

Hong Kong Accounting Standard 41

Agriculture

[An entity shall apply amendments resulting from *Improvements to HKFRSs* issued in October 2008 for annual periods beginning on or after 1 January 2009.](#)

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BASIS FOR CONCLUSIONS	

Hong Kong Accounting Standard 41 *Agriculture* (IAS 41) is set out in paragraphs 1-59A. *All the paragraphs have equal authority.* HKAS 41 shall be read in the context of its objective and the Basis for Conclusions, the *Preface to Hong Kong Financial Reporting Standards* and the *Framework for the Preparation and Presentation of Financial Statements*. HKAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* provides a basis for selecting and applying accounting policies in the absence of explicit guidance.

Hong Kong Accounting Standard 41

Agriculture

Objective

The objective of this Standard is to prescribe the accounting treatment, financial statement presentation, and disclosures related to agricultural activity.

Scope

1. ***This Standard shall be applied to account for the following when they relate to agricultural activity:***
 - (a) ***biological assets;***
 - (b) ***agricultural produce at the point of harvest; and***
 - (c) ***government grants covered by paragraphs 34-35.***
2. This Standard does not apply to:
 - (a) land related to agricultural activity (see HKAS 16 *Property, Plant and Equipment* and HKAS 40 *Investment Property*); and
 - (b) intangible assets related to agricultural activity (see HKAS 38 *Intangible Assets*).
3. This Standard is applied to agricultural produce, which is the harvested product of the entity's biological assets, only at the point of harvest. Thereafter, HKAS 2 *Inventories*, or another applicable Standard is applied. Accordingly, this Standard does not deal with the processing of agricultural produce after harvest; for example, the processing of grapes into wine by a vintner who has grown the grapes. While such processing may be a logical and natural extension of agricultural activity, and the events taking place may bear some similarity to biological transformation, such processing is not included within the definition of agricultural activity in this Standard.
4. The table below provides examples of biological assets, agricultural produce, and products that are the result of processing after harvest:

Biological assets	Agricultural produce	Products that are the result of processing after harvest
Sheep	Wool	Yarn, carpet
Trees in a plantation forest	Logs	Lumber
Plants	Cotton	Thread, clothing
	Harvested cane	Sugar
Dairy cattle	Milk	Cheese
Pigs	Carcass	Sausages, cured hams
Bushes	Leaf	Tea, cured tobacco
Vines	Grapes	Wine
Fruit trees	Picked fruit	Processed fruit

Definitions

Agriculture-Related Definitions

5. *The following terms are used in this Standard with the meanings specified:*

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.

Biological transformation comprises the processes of growth, degeneration, production, and procreation that cause qualitative or quantitative changes in a biological asset.

A group of biological assets is an aggregation of similar living animals or plants.

Harvest is the detachment of produce from a biological asset or the cessation of a biological asset's life processes.

6. Agricultural activity covers a diverse range of activities; for example, raising livestock, forestry, annual or perennial cropping, cultivating orchards and plantations, floriculture, and aquaculture (including fish farming). Certain common features exist within this diversity:

- (a) *Capability to change.* Living animals and plants are capable of biological transformation;
- (b) *Management of change.* Management facilitates biological transformation by enhancing, or at least stabilising, conditions necessary for the process to take place (for example, nutrient levels, moisture, temperature, fertility, and light). Such management distinguishes agricultural activity from other activities. For example, harvesting from unmanaged sources (such as ocean fishing and deforestation) is not agricultural activity; and
- (c) *Measurement of change.* The change in quality (for example, genetic merit, density, ripeness, fat cover, protein content, and fibre strength) or quantity (for example, progeny, weight, cubic metres, fibre length or diameter, and number of buds) brought about by biological transformation is measured and monitored as a routine management function.

7. Biological transformation results in the following types of outcomes:

- (a) asset changes through (i) growth (an increase in quantity or improvement in quality of an animal or plant); (ii) degeneration (a decrease in the quantity or deterioration in quality of an animal or plant); or (iii) procreation (creation of additional living animals or plants); or
- (b) production of agricultural produce such as latex, tea leaf, wool, and milk.

General Definitions

8. *The following terms are used in this Standard with the meanings specified:*

An active market is a market where all the following conditions exist:

- (a) *the items traded within the market are homogeneous;*
- (b) *willing buyers and sellers can normally be found at any time; and*
- (c) *prices are available to the public.*

Carrying amount is the amount at which an asset is recognised in the balance sheet.

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

Government grants are as defined in HKAS 20 Accounting for Government Grants and Disclosure of Government Assistance.

9. The fair value of an asset is based on its present location and condition. As a result, for example, the fair value of cattle at a farm is the price for the cattle in the relevant market less the transport and other costs of getting the cattle to that market.

Recognition and Measurement

10. ***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.***
11. In agricultural activity, control may be evidenced by, for example, legal ownership of cattle and the branding or otherwise marking of the cattle on acquisition, birth, or weaning. The future benefits are normally assessed by measuring the significant physical attributes.
12. ***A biological asset shall be measured on initial recognition and at each balance sheet date at its fair value less estimated point-of-sale costs, except for the case described in paragraph 30 where the fair value cannot be measured reliably.***
13. ***Agricultural produce harvested from an entity's biological assets shall be measured at its fair value less estimated point-of-sale costs at the point of harvest. Such measurement is the cost at that date when applying HKAS 2 Inventories or another applicable Standard.***
14. Point-of-sale costs include commissions to brokers and dealers, levies by regulatory agencies and commodity exchanges, and transfer taxes and duties. Point-of-sale costs exclude transport and other costs necessary to get assets to a market.
15. The determination of fair value for a biological asset or agricultural produce may be facilitated by grouping biological assets or agricultural produce according to significant attributes; for example, by age or quality. An entity selects the attributes corresponding to the attributes used in the market as a basis for pricing.
16. Entities often enter into contracts to sell their biological assets or agricultural produce at a future date. Contract prices are not necessarily relevant in determining fair value, because fair value reflects the current market in which a willing buyer and seller would enter into a transaction. As a result, the fair value of a biological asset or agricultural produce is not adjusted because of the existence of a contract. In some cases, a contract for the sale of a biological asset or agricultural produce may be an onerous contract, as defined in HKAS 37 *Provisions, Contingent Liabilities and Contingent Assets*. HKAS 37 applies to onerous contracts.
17. If an active market exists for a biological asset or agricultural produce the quoted price in that market is the appropriate basis for determining the fair value of that asset. If an entity has access to different active markets, the entity uses the most relevant one. For example, if an entity has access to two active markets, it would use the price existing in the market expected to be used.
18. If an active market does not exist, an entity uses one or more of the following, when available, in determining fair value:
- (a) the most recent market transaction price, provided that there has not been a significant change in economic circumstances between the date of that transaction and the balance sheet date;
 - (b) market prices for similar assets with adjustment to reflect differences; and

- (c) sector benchmarks such as the value of an orchard expressed per export tray, bushel, or hectare, and the value of cattle expressed per kilogram of meat.
19. In some cases, the information sources listed in paragraph 18 may suggest different conclusions as to the fair value of a biological asset or agricultural produce. An entity considers the reasons for those differences, in order to arrive at the most reliable estimate of fair value within a relatively narrow range of reasonable estimates.
20. In some circumstances, market-determined prices or values may not be available for a biological asset in its present condition. In these circumstances, an entity uses the present value of expected net cash flows from the asset discounted at a current market-determined pre-tax rate in determining fair value.
21. The objective of a calculation of the present value of expected net cash flows is to determine the fair value of a biological asset in its present location and condition. An entity considers this in determining an appropriate discount rate to be used and in estimating expected net cash flows. The present condition of a biological asset excludes any increases in value from additional biological transformation and future activities of the entity, such as those related to enhancing the future biological transformation, harvesting, and selling.
22. An entity does not include any cash flows for financing the assets, taxation, or re-establishing biological assets after harvest (for example, the cost of replanting trees in a plantation forest after harvest).
23. In agreeing an arm's length transaction price, knowledgeable, willing buyers and sellers consider the possibility of variations in cash flows. It follows that fair value reflects the possibility of such variations. Accordingly, an entity incorporates expectations about possible variations in cash flows into either the expected cash flows, or the discount rate, or some combination of the two. In determining a discount rate, an entity uses assumptions consistent with those used in estimating the expected cash flows, to avoid the effect of some assumptions being double-counted or ignored.
24. Cost may sometimes approximate fair value, particularly when
- (a) little biological transformation has taken place since initial cost incurrence (for example, for fruit tree seedlings planted immediately prior to a balance sheet date); or
 - (b) the impact of the biological transformation on price is not expected to be material (for example, for the initial growth in a 30-year pine plantation production cycle).
25. Biological assets are often physically attached to land (for example, trees in a plantation forest). There may be no separate market for biological assets that are attached to the land but an active market may exist for the combined assets, that is, for the biological assets, raw land, and land improvements, as a package. An entity may use information regarding the combined assets to determine fair value for the biological assets. For example, the fair value of raw land and land improvements may be deducted from the fair value of the combined assets to arrive at the fair value of biological assets.

