair value less costs to sell of each group of biological assets and agricultural produce at 31 December 20X8:

<i>Units</i>		<i>Fair value less costs to sell</i>
808	Dairy herd	CU4,652,400
1,305	Beef herd	CU1,712,200
30,000	Litres of milk	CU19,500

Prepare:

- 1. Journal entries to record the transactions relating to the biological assets in the accounting records of SME A for the year ended 31 December 20X8 and the reconciliation required by paragraph 34.7(c) of the Standard.**
- 2. The amounts for biological assets and inventory that would be recognised in SME A's statement of financial position at 31 December 20X8.**
- 3. The amounts that would be recognised in SME A's statement of comprehensive income for the year ended 31 December 20X8.**
- 4. The amounts that would be presented in the operating activities part of SME A's statement of cash flows for the year ended 31 December 20X8 if it were prepared using the direct method.**

Answer to case study

Part 1

One way SME A could prepare the journal entries to account for its biological assets in 20X8 is as follows.

In 20X8

Dr	Asset—Biological assets (dairy livestock)	CU536,000	
Dr	Asset—Biological assets (beef livestock)	CU1,344,000	
	Cr Asset—Cash		CU1,880,000

To recognise livestock purchased in 20X8

Dr	Asset—Cash	CU1,072,000	
	Cr Asset—Biological assets (dairy livestock)		CU1,072,000

To recognise the sale of dairy cows in 20X8^(a)

Dr	Asset—Cash	CU3,450,000	
Dr	Expense—Cost of beef cattle sold	CU3,450,000	
Dr	Expense—Commissions paid	CU350,000	
	Cr Asset—Biological assets (beef livestock)		CU3,450,000
	Cr Income—Revenue		CU3,800,000

To recognise the sale of beef cattle in 20X8

Dr	Asset—Inventories	CU1,737,773	
	Cr Income—Profit or loss: gain on recognition of inventories		CU1,737,773

To recognise the milk harvested in 20X8 at the point of harvest

Dr	Asset—Cash	CU1,735,273	
Dr	Expense—Cost of milk sold	CU1,735,273	
	Cr Income—Revenue		CU1,735,273
	Cr Asset—Inventories		CU1,735,273

To recognise the sale of milk in 20X8^(b)

Dr	Expense—Profit or loss: veterinary expense	CU62,000	
Dr	Expense—Profit or loss: water and electricity expense	CU48,000	
Dr	Expense—Profit or loss: salaries	CU84,000	
Dr	Expense—Profit or loss: cattle feed	CU276,000	

Dr	Expense—Profit or loss: wages	CU78,000	
	Cr Asset—Cash		CU548,000

To recognise the payment of the expenses in 20X8

31 December 20X8

Dr	Expense—Profit or loss: fair value loss (biological assets)	CU400,600 ^(c)	
	Cr Asset—Biological assets (dairy livestock)		CU400,600

To recognise the loss on change in fair value of dairy livestock

Dr	Asset—Biological assets (beef livestock)	CU843,200 ^(c)	
	Cr Income—Profit or loss: fair value gain (biological assets)		CU843,200

To recognise the gain on beef livestock

Extract from Note X Biological assets

	Dairy livestock	Beef livestock	Total
	CU	CU	CU
Balance at start of 20X8	5,589,000	2,975,000	8,564,000
Increase resulting from purchases	536,000	1,344,000	1,880,000
Decrease resulting from sale	(1,072,000)	(3,450,000)	(4,522,000)
Gain (loss) from changes in fair value less costs to sell ^(c)	(400,600)	843,200	442,600
Balance at the end of 20X8	4,652,400	1,712,200	6,364,600

Note: It is not a requirement to present biological assets separately by class as shown in this example. They can be shown in aggregate.

The calculations and explanatory notes below do not form part of the extracts from financial statements that form the answer to this case study:

- ^(a) The SME does not recognise revenue from the sale of the dairy livestock because the SME's ordinary activities do not include selling dairy livestock.
- ^(b) CU17,000 opening inventory + CU1,737,773 fair value minus costs to sell milk produced in 20X8 minus CU19,500 closing inventory = CU1,735,273 cost of milk sold.
- ^(c) The gain or loss from changes in fair value less costs to sell is calculated as the balancing figure in the reconciliation in note X after the journal entries.

Part 2

SME A could report its assets in its statement of financial position as follows:

Amounts in the statement of financial position at 31 December 20X8

(in currency units)

	Notes	31 Dec 20X8	31 Dec 20X7
ASSETS			
Non-current assets			
Biological assets carried at fair value through profit or loss	X	6,364,600	8,564,000
Current assets			
Inventories—milk	Y	19,500	17,000

Note: the SME can show a single line for biological assets because they are all measured at fair value less costs to sell. If any biological assets were measured using the cost model, they would need to be shown under a separate heading (see paragraph 4.2 of the Standard).

Part 3

SME A could report the amounts relating to biological assets and agricultural produce in its statement of comprehensive income as follows:

Amounts in the statement of comprehensive income for the year ended 31 December 20X8

(in currency units)

	Notes	20X8	20X7
Revenue—Beef cattle and milk sold		5,535,273	X
Cost of beef cattle and milk sold		(5,185,273)	X
Gain from changes in fair value less costs to sell of biological assets	X	442,600	X
Gain on recognition of agricultural produce—Milk		1,737,773	X
Commissions		(350,000)	(X)
Cattle feed		(276,000)	(X)
Staff costs		(162,000)	(X)
Veterinary costs		(62,000)	(X)
Water and electricity		(48,000)	(X)

Note: the SME could make allocations and aggregations of these amounts when presenting the statement of comprehensive income in accordance with Section 5 *Statement of Comprehensive Income and Income Statement*.

Part 4

SME A could report the operating activities part of its statement of cash flows as follows:

Amounts in the statement of cash flows for the year ended 31 December 20X8

(in currency units)

	Notes	20X8	20X7
Cash flows from operating activities			
Cash receipts from sales of milk		1,735,273	X
Cash receipts from sale of beef livestock net of auctioneer's commission ^(a)		3,450,000	X
Cash paid to suppliers and employees		(548,000)	(X)
Cash paid for purchases of beef livestock		(1,344,000)	(X)

^(a) It is assumed that the cash flows received for selling the livestock were received net of the auctioneer's commission.

Note: cash flows associated with the purchase and sale of dairy cows have been classified as investing activities.



IFRS[®]

Foundation

Columbus Building
7 Westferry Circus
Canary Wharf
London E14 4HD, UK

Tel **+44 (0) 20 7246 6410**

Email **customerservices@ifrs.org**

ifrs.org

The IFRS Foundation has trade marks registered around the world, including 'FSA[®]', 'IASB[®]', 'IFRS[®]', 'International Financial Reporting Standards[®]', 'ISSB[®]', and 'SASB[®]'. For a full list of our registered trade marks, visit www.ifrs.org.