Gains and Losses

26. ***A gain or loss arising on initial recognition of a biological asset at fair value less estimated point-of-sale costs and from a change in fair value less estimated point-of-sale costs of a biological asset shall be included in profit or loss for the period in which it arises.***
27. A loss may arise on initial recognition of a biological asset, because estimated point-of-sale costs are deducted in determining fair value less estimated point-of-sale costs of a biological asset. A gain may arise on initial recognition of a biological asset, such as when a calf is born.
28. ***A gain or loss arising on initial recognition of agricultural produce at fair value less estimated point-of-sale costs shall be included in profit or loss for the period in which it arises.***
29. A gain or loss may arise on initial recognition of agricultural produce as a result of harvesting.

Inability to Measure Fair Value Reliably

30. ***There is a presumption that fair value can be measured reliably for a biological asset. However, that presumption can be rebutted only on initial recognition for a biological asset for which market-determined prices or values are not available and for which alternative estimates of fair value are determined to be clearly unreliable. In such a case, that biological asset shall be measured at its cost less any accumulated depreciation and any accumulated impairment losses. Once the fair value of such a biological asset becomes reliably measurable, an entity shall measure it at its fair value less estimated point-of-sale costs. Once a non-current biological asset meets the criteria to be classified as held for sale (or is included in a disposal group that is classified as held for sale) in accordance with HKFRS 5 Non-current Assets Held for Sale and Discontinued Operations, it is presumed that fair value can be measured reliably.***
31. The presumption in paragraph 30 can be rebutted only on initial recognition. An entity that has previously measured a biological asset at its fair value less estimated point-of-sale costs continues to measure the biological asset at its fair value less estimated point-of-sale costs until disposal.
32. In all cases, an entity measures agricultural produce at the point of harvest at its fair value less estimated point-of-sale costs. This Standard reflects the view that the fair value of agricultural produce at the point of harvest can always be measured reliably.
33. In determining cost, accumulated depreciation and accumulated impairment losses, an entity considers HKAS 2 *Inventories*, HKAS 16 *Property, Plant and Equipment* and HKAS 36 *Impairment of Assets*.

Government Grants

34. ***An unconditional government grant related to a biological asset measured at its fair value less estimated point-of-sale costs shall be recognised as income when, and only when, the government grant becomes receivable.***
35. ***If a government grant related to a biological asset measured at its fair value less estimated point-of-sale costs is conditional, including where a government grant requires an entity not to engage in specified agricultural activity, an entity shall recognise the government grant as income when, and only when, the conditions attaching to the government grant are met.***
36. Terms and conditions of government grants vary. For example, a government grant may require an entity to farm in a particular location for five years and require the entity to return all of the government grant if it farms for less than five years. In this case, the government grant is not recognised as income until the five years have passed. However, if the government grant allows part of the government grant to be retained based on the passage of time, the entity recognises the government grant as income on a time proportion basis.
37. If a government grant relates to a biological asset measured at its cost less any accumulated depreciation and any accumulated impairment losses (see paragraph 30), HKAS 20 *Accounting for Government Grants and Disclosure of Government Assistance*, is applied.
38. This Standard requires a different treatment from HKAS 20, if a government grant relates to a biological asset measured at its fair value less estimated point-of-sale costs or a government grant requires an entity not to engage in specified agricultural activity. HKAS 20 is applied only to a government grant related to a biological asset measured at its cost less any accumulated depreciation and any accumulated impairment losses.

Disclosure

39. [Not used]

General

40. ***An entity shall disclose the aggregate gain or loss arising during the current period on initial recognition of biological assets and agricultural produce and from the change in fair value less estimated point-of-sale costs of biological assets.***

- 41. An entity shall provide a description of each group of biological assets.**
42. The disclosure required by paragraph 41 may take the form of a narrative or quantified description.
43. An entity is encouraged to provide a quantified description of each group of biological assets, distinguishing between consumable and bearer biological assets or between mature and immature biological assets, as appropriate. For example, an entity may disclose the carrying amounts of consumable biological assets and bearer biological assets by group. An entity may further divide those carrying amounts between mature and immature assets. These distinctions provide information that may be helpful in assessing the timing of future cash flows. An entity discloses the basis for making any such distinctions.
44. Consumable biological assets are those that are to be harvested as agricultural produce or sold as biological assets. Examples of consumable biological assets are livestock intended for the production of meat, livestock held for sale, fish in farms, crops such as maize and wheat, and trees being grown for lumber. Bearer biological assets are those other than consumable biological assets; for example, livestock from which milk is produced, grape vines, fruit trees, and trees from which firewood is harvested while the tree remains. Bearer biological assets are not agricultural produce but, rather, are self-regenerating.
45. Biological assets may be classified either as mature biological assets or immature biological assets. Mature biological assets are those that have attained harvestable specifications (for consumable biological assets) or are able to sustain regular harvests (for bearer biological assets).
- 46. If not disclosed elsewhere in information published with the financial statements, an entity shall describe:**
- (a) the nature of its activities involving each group of biological assets; and**
 - (b) non-financial measures or estimates of the physical quantities of:**
 - (i) each group of the entity's biological assets at the end of the period; and**
 - (ii) output of agricultural produce during the period.**
- 47. An entity shall disclose the methods and significant assumptions applied in determining the fair value of each group of agricultural produce at the point of harvest and each group of biological assets.**
- 48. An entity shall disclose the fair value less estimated point-of-sale costs of agricultural produce harvested during the period, determined at the point of harvest.**
- 49. An entity shall disclose:**
- (a) the existence and carrying amounts of biological assets whose title is restricted, and the carrying amounts of biological assets pledged as security for liabilities;**
 - (b) the amount of commitments for the development or acquisition of biological assets; and**
 - (c) financial risk management strategies related to agricultural activity.**
- 50. An entity shall present 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:**
- (a) the gain or loss arising from changes in fair value less estimated point-of-sale costs;**
 - (b) increases due to purchases;**
 - (c) decreases attributable to sales and biological assets classified as held for sale (or included in a disposal group that is classified as held for sale) in accordance with HKFRS 5;**

- (d) **decreases due to harvest;**
 - (e) **increases resulting from business combinations;**
 - (f) **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**
 - (g) **other changes.**
51. The fair value less estimated point-of-sale costs of a biological asset can change due to both physical changes and price changes in the market. Separate disclosure of physical and price changes is useful in appraising current period performance and future prospects, particularly when there is a production cycle of more than one year. In such cases, an entity is encouraged to disclose, by group or otherwise, the amount of change in fair value less estimated point-of-sale costs included in profit or loss due to physical changes and due to price changes. This information is generally less useful when the production cycle is less than one year (for example, when raising chickens or growing cereal crops).
52. Biological transformation results in a number of types of physical change - growth, degeneration, production, and procreation, each of which is observable and measurable. Each of those physical changes has a direct relationship to future economic benefits. A change in fair value of a biological asset due to harvesting is also a physical change.
53. Agricultural activity is often exposed to climatic, disease and other natural risks. If an event occurs that gives rise to a material item of income or expense, the nature and amount of that item are disclosed in accordance with HKAS 1 *Presentation of Financial Statements*. Examples of such an event include an outbreak of a virulent disease, a flood, a severe drought or frost, and a plague of insects.

Additional Disclosures for Biological Assets Where Fair Value Cannot Be Measured Reliably

54. ***If an entity measures biological assets at their cost less any accumulated depreciation and any accumulated impairment losses (see paragraph 30) at the end of the period, the entity shall disclose for such biological assets:***
- (a) ***a description of the biological assets;***
 - (b) ***an explanation of why fair value cannot be measured reliably;***
 - (c) ***if possible, the range of estimates within which fair value is highly likely to lie;***
 - (d) ***the depreciation method used;***
 - (e) ***the useful lives or the depreciation rates used; and***
 - (f) ***the gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the period.***
55. ***If, during the current period, an entity measures biological assets at their cost less any accumulated depreciation and any accumulated impairment losses (see paragraph 30), an entity shall disclose any gain or loss recognised on disposal of such biological assets and the reconciliation required by paragraph 50 shall disclose amounts related to such biological assets separately. In addition, the reconciliation shall include the following amounts included in profit or loss related to those biological assets:***
- (a) ***impairment losses;***
 - (b) ***reversals of impairment losses; and***
 - (c) ***depreciation.***
56. ***If the fair value of biological assets previously measured at their cost less any accumulated depreciation and any accumulated impairment losses becomes reliably measurable during the current period, an entity shall disclose for those biological assets:***

- (a) *a description of the biological assets;*
- (b) *an explanation of why fair value has become reliably measurable; and*
- (c) *the effect of the change.*

Government Grants

57. *An entity shall disclose the following related to agricultural activity covered by this Standard:*
- (a) *the nature and extent of government grants recognised in the financial statements;*
 - (b) *unfulfilled conditions and other contingencies attaching to government grants; and*
 - (c) *significant decreases expected in the level of government grants.*

Effective Date and Transition

58. *This Standard becomes operative for annual financial statements covering periods beginning on or after 1 January 2005. Earlier application is encouraged. If an entity applies this Standard for periods beginning before 1 January 2005, it shall disclose that fact.*
59. This Standard does not establish any specific transitional provisions. The adoption of this Standard is accounted for in accordance with HKAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*.
- 59A. This Standard supersedes SSAP 36 *Agriculture* (issued in November 2002).

Appendix

Illustrative Examples

This appendix, accompanies, but is not part of, HKAS 41.

- A1. Example 1 illustrates how the disclosure requirements of this Standard might be put into practice for a dairy farming entity. This Standard encourages the separation of the change in fair value less estimated point-of-sale costs of an entity's biological assets into physical change and price change. That separation is reflected in Example 1. Example 2 illustrates how to separate physical change and price change.
- A2. The financial statements in Example 1 do not conform to all of the disclosure and presentation requirements of other Standards. Other approaches to presentation and disclosure may also be appropriate.

Example 1: XYZ Dairy Ltd.

Balance Sheet

XYZ Dairy Ltd. Balance Sheet	Notes	31 December 20X1	31 December 20X0
ASSETS			
Non-current assets			
Dairy livestock - immature ¹		52,060	47,730
Dairy livestock - mature ¹		372,990	411,840
		<u> </u>	<u> </u>
Subtotal - biological assets	3	425,050	459,570
Property, plant and equipment		1,462,650	1,409,800
		<u> </u>	<u> </u>
Total non-current assets		1,887,700	1,869,370
		<u> </u>	<u> </u>
Current assets			
Inventories		82,950	70,650
Trade and other receivables		88,000	65,000
Cash		10,000	10,000
		<u> </u>	<u> </u>
Total current assets		180,950	145,650
		<u> </u>	<u> </u>
Total assets		2,068,650	2,015,020
		<u> </u>	<u> </u>
EQUITY AND LIABILITIES			
Equity			
Issued capital		1,000,000	1,000,000
Accumulated profits		902,828	865,000
		<u> </u>	<u> </u>
Total equity		1,902,828	1,865,000
		<u> </u>	<u> </u>
Current liabilities			
Trade and other payables		165,822	150,020
		<u> </u>	<u> </u>
Total current liabilities		165,822	150,020
		<u> </u>	<u> </u>
Total equity and liabilities		2,068,650	2,015,020
		<u> </u>	<u> </u>

¹ An entity is encouraged, but not required, to provide a quantified description of each group of biological assets, distinguishing between consumable and bearer biological assets or between mature and immature biological assets, as appropriate. An entity discloses the basis for making any such distinctions.

Income Statement²

XYZ Dairy Ltd. Income Statement	Notes	Year Ended 31 December 20X1
Fair value of milk produced		518,240
Gains arising from changes in fair value less estimated point-of-sale costs of dairy livestock	3	39,930
		<u>558,170</u>
Inventories used		(137,523)
Staff costs		(127,283)
Depreciation expense		(15,250)
Other operating expenses		(197,092)
		<u>(477,148)</u>
Profit from operations		81,022
Income tax expense		(43,194)
		<u>37,828</u>
Net profit for the period		37,828 =====

Statement of Changes in Equity³

XYZ Dairy Ltd. Statement of Changes in Equity	Year Ended 31 December 20X1		
	Share Capital	Accumulated Profits	Total
Balance at 1 January 20X1	1,000,000	865,000	1,865,000
Net profit for the period		37,828	37,828
	<u>1,000,000</u>	<u>902,828</u>	<u>1,902,828</u>
Balance at 31 December 20X1	1,000,000 =====	902,828 =====	1,902,828 =====

² This income statement presents an analysis of expenses using a classification based on the nature of expenses. HKAS 1 *Presentation of Financial Statements* requires that an entity present, either on the face of the income statement or in the notes to the income statement, an analysis of expenses using a classification based on either the nature of expenses or their function within the entity. HKAS 1 encourages presentation of an analysis of expenses on the face of the income statement.

³ This is one of several formats for the statement of changes in equity permitted by HKAS 1.

Cash Flow Statement⁴

XYZ Dairy Ltd. Cash Flow Statement	Notes	Year Ended 31 December 20X1
Cash flows from operating activities		
Cash receipts from sales of milk		498,027
Cash receipts from sales of livestock		97,913
Cash paid for supplies and to employees		(460,831)
Cash paid for purchases of livestock		(23,815)
		<hr/> 111,294
Income taxes paid		(43,194)
		<hr/> 68,100
Net cash from operating activities		
Cash flows from investing activities		
Purchase of property, plant and equipment		(68,100)
		<hr/> (68,100)
Net cash used in investing activities		
Net increase in cash		0
Cash at beginning of period		10,000
		<hr/> 10,000
Cash at end of period		10,000 =====

Notes to the Financial Statements**1. Operations and Principal Activities**

XYZ Dairy Ltd. ("the Company") is engaged in milk production for supply to various customers. At 31 December 20X1, the Company held 419 cows able to produce milk (mature assets) and 137 heifers being raised to produce milk in the future (immature assets). The Company produced 157,584kg of milk with a fair value less estimated point-of-sale costs of 518,240 (that is determined at the time of milking) in the year ended 31 December 20X1.

⁴ This cash flow statement reports cash flows from operating activities using the direct method. HKAS 7 *Cash Flow Statements* requires that an entity report cash flows from operating activities using either the direct method or the indirect method. HKAS 7 encourages use of the direct method.

2. Accounting Policies

Livestock and milk

Livestock are measured at their fair value less estimated point-of-sale costs. The fair value of livestock is determined based on market prices of livestock of similar age, breed, and genetic merit. Milk is initially measured at its fair value less estimated point-of-sale costs at the time of milking. The fair value of milk is determined based on market prices in the local area.

3. Biological Assets

Reconciliation of Carrying Amounts of Dairy Livestock	20X1
Carrying amount at 1 January 20X1	459,570
Increases due to purchases	26,250
Gain arising from changes in fair value less estimated point-of-sale costs attributable to physical changes ⁵	15,350
Gain arising from changes in fair value less estimated point-of-sale costs attributable to price changes ⁵	24,580
Decreases due to sales	(100,700)
Carrying amount at 31 December 20X1	425,050 =====

4. Financial Risk Management Strategies

The Company is exposed to financial risks arising from changes in milk prices. The Company does not anticipate that milk prices will decline significantly in the foreseeable future and, therefore, has not entered into derivative or other contracts to manage the risk of a decline in milk prices. The Company reviews its outlook for milk prices regularly in considering the need for active financial risk management.

⁵ Separating the increase in fair value less estimated point-of-sale costs between the portion attributable to physical changes and the portion attributable to price changes is encouraged but not required by this Standard.

Example 2: Physical Change and Price Change

The following example illustrates how to separate physical change and price change. Separating the change in fair value less estimated point-of-sale costs between the portion attributable to physical changes and the portion attributable to price changes is encouraged but not required by this Standard.

A herd of 10 2 year old animals was held at 1 January 20X1. One animal aged 2.5 years was purchased on 1 July 20X1 for 108, and one animal was born on 1 July 20X1. No animals were sold or disposed of during the period. Per-unit fair values less estimated point-of-sale costs were as follows:		
2 year old animal at 1 January 20X1	100	
Newborn animal at 1 July 20X1	70	
2.5 year old animal at 1 July 20X1	108	
Newborn animal at 31 December 20X1	72	
0.5 year old animal at 31 December 20X1	80	
2 year old animal at 31 December 20X1	105	
2.5 year old animal at 31 December 20X1	111	
3 year old animal at 31 December 20X1	120	
Fair value less estimated point-of-sale costs of herd at 1 January 20X1 (10 x 100)		1,000
Purchase on 1 July 20X1 (1 x 108)		108
Increase in fair value less estimated point-of-sale costs due to price change:		
10 x (105 - 100)	50	
1 x (111 - 108)	3	
1 x (72 - 70)	2	55
	<hr/>	<hr/>
Increase in fair value less estimated point-of-sale costs due to physical change:		
10 x (120 - 105)	150	
1 x (120 - 111)	9	
1 x (80 - 72)	8	
1 x 70	70	237
	<hr/>	<hr/>
Fair value less estimated point-of-sale costs of herd at 31 December 20X1		
11 x 120	1,320	
1 x 80	80	1,400
	<hr/>	<hr/>

Appendix

Amendments resulting from other HKFRSs

The following sets out amendments required for this Standard resulting from other newly issued HKFRSs that are not yet effective. Once effective, the amendments set out below will be incorporated into the text of this Standard and this appendix will be deleted. In the amended paragraphs shown below, new text is underlined and deleted text is struck through.

HKAS 1 Presentation of Financial Statements (issued in December 2007) - effective for annual periods beginning on or after 1 January 2009

In paragraph 24(a) of HKAS 41, 'a balance sheet date' is amended to 'the end of a reporting period'.

In the appendix accompanying HKAS 41, the rubric above paragraph A1 is amended as follows:

'This appendix, which was prepared by the IASC staff but was not approved by the IASC Board, accompanies, but is not part of, HKAS 41. It has been updated to take account of the changes made by HKAS 1 Presentation of Financial Statements (as revised in 2007).'

Example 1 in the appendix is amended as described below.

In the '**Statement of financial position**' and in the '**Statement of changes in equity**', the reference to 'Accumulated profits' is amended to 'Retained earnings'.

The following footnote to the '**Statement of changes in equity**' is deleted:

'This is one of several formats for the statement of changes in equity permitted by HKAS 1.'

In the second footnote, 'HKAS 7 Cash Flow Statements' is amended to 'HKAS 7 Statement of Cash Flows'.

Appendix

Comparison with International Accounting Standards

This comparison appendix, which was prepared as at December 2004 and deals only with significant differences in the standards extant, is produced for information only and does not form part of the standards in HKAS 41.

The International Accounting Standard comparable with HKAS 41 is IAS 41 *Agriculture*.

There are no major textual differences between HKAS 41 and IAS 41.

HKAS 41 is based on IAS 41, *Agriculture*. In approving HKAS 41, the Council of the Hong Kong Institute of Certified Public Accountants considered and agreed with the IASB's basis for conclusions on IAS 41 (as revised 2003). Accordingly, there are no significant differences between HKAS 41 and IAS 41. The IASB's basis for conclusions is reproduced below for reference. The paragraph numbers of IAS 41 referred to below generally correspond with those in HKAS 41.

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Basis for Conclusions

Agriculture

This Basis for Conclusions accompanies, but is not part of, HKAS 41.

Background

- B1. In 1994, the IASC Board (the “Board” decided to develop an International Accounting Standard on agriculture and appointed a Steering Committee to help define the issues and develop possible solutions. In 1996, the Steering Committee published a Draft Statement of Principles (“DSOP” setting out the issues, alternatives, and the Steering Committee’s proposals for resolving the issues and inviting public comment. In response, 42 comment letters were received. The Steering Committee reviewed the comments, revised certain of its recommendations, and submitted them to the Board.
- B2. In July 1999, the Board approved Exposure Draft E65, Agriculture, with a comment deadline of 31 January 2000. The Board received 62 comment letters on E65. They came from various international organisations, as well as from 28 individual countries. In April 2000, the IASC Staff sent a questionnaire to enterprises that undertake agricultural activity in an attempt to determine the reliability of the fair value measurement proposed in E65 and received 20 responses from 11 countries. In December 2000, after considering the comments on E65 and responses to the questionnaire, the Board approved IAS 41 *Agriculture* (the Standard). Paragraph B82 below summarises the changes that the Board made to E65 in finalising the Standard.

The Need for an International Accounting Standard on Agriculture

- B3. A main objective of the IASC is to develop International Accounting Standards that are relevant in the general purpose financial statements of all businesses. While most International Accounting Standards apply to enterprises in all activities, some International Accounting Standards; for example, IAS 30 *Disclosures in the Financial Statements of Banks and Similar Financial Institutions** and IAS 40 *Investment Property*, deal with issues that arise in particular activities. IASC has also undertaken industry-specific projects on insurance and extractive industries.
- B4. Diversity in accounting for agricultural activity has occurred because:
- (a) prior to the development of the Standard, assets related to agricultural activity and changes in those assets were excluded from the scope of International Accounting Standards:
 - (i) IAS 2 *Inventories* excluded “producers” inventories of livestock, agricultural and forest products... to the extent that they are measured at net realisable value in accordance with well established practices in certain industries?
 - (ii) IAS 16 *Property, Plant and Equipment* did not apply to “forests and similar regenerative natural resources”;
 - (iii) IAS 18 *Revenue* did not deal with revenue arising from “natural increases in herds, and agricultural and forest products” and
 - (iv) IAS 40 *Investment Property* did not apply to “forests and similar regenerative natural resources”;
 - (b) accounting guidelines for agricultural activity developed by national standard setters have, in general, been piecemeal, developed to resolve a specific issue related to a form of agricultural activity of significance to that country; and
 - (c) the nature of agricultural activity creates uncertainty or conflicts when applying

* In August 2005, IFRS 7 *Financial Instruments: Disclosure* supersedes IAS 30.

traditional accounting models, particularly because the critical events associated with biological transformation (growth, degeneration, production, and procreation) that alter the substance of biological assets are difficult to deal with in an accounting model based on historical cost and realisation.

- B5. Most business organisations involved in agricultural activity are small, independent, cash and tax focused, family-operated business units, often perceived as not being required to produce general purpose financial statements. Some believe that because of this an International Accounting Standard on agriculture would not have widespread application. However, even small agricultural enterprises seek outside capital and subsidies, particularly from banks or government agencies, and these capital providers increasingly request financial statements. Moreover, an international trend toward deregulation, an increasing number of cross-border listings and more investment have resulted in increasing scale, scope, and commercialism of agricultural activity. This has created a greater need for financial statements based on sound and generally accepted accounting principles. For the above reasons, in 1994 the Board added to its agenda a project on agriculture.
- B6. The DSOP specifically asked for views on the feasibility of developing a comprehensive International Accounting Standard on agriculture. Some commentators felt that the diversity of agricultural activity prevents the development of a single International Accounting Standard on accounting for all agricultural activities. Others said that different principles should attach to agricultural activity with short and long production cycles. Some cited the need to develop International Accounting Standards that are simple to apply and broad in application. Commentators on the DSOP also noted that agriculture is a significant industry in many countries, particularly in developing and newly industrialised countries. In many such countries it is the most important industry.
- B7. After considering the comments on the DSOP, the Board reaffirmed its conclusion that an International Accounting Standard is needed. The Board believes that the principles set forth in the Standard have wide application and provide a clear set of principles.

Scope

- B8. The Standard prescribes, among other things, the accounting treatment for biological assets and for the initial measurement of agricultural produce harvested from an enterprise's biological assets at the point of harvest. However, the Standard does not deal with the processing of agricultural produce after harvest, since the Board did not consider it appropriate to undertake a partial revision of IAS 2 *Inventories* which deals with the accounting treatment for inventories under the historical cost system. The processing after harvest is accounted for under IAS 2 or another applicable International Accounting Standard (for example, if an enterprise harvests logs and decides to use them for constructing its own building, IAS 16 *Property, Plant and Equipment* is applied in accounting for the logs).
- B9. Some may think of such processing as agricultural activity, particularly if it is done by the same enterprise that developed the agricultural produce (for example, the processing of grapes into wine by a vintner who has grown the grapes). While such processing may be a logical and natural extension of agricultural activity, and the events taking place may bear some similarity to biological transformation, such processing is not included within the definition of agricultural activity in the Standard.
- B10. In particular, the Board considered whether to include circumstances where there is a long ageing or maturation process after harvest (for example, for wine production from grapes and cheese production from milk) in the scope of the Standard. Those who believe that the Standard should cover such processing argue that:
- (a) such a long ageing or maturation process is similar to biological transformation and fundamental to assessing the performance of an enterprise; and
 - (b) many agricultural enterprises are vertically integrated and involved in, for example, producing both grapes and wine.

* The term "historical cost system" is no longer applicable owing to revisions made to IAS 2 in December 2003.

- B11. The Board decided not to include such circumstances in the scope of the Standard because of concerns about difficulties in differentiating them from other manufacturing processes (such as conversion of raw materials into marketable inventories as defined in IAS 2). The Board concluded that the requirements in IAS 2 or another applicable International Accounting Standard would be suited to accounting for such processes.
- B12. The Board also considered whether to deal with contracts for the sale of a biological asset or agricultural produce and government grants related to agricultural activity in the Standard. These issues are discussed below (see paragraphs B47-54 and B63-73).

Measurement

Biological Assets

Fair Value versus Cost

- B13. The Standard requires an enterprise to use a fair value approach in measuring its biological assets related to agricultural activity as proposed in the DSOP and E65, except for cases where the fair value cannot be measured reliably on initial recognition.
- B14. Those who support fair value measurement argue that the effects of changes brought about by biological transformation are best reflected by reference to the fair value changes in biological assets. They believe that fair value changes in biological assets have a direct relationship to changes in expectations of future economic benefits to the enterprise.
- B15. Those who support fair value measurement also note that the transactions entered into to effect biological transformation often have only a weak relationship with the biological transformation itself and, thus, a more distant relationship to expected future economic benefits. For example, patterns of growth in a plantation forest directly affect expectations of future economic benefits but differ markedly, in timing, from patterns of cost incurrence. No income might be reported until first harvest and sale (perhaps 30 years) in a plantation forestry enterprise using a transaction-based, historical cost accounting model. On the other hand, income is measured and reported throughout the period until initial harvest if an accounting model is used that recognises and measures biological growth using current fair values.
- B16. Further, those who support fair value measurement cite reasons for concluding that fair value has greater relevance, reliability, comparability, and understandability as a measurement of future economic benefits expected from biological assets than historical cost, including:
- (a) many biological assets are traded in active markets with observable market prices. Active markets for these assets provide a reliable measure of market expectations of future economic benefits. The presence of such markets significantly increases the reliability of market value as an indicator of fair value;
 - (b) measures of the cost of biological assets are sometimes less reliable than measures of fair value because joint products and joint costs can create situations in which the relationship between inputs and outputs is ill-defined, leading to complex and arbitrary allocations of cost between the different outcomes of biological transformation. Such allocations become even more arbitrary if biological assets generate additional biological assets (offspring) and the additional biological assets are also used in the enterprise's own agricultural activity;
 - (c) relatively long and continuous production cycles, with volatility in both the production and market environment, mean that the accounting period often does not depict a full cycle. Therefore, period-end measurement (as opposed to time of transaction) assumes greater significance in deriving a measure of current period financial performance or position. The less significant current year harvest is in relation to total biological transformation, the greater the significance of period-end measures of asset change (growth and degeneration). In relatively high turnover, short production cycle, highly controlled agricultural systems (for example, broiler chicken or mushroom production) in which the majority of biological transformation and harvesting occurs within a year, the relationship between cost and future economic benefits appears more stable. This apparent stability does not alter the relationship between current market value and future economic benefits, but it makes the difference in

measurement method less significant; and

- (d) different sources of replacement animals and plants (home-grown or purchased) give rise to different costs in a historical cost approach. Similar assets should give rise to similar expectations with regard to future benefits. Considerably enhanced comparability and understandability result when similar assets are measured and reported using the same basis.

B17. Those who oppose measuring biological assets at fair value believe there is superior reliability in cost measurement because historical cost is the result of arm's length transactions, and therefore provides evidence of an open-market value at that point in time, and is independently verifiable. More importantly, they believe fair value is sometimes not reliably measurable and that users of financial statements may be misled by presentation of numbers that are indicated as being fair value but are based on subjective and unverifiable assumptions. Information regarding fair value can be provided other than in a single number in the financial statements. They believe the scope of the Standard is too broad. They also argue that:

- (a) market prices are often volatile and cyclical and not appropriate as a basis of measurement;
- (b) it may be onerous to require fair valuation at each balance sheet date, especially if interim reports are required;
- (c) the historical cost convention is well established and commonly used. The use of any other basis should be accompanied by a change in the IASC *Framework for the Preparation and Presentation of Financial Statements* (the "Framework"). For consistency with other International Accounting Standards and other activities, biological assets should be measured at their cost;
- (d) cost measurement provides more objective and consistent measurement;
- (e) active markets may not exist for some biological assets in some countries. In such cases, fair value cannot be measured reliably, especially during the period of growth in the case of a biological asset that has a long growth period (for example, trees in a plantation forest);
- (f) fair value measurement results in recognition of unrealised gains and losses and contradicts principles in International Accounting Standards on recognition of revenue; and
- (g) market prices at a balance sheet date may not bear a close relationship to the prices at which assets will be sold, and many biological assets are not held for sale.

B18. The *Framework* is neutral with respect to the choice of measurement basis, identifying that a number of different bases are employed to different degrees and in varying combinations, though noting that historical cost is most commonly adopted. The alternatives specifically identified are historical cost, current cost, realisable value, and present value. Precedents for fair value measurement exist in other International Accounting Standards.

B19. The Board concluded that the Standard should require a fair value model for biological assets related to agricultural activity because of the unique nature and characteristics of agricultural activity. However, the Board also concluded that, in some cases, fair value cannot be measured reliably. Some respondents to the questionnaire, as well as some commentators on E65, expressed significant concern about the reliability of fair value measurement for some biological assets, arguing that:

- (a) active markets do not exist for some biological assets, in particular for those with a long growth period;
- (b) present value of expected net cash flows is often an unreliable measure of fair value due to the need for, and use of, subjective assumptions (for example, about weather); and
- (c) fair value cannot be measured reliably prior to harvest.

Some commentators on E65 suggested that the Standard should include a reliability exception for cases where no active market exists.

- B20. The Board decided there was a need to include a reliability exception for cases where market-determined prices or values are not available and alternative estimates of fair value are determined to be clearly unreliable. In those cases, biological assets should be measured at their cost less any accumulated depreciation and any accumulated impairment losses. In determining cost, accumulated depreciation and accumulated impairment losses, an enterprise considers IAS 2 *Inventories*, IAS 16 *Property, Plant and Equipment* and IAS 36 *Impairment of Assets*.
- B21. The Board rejected a benchmark treatment of fair value and an allowed alternative treatment of historical cost because of the greater comparability and understandability achieved by a mandatory fair value approach in the presence of active markets. The Board is also uncomfortable with options in International Accounting Standards.

Treatment of Point-of-Sale Costs

- B22. The Standard requires that a biological asset should be measured at its fair value less estimated point-of-sale costs. Point-of-sale costs include commissions to brokers and dealers, levies by regulatory agencies and commodity exchanges, and transfer taxes and duties. Point-of-sale costs exclude transport and other costs necessary to get assets to a market. Such transport and other costs are deducted in determining fair value (that is, fair value is a market price less transport and other costs necessary to get an asset to a market).
- B23. E65 proposed that pre-sale disposal costs that will be incurred to place an asset on the market (such as transport costs) should be deducted in determining fair value, if a biological asset will be sold in an active market in another location. However, E65 did not specify the treatment of point-of-sale costs. Some commentators suggested that the Standard should clarify the treatment of point-of-sale costs, as well as pre-sale disposal costs.
- B24. Some argue that point-of-sale costs should not be deducted in a fair value model. They argue that fair value less estimated point-of-sale costs would be a biased estimate of markets' estimate of future cash flows, because point-of-sale costs would in effect be recognised as an expense twice if the acquirer pays point-of-sale costs on acquisition; once related to the initial acquisition of biological assets and once related to the immediate measurement at fair value less estimated point-of-sale costs. This would occur even when point-of-sale costs would not be incurred until a future period or would not be paid at all for a bearer biological asset that will not be sold.
- B25. On the other hand, some believe that point-of-sale costs should be deducted in a fair value model. They believe that the carrying amount of an asset should represent the economic benefits that are expected to flow from the asset. They argue that fair value less estimated point-of-sale costs would represent the markets' estimate of the economic benefits that are expected to flow to the enterprise from that asset at the balance sheet date. They also argue that failure to deduct estimated point-of-sale costs could result in a loss being deferred until a sale occurs.
- B26. The Board concluded that fair value less estimated point-of-sale costs is a more relevant measurement of biological assets, acknowledging that, in particular, failure to deduct estimated point-of-sale costs could result in a loss being deferred.

Hierarchy in Fair Value Measurement

- B27. The Standard requires that, if an active market exists for a biological asset, the quoted price in that market is the appropriate basis for determining the fair value of that asset. If an active market does not exist, an enterprise uses market-determined prices or values (such as the most recent market transaction price) when available. However, in some circumstances, market-determined prices or values may not be available for a biological asset in its present condition. In these circumstances, the Standard indicates that an enterprise uses the present value of expected net cash flows from the asset.
- B28. E65 proposed that, if an active market exists for a biological asset, an enterprise should use the market price in the active market. If an active market does not exist, E65 proposed that an enterprise should consider other measurement bases such as the price of the most recent

transaction for the same type of asset, sector benchmarks, and present value of expected net cash flows. E65 did not set a hierarchy in cases where no active market exists; that is, E65 did not indicate which basis is preferable to the other bases.

- B29. The Board considered setting an explicit hierarchy in cases where no active market exists. Some believe that using market-determined prices or values; for example, the most recent market transaction price, would always be preferable to present value of expected net cash flows. On the other hand, some believe that market-determined prices or values would not necessarily be preferable to present value of expected net cash flows, especially when an enterprise uses market prices for similar assets with adjustment to reflect differences.
- B30. The Board concluded that a detailed hierarchy would not provide sufficient flexibility to appropriately deal with all the circumstances that may arise and decided not to set a detailed hierarchy in cases where no active market exists. However, the Board decided to indicate that an enterprise uses all available market-determined prices or values since otherwise there is a possibility that enterprises may opt to use present value of expected net cash flows from the asset even when useful market-determined prices or values are available. Of the 20 companies that responded to the questionnaire, six companies used present value of expected net cash flows as a basis of fair value measurement and, in addition, two companies indicated that it was impossible to measure their biological assets reliably since the present value of expected net cash flows would not be reliable (as they would need to use present value as a basis).
- B31. When an enterprise has access to different markets, the Standard indicates that the enterprise uses the most relevant one. For example, if an enterprise has access to two active markets, it uses the price existing in the market expected to be used. Some believe that the most advantageous price in the accessible markets should be used. The Standard reflects the view that the most relevant measurement results from using the market expected to be used.

Frequency of Fair Value Measurement

- B32. Some argue that less frequent measurement of fair value should be permitted because of concerns about burdens on enterprises. The Board rejected this approach because of the:
- (a) continuous nature of biological transformation;
 - (b) lack of direct relationships between financial transactions and the outcomes of biological transformation; and
 - (c) general availability of reliable measures of fair value at reasonable cost.

Independent Valuation

- B33. A significant number of commentators on the DSOP indicated that, if present value of expected net cash flows is used to determine fair value, an external independent valuation should be required. The Board rejected this proposal since it believes that external independent valuations are not commonly used for certain agricultural activity and it would be burdensome to require an external independent valuation. The Board believes that it is for enterprises to decide how to determine fair value reliably, including the extent to which independent valuers need to be involved.

Inability to Measure Fair Value Reliably

- B34. As noted previously, the Board decided to include a reliability exception in the Standard for cases where fair value cannot be measured reliably on initial recognition. The Standard indicates a presumption that fair value can be measured reliably for a biological asset. However, that presumption can be rebutted only on initial recognition for a biological asset for which market-determined prices or values are not available and for which alternative estimates of fair value are determined to be clearly unreliable. In such a case, that biological asset should be measured at its cost less any accumulated depreciation and any accumulated impairment losses. Once the fair value of such a biological asset becomes reliably measurable, the Standard requires that an enterprise should start measuring the biological asset at its fair value less estimated point-of-sale costs.
- B35. Some believe that, if an enterprise was previously using the reliability exception, the enterprise

should not be allowed to start fair value measurement (that is, an enterprise should continue to use a cost basis). They argue that it could be a subjective decision to determine when fair value has become reliably measurable and that this subjectivity could lead to inconsistent application and, potentially, abuse. The Board noted, however, that in agricultural activity, it is likely that fair value becomes measurable more reliably as biological transformation occurs and that fair value measurement is preferable to cost in those cases. Thus, the Board decided to require fair value measurement once fair value becomes reliably measurable.

- B36. If an enterprise has previously measured a biological asset at its fair value less estimated point-of-sale costs, the Standard requires that the enterprise should continue to measure the biological asset at its fair value less estimated point-of-sale costs until disposal. Some argue that reliable estimates may cease to be available. The Board believed that this would rarely, if ever, occur. Accordingly, the Board decided to prohibit enterprises from changing their measurement basis from fair value to cost, because otherwise an enterprise might use a reliability exception as an excuse to discontinue fair value accounting in a falling market.
- B37. If an enterprise uses the reliability exception, the Standard requires additional disclosures. The additional disclosures include information on biological assets held at the end of the period such as a description of the assets and an explanation of why fair value cannot be measured reliably. The additional disclosures also include the gain or loss recognised for the period on disposal of biological assets measured at cost less any accumulated depreciation and any accumulated impairment losses, even though those biological assets are not held at the end of the period.

Gains and Losses

- B38. The Standard requires that a gain or loss arising on initial recognition of a biological asset and from a change in fair value less estimated point-of-sale costs of a biological asset should be included in net profit or loss^{*} for the period in which it arises. Those who support this treatment argue that biological transformation is a significant event that should be included in net profit or loss because:
- (a) the event is fundamental to understanding an enterprise's performance; and
 - (b) this is consistent with the accrual basis of accounting.
- B39. Some commentators on the DSOP and E65 argued that fair value changes should be included directly in equity, through the statement of changes in equity, until realised, arguing that:
- (a) the effects of biological transformation cannot be measured reliably and, therefore, should not be reported as income;
 - (b) fair value changes should only be included in net profit or loss when the earnings process is complete;
 - (c) recognition of unrealised gains and losses in net profit or loss increases volatility of earnings;
 - (d) the results of biological transformation may never be realised, particularly given the risks to which biological assets are exposed; and
 - (e) it is premature to require recognition of fair value changes in net profit or loss, until performance reporting issues are resolved.
- B40. The Board rejected requiring changes in fair value to be included directly in equity since it is difficult to find any conceptual basis for reporting any portion of the changes in fair value of biological assets related to agricultural activity directly in equity. No distinction is made in the *Framework* between recognition in the balance sheet and recognition in the income statement.

* IAS 1 *Presentation of Financial Statements* (revised in 2003) replaced the term "net profit or loss" with "profit or loss".

Agricultural Produce

- B41. The Standard requires that agricultural produce harvested from an enterprise's biological assets should be measured at its fair value less estimated point-of-sale costs at the point of harvest. Such measurement is the cost at that date when applying IAS 2 *Inventories* or another applicable International Accounting Standard.
- B42. The Board noted that the same basis of measurement should generally be applied to agricultural produce on initial recognition and to the biological asset from which it is harvested. Because the fair value of a biological asset takes into account the condition of the agricultural produce that will be harvested from the biological asset, it would be illogical to measure the agricultural produce at cost when the biological asset is measured at fair value. For example, the fair value of a sheep with half fleece will differ from the fair value of a similar sheep with full fleece. It would be inconsistent and distort reporting of current period performance if, upon shearing, the shorn fleece is measured at its cost when the fair value of the sheep is reduced by the fair value of the fleece.
- B43. As noted previously, certain biological assets are measured at their cost less any accumulated depreciation and any accumulated impairment losses, if the reliability exception is applied. Some argue that a reliability exception should exist for measurement of agricultural produce. The Board rejected this view because many of the arguments for a reliability exception do not apply to agricultural produce. For example, markets more often exist for agricultural produce than for biological assets. The Board also noted that it is generally not practicable to reliably determine the cost of agricultural produce harvested from biological assets.
- B44. With regard to measurement after harvest, some argue that agricultural produce should be measured at its fair value both at the point of harvest and at each balance sheet date until sold, consumed, or otherwise disposed of. They argue that this approach would ensure that all agricultural produce of a similar type is measured similarly irrespective of date of harvest, thus enhancing comparability and consistency.
- B45. The Board concluded that fair value less estimated point-of-sale costs at the point of harvest should be the cost when applying IAS 2 or another applicable International Accounting Standard, since this is consistent with the historical cost accounting model applied to manufacturing processes in general and other types of inventory.
- B46. In reaching the above conclusion, the Board noted that enterprises undertaking agricultural activity sometimes purchase agricultural produce for resale, and other enterprises often engage in processing purchased agricultural produce into consumable products. If agricultural produce would be measured at its fair value after harvest, a desire for consistency would suggest revaluing purchased inventories as well, and such a treatment would be inconsistent with IAS 2. The Board did not consider it appropriate to undertake a partial revision of IAS 2.

Sales Contracts

- B47. Enterprises often enter into contracts to sell at a future date their biological assets or agricultural produce. The Standard indicates that contract prices are not necessarily relevant in determining fair value and that the fair value of a biological asset or agricultural produce is not adjusted because of the existence of a contract.
- B48. E65 did not propose how to account for a contract for the sale of a biological asset or agricultural produce. Some commentators suggested prescribing the treatment of sales contracts since such sales contracts are common in certain agricultural activity. Some commentators also pointed out that certain sales contracts are not within the scope of IAS 39 *Financial Instruments: Recognition and Measurement* and that no other International Accounting Standards deal with those contracts.
- B49. Some argue that contract prices should be used in measuring the related biological assets when an enterprise expects to settle the contract by delivery and believe this would result in the most relevant carrying amount for the biological asset. Others argue that contract prices are not necessarily relevant in measuring the biological assets at fair value since fair value reflects the current market in which a willing buyer and seller would enter into a transaction.
- B50. The Board concluded that contract prices should not be used in measuring related biological assets, because contract prices do not necessarily reflect the current market in which a willing

buyer and seller would enter into a transaction and therefore do not necessarily represent the fair value of assets. The Board wished to maintain a consistent approach to the measurement of assets. The Board instead considered whether it might require that sales contracts be measured at fair value. It is logical to measure a sales contract at fair value to the extent that a related biological asset is also measured at fair value.

- B51. However, the Board noted that to achieve symmetry between the measurement of a biological asset and a related sales contract the Standard would have to carefully restrict the sales contracts to be measured at fair value. An enterprise may enter into a contract to sell agricultural produce to be harvested from the enterprise's biological assets. The Board concluded that it would not be appropriate to require fair value measurement for a contract to sell agricultural produce that does not yet exist (for example, milk to be harvested from a cow), since no related asset has yet been recognised or measured at fair value and to do so would be beyond the scope of the project on agriculture.
- B52. Thus, the Board considered restricting the sales contracts to be measured at fair value to those for the sale of an enterprise's existing biological assets and agricultural produce. However, the Board noted that it is difficult to differentiate existing agricultural produce from agricultural produce that does not exist. For example:
- (a) if an enterprise enters into a contract to sell fully-grown wheat at a future date and has half-grown wheat at a balance sheet date, it seems clear that the wheat to be delivered under the contract does not yet exist at the balance sheet date; but
 - (b) on the other hand, if an enterprise enters into a contract to sell mature cattle at a future date and has mature cattle at a balance sheet date, it could be argued that the cattle exist in the form in which they will be sold at the balance sheet date. However, it could also be argued that the cattle do not yet exist in the form in which they will be sold at the balance sheet date since further biological transformation will occur between the balance sheet date and the date of delivery.
- B53. The Board also noted that the Standard would have to require an enterprise to stop fair value measurement for sales contracts once agricultural produce to be sold under the contract is harvested from an enterprise's biological assets, since accounting for agricultural produce is not dealt with in the Standard except for initial measurement and IAS 2 *Inventories* or another applicable International Standard applies after harvest. It would be illogical to continue fair value measurement when the agricultural produce is measured at historical cost. The Board noted that it would be anomalous to require an enterprise to start measuring a contract at fair value once the related asset exists and to stop doing that at a later date.
- B54. The Board concluded that no solution is practicable without a complete review of the accounting for commodity contracts that are not within the scope of IAS 39. Because of the above difficulties, the Board concluded that the Standard should not deal with the measurement of sales contracts that are not within the scope of IAS 39. Instead, the Board decided to include an observation that those sales contracts may be onerous contracts under IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*.

Land Related to Agricultural Activity

- B55. The Standard does not establish any new principles for land related to agricultural activity. Rather, an enterprise follows IAS 16 *Property, Plant and Equipment*, or IAS 40 *Investment Property*, depending on which standard is appropriate in the circumstances. IAS 16 requires land to be measured either at its cost less any accumulated impairment losses, or at a revalued amount. IAS 40 requires land that is investment property to be measured at its fair value, or cost less any accumulated impairment losses.
- B56. Some argue that land attached to biological assets related to agricultural activity should also be measured at its fair value. They argue that fair value measurement of land results in consistency of measurement with the fair value measurement of biological assets. They also argue that it is sometimes difficult to measure the fair value of such biological assets separately from the land since an active market often exists for the combined assets (that is, land and biological assets; for example, trees in a plantation forest).
- B57. The Board rejected this approach, primarily because requiring the fair value measurement of land related to agricultural activity would be inconsistent with IAS 16.

Intangible Assets

- B58. The Standard does not establish any new principles for intangible assets related to agricultural activity. Rather, an enterprise follows IAS 38 *Intangible Assets*. IAS 38 requires an intangible asset, after initial recognition, to be measured at its cost less any accumulated amortisation and impairment losses, or at a revalued amount.
- B59. E65 proposed that an enterprise should be encouraged to follow the revaluation alternative in IAS 38 for intangible assets related to agricultural activity, to enhance consistency of measurement with the fair value measurement of biological assets. Some commentators on E65 disagreed with having the encouragement. They argued that a unique treatment for intangible assets related to agricultural activity is not warranted.
- B60. The Board did not include the encouragement in E65 in the Standard. The Board concluded that IAS 38 should be applied to intangible assets related to agricultural activity, as it is to intangible assets related to other activities.

Subsequent Expenditure

- B61. The Standard does not explicitly prescribe how to account for subsequent expenditure related to biological assets. E65 proposed that costs of producing and harvesting biological assets should be charged to expense when incurred and that costs that increase the number of units of biological assets owned or controlled by the enterprise should be added to the carrying amount of the asset.
- B62. Some believe that there is no need to capitalise subsequent expenditure in a fair value model and that all subsequent expenditure should be recognised as an expense. Some also argue that it would sometimes be difficult to prescribe which costs should be recognised as expenses and which costs should be capitalised; for example, in the case of vet fees paid for delivering a calf. The Board decided not to explicitly prescribe the accounting for subsequent expenditure related to biological assets in the Standard, because it believes to do so is unnecessary with a fair value measurement approach.

Government Grants

- B63. The Standard requires that an unconditional government grant related to a biological asset measured at its fair value less estimated point-of-sale costs should be recognised as income when, and only when, the government grant becomes receivable. If a government grant is conditional, including where a government grant requires an enterprise not to engage in specified agricultural activity, an enterprise should recognise the government grant as income when, and only when, the conditions attaching to the government grant are met.
- B64. The Standard requires a different treatment from IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance* in the circumstances described above. IAS 20 is to be applied only to government grants related to biological assets measured at cost less any accumulated depreciation and any accumulated impairment losses.
- B65. IAS 20 requires that government grants should not be recognised until there is reasonable assurance that:
- (a) the enterprise will comply with the conditions attaching to them; and
 - (b) the grants will be received.

IAS 20 also requires that government grants should be recognised as income over the periods necessary to match them with the related costs that they are intended to compensate, on a systematic basis. In relation to the presentation of government grants related to assets, IAS 20 permits two methods—setting up a government grant as deferred income or deducting the government grant from the carrying amount of the asset.

- B66. The latter method of presentation—deducting a government grant from the carrying amount of the related asset—is inconsistent with a fair value model in which an asset is measured and presented at its fair value. Using the deduction from carrying value approach, an enterprise

would first deduct the government grant from the carrying amount of the related asset and then measure that asset at its fair value. In effect, an enterprise would recognise a government grant as income immediately, even for a conditional government grant. This conflicts with the requirement in IAS 20 that government grants should not be recognised until there is reasonable assurance that the enterprise will comply with the conditions attaching to them.

- B67. Because of the above, the Board concluded that there was a need to deal with government grants related to biological assets measured at their fair value. Some argued that IASB should begin a wider review of IAS 20, rather than provide special rules in individual International Accounting Standards. The Board acknowledged that this might be a more appropriate approach, but concluded that such a review would be beyond the scope of the project on agriculture. Instead, the Board decided to deal with government grants in the Standard, since the Board noted that government grants related to agricultural activity are common in some countries.
- B68. E65 proposed that, if an enterprise receives a government grant in respect of a biological asset that is measured at its fair value and the grant is unconditional, the enterprise should recognise the grant as income when the government grant becomes receivable. E65 also proposed that, if a government grant is conditional, the enterprise should recognise it as income when there is reasonable assurance that the conditions are met.
- B69. The Board noted that, if a government grant is conditional, an enterprise is likely to have costs and ongoing obligations associated with satisfying the conditions attaching to the government grant. It may be possible that the inflow of economic benefits is much less than the amount of the government grant. Given that possibility, the Board acknowledged that the criterion for recognising income from a conditional government grant in E65, when there is reasonable assurance that the conditions are met, may give rise to income recognition that is inconsistent with the *Framework*. The *Framework* indicates that income is recognised in the income statement when an increase in future economic benefits related to an increase in an asset or a decrease in a liability has arisen that can be measured reliably. The Board also noted that it would inevitably be a subjective decision as to when there is reasonable assurance that the conditions are met and that this subjectivity could lead to inconsistent income recognition.
- B70. The Board considered two alternative approaches:
- (a) an enterprise should recognise a conditional government grant as income when it is probable that the enterprise will meet the conditions attaching to the government grant; and
 - (b) an enterprise should recognise a conditional government grant as income when the enterprise meets the conditions attaching to the government grant.
- B71. Proponents of approach (a) argue that this approach is generally consistent with the revenue recognition requirements in IAS 18 *Revenue*. IAS 18 requires that revenue should be recognised, among other things, when it is probable that the economic benefits associated with the transaction will flow to the enterprise.
- B72. Proponents of approach (b) believe that, until the conditions attaching to the government grant are met, a liability should be recognised under the *Framework* rather than income since an enterprise has a present obligation to satisfy the conditions arising from past events. They also argue that income recognition under approach (a) would still be subjective and inconsistent with the recognition criteria indicated in the *Framework*.
- B73. The Board concluded that approach (b) is more appropriate. The Board also decided that a government grant that requires an enterprise not to engage in specified agricultural activity should also be accounted for in the same way as a conditional government grant related to a biological asset measured at its fair value less estimated point-of-sale costs.

Disclosure

Separate Disclosure of Physical and Price Changes

- B74. The Standard encourages, but does not require, separate disclosure of the effects of the factors resulting in changes to the carrying amount of biological assets, physical change and price change, when there is a production cycle of more than one year. Physical change is attributable to changes in the assets themselves while price change is attributable to changes in unit fair values.
- B75. Some argue that the separate disclosure should be required since it is useful in appraising current period performance and future prospects in relation to production from, and maintenance and renewal of, biological assets. Others argue that it may be impracticable to separate these elements and the two components cannot be separated reliably.
- B76. The Board concluded that the separate disclosure should not be required because of practicability concerns. However, the Board decided to encourage the separate disclosure, given that such disclosure may be useful and practically determinable in some circumstances. The separate disclosure is not encouraged when the production cycle is less than one year (for example, when raising broiler chickens or growing cereal crops) since that information is less useful in that circumstance.
- B77. Some argue that physical changes should be included in net profit or loss and that price changes should be included directly in equity, through the statement of changes in equity. The Board rejected this approach because both components are indicative of management's performance.

Disaggregation of the Gain or Loss

- B78. The Standard requires that an enterprise should disclose the aggregate gain or loss arising during the current period on initial recognition of biological assets and agricultural produce and from the change in fair value less estimated point-of-sale costs of biological assets. The Standard does not require or encourage disaggregating the gain or loss, except that the Standard encourages separate disclosure of physical changes and price changes as discussed above.
- B79. The Board considered requiring, or encouraging, disclosure of the gain or loss on a disaggregated basis; for example, requiring separate disclosure of the gain or loss related to biological assets and the gain or loss related to agricultural produce. Those who supported disaggregating the gain or loss believe that such information is useful in appraising current period performance in relation to biological transformation. Others argued that disaggregation would be impracticable and require a subjective procedure.

Other Disclosures

- B80. E65 proposed disclosing the:
- (a) extent to which the carrying amount of biological assets reflects a valuation by an external independent valuer, or if there has been no valuation by an external independent valuer, that fact;
 - (b) activities that are unsustainable with an estimated date of cessation of the activities;
 - (c) aggregate carrying amount of an enterprise's agricultural land and the basis (cost or revalued amount) on which the carrying amount was determined under IAS 16 *Property, Plant and Equipment*; and
 - (d) carrying amount of agricultural produce either on the face of the balance sheet or in the notes.

- B81. The Board did not include the above disclosures in the Standard. The Board noted that requiring item (a) above would not be appropriate since external independent valuations are not commonly used for assets related to agricultural activity, unlike for certain other assets such as investment property. The Board also noted that item (b) is not required in other International Accounting Standards and a unique disclosure requirement is not warranted for agricultural activity. Items (c) and (d) would be outside the scope of the Standard and covered by other International Accounting Standards (IAS 16 or IAS 2 *Inventories*).

Summary of Changes to E65

- B82. The Standard made the following principal changes to the proposals in E65:
- (a) The Standard includes a reliability exception for biological assets on initial recognition. If the exception is applied, the biological asset should be measured at its cost less any accumulated depreciation and any accumulated impairment losses (paragraph 30 of the Standard). As a consequence, the Standard includes disclosure requirements consistent with paragraph 170(b) of IAS 39 *Financial Instruments: Recognition and Measurement*[†], and paragraph 68 of IAS 40 *Investment Property*[‡] (paragraphs 54(a)-(c) and 55 of the Standard), and consistent with paragraphs 60(b)-(d) and 60(e)(v)-(vii) of IAS 16 *Property, Plant and Equipment*[§] (paragraphs 54(d)-(f) and 55).
 - (b) If the reliability exception is applied but fair value subsequently becomes reliably measurable and, therefore, an enterprise has started measuring the biological assets at their fair value less estimated point-of-sale costs, the Standard requires the enterprise to disclose a description of the biological assets, an explanation of why fair value has become reliably measurable, and the effect of the change (paragraph 56).
 - (c) E65 did not specify how to account for point-of-sale costs (such as commissions to brokers). The Standard requires that biological assets and agricultural produce should be measured at their fair value less estimated point-of-sale costs (paragraphs 12-13).
 - (d) E65 included net realisable value as one of the measurement bases in cases where no active market exists. Net realisable value was deleted from the bases since it is not a market-determined value.
 - (e) The Standard indicates that market-determined prices or values are used when available. The Standard also indicates that, in some circumstances, market-determined prices or values may not be available for an asset in its present condition. In these circumstances, an enterprise uses the present value of expected net cash flows (paragraphs 18-20).
 - (f) Guidance on the performance of present value calculations was added (paragraphs 21-23).
 - (g) E65 did not specify how to account for contracts for the sale of a biological asset or agricultural produce. The Standard indicates that the fair value of a biological asset or agricultural produce is not adjusted because of the existence of a sales contract (paragraph 16).
 - (h) E65 did not explicitly indicate that a gain or loss may arise on initial recognition of agricultural produce. The Standard clarifies that a gain or loss may arise on initial recognition of agricultural produce; for example, as a result of harvesting and that such a gain or loss should be included in net profit or loss[¶] for the period in which it arises (paragraphs 28-29).

[†] Paragraph 170(b) of IAS 39 was replaced by paragraph 90 of IAS 32 *Financial Instruments: Disclosure and Presentation* when the IASB revised those standards in 2003. In 2005, the IASB relocated all disclosures relating to financial instruments to IFRS 7 *Financial Instruments: Disclosures*.

[‡] Paragraph 68 of IAS 40 was replaced by paragraph 78 when the IASB revised IAS 40 in 2003.

[‡] Paragraph 60 of IAS 16 was replaced by paragraph 73 when IAS 16 was revised in 2003.

[¶] IAS 1 *Presentation of Financial Statements* (revised in 2003) replaced the term 'net profit or loss' with 'profit or loss'.

- (i) E65 proposed that costs of producing and harvesting biological assets should be charged to expense when incurred, and that costs that increase the number of units of biological assets owned or controlled by the enterprise should be added to the carrying amount of the asset. The Standard does not explicitly prescribe how to account for subsequent expenditure related to biological assets.
- (j) E65 proposed that an enterprise should recognise a conditional government grant as income when there is reasonable assurance that the conditions are met. The Standard requires that a conditional government grant related to a biological asset measured at its fair value less estimated point-of-sale costs, including where a government grant requires an enterprise not to engage in specified agricultural activity, should be recognised as income when, and only when, the conditions attaching to the government grant are met. The Standard also indicates that IAS 20 Accounting for Government Grants and Disclosure of Government Assistance, is applied to a government grant related to a biological asset measured at its cost less any accumulated depreciation and any accumulated impairment losses (paragraphs 34-35 and 37).
- (k) E65 provided the following encouragements specific to agricultural activity with regard to alternative treatments allowed in other International Accounting Standards, to achieve consistency with the accounting treatment of activities covered by E65:
 - (i) analysing expenses by nature, as set out in IAS 1 Presentation of Financial Statements; and
 - (ii) revaluing certain intangible assets used in agricultural activity if an active market exists, as set out in IAS 38 Intangible Assets.

The Board did not include these encouragements in the Standard. The Board noted that IAS 1 and IAS 38 apply to enterprises that undertake agricultural activity, as well as to those in other activities.

- (l) New disclosure requirements include disclosing the:
 - (i) basis for making distinctions between consumable and bearer biological assets or between mature and immature biological assets, when an enterprise provides a quantified description of each group of biological assets (paragraph 43);
 - (ii) methods and significant assumptions applied in determining the fair value of each group of agricultural produce at the point of harvest (paragraph 47);
 - (iii) fair value less estimated point-of-sale costs of agricultural produce harvested during the period, determined at the point of harvest (paragraph 48);
 - (iv) increases resulting from business combinations in the reconciliation of the carrying amount of biological assets (paragraph 50(e)); and
 - (v) significant decreases expected in the level of government grants related to agricultural activity covered by the Standard (paragraph 57(c)).
- (m) E65 proposed disclosing the:
 - (i) extent to which the carrying amount of biological assets reflects a valuation by an external independent valuer or, if there has been no valuation by an external independent valuer, that fact;
 - (ii) activities that are unsustainable with an estimated date of cessation of the activities;
 - (iii) aggregate carrying amount of an enterprise's agricultural land and the basis (cost or revalued amount) on which the carrying amount was determined under IAS 16; and
 - (iv) carrying amount of agricultural produce either on the face of the balance sheet or in the notes.

The Standard does not include the above disclosures.

- (n) The amendment to IAS 17 Leases, now clarifies that IAS 17 should not be applied to the measurement by:
- (i) lessees of biological assets held under finance leases; and
 - (ii) lessors of biological assets leased out under operating leases.

Biological assets held under finance leases and those leased out under operating leases are measured under the Standard rather than IAS 17. A lease of a biological asset is classified as a finance lease or operating lease under IAS 17. If a lease is classified as a finance lease, the lessee recognises the leased biological asset under IAS 17 and thereafter measures and presents it under the Standard. In that case, the lessee makes disclosures both under the Standard and IAS 17. A lessor of a biological asset under an operating lease measures and presents the biological asset under the Standard, and makes disclosures both under the Standard and IAS 17.