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Agriculture

A conceptual farmhouse

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Agriculture – a conceptual farmhouse

In our earlier publications, we have covered accounting for bearer plants and biological assets under Ind AS. This publication contains the concepts relating to agricultural produce, inventory and government grants and the related accounting requirements.

Agricultural produce
The concept of accounting for agricultural produce has been introduced by Ind AS.

Since there was no accounting guidance in India (previous GAAP), agricultural produce was not recognised in the financial statements.

Ind AS 41 defines agricultural activity as management of biological transformation and harvest[1] of biological assets. Agricultural produce is the harvested product of the entity's biological assets.

Some examples of agricultural produce are:

[1] Harvest is the detachment of the produce from a biological asset or the cessation of a biological asset's life process

For an agricultural produce to be recognized, the entity should control the asset as a result of past events, it should be probable that future economic benefits associated with the asset will flow to the entity and the fair value or cost of the asset can be measured reliably. In accordance with Ind AS 41.13, agricultural produce should be measured at fair value less costs to sell at the point of harvest. Harvested agricultural produce is presumed to be a marketable commodity and therefore the fair value of agricultural produce at the point of harvest can be measured reliably. Additionally, the fair value of biological assets takes into account the condition of the agricultural produce that will be harvested from the biological asset and therefore the same basis of measurement should generally be applied to agricultural produce and to the biological asset.[2]

The fair value determined at the point of harvest will be the deemed cost of the agricultural produce and inventory and should not to be revalued at each balance sheet date.[3]

Gain or loss resulting from fair value less cost to sell of agricultural produce on initial recognition should be recognised in profit or loss.

Our earlier publication discussed in detail the three widely used valuation techniques: market approach, cost approach and the income approach. Selection of a valuation technique to best represent the value of the item under consideration is a matter of significant judgement. A valuation technique must be selected and consistently applied, to maximize the use of relevant observable inputs (and minimize unobservable inputs). Agricultural produce may also be grouped on the basis of attributes such as age or quality to determine fair values.

Determination of volume of the agricultural produce is critical and could be time consuming and may require the use of estimates (for example: yield ratio). The table below illustrates some practical basis to determine volume and fair value.











[2] Guidance drawn from IAS 41:B42
[3] Guidance drawn from IAS 41:B44 to B46

Agricultural Produce	Determination of volume	Determination of fair value		
		Where an active market exists for the agricultural produce, fair value per such active market adjusted for transportation costs	Where no active market exists	
			Reverse working from the fair value of the inventory produced adjusted for costs of conversion	Discounted Cash Flow (DCF) Method
Harvested tea leaves	• Plucking records • Estate yields	Active market exists for green leaves	Reverse working from the fair value of black tea	Assumptions – made tea realization, discount rates, green leaf yields and applicable costs
Picked coffee bean	• Picking records • Estate yields	Active market exists for picked coffee beans	Reverse working from the fair value of raw coffee bean	Assumptions – raw coffee prices, discount rates, coffee fruit yields and applicable costs
Harvested Latex	• Tapping records • Estate yields	Active market exists for raw latex	Reverse working from the fair value of processed latex	Assumptions – processed latex prices, discount rates, latex yields and applicable costs
Managed timber - Felled trees (for example: eucalyptus, rubber trees)	• Field records	Active market exists for timber (eucalyptus, rubber trees)	Not applicable	Assumptions - timber content based on physical verification of girth, height and growth, any statutory regulations, forestry plan of the company, estimated current market price per tree, appropriate discount rate

Since the crops are impacted due to weather conditions, leaf diseases and natural disasters, the yield, quality and therefore earnings and profitability would get impacted. This is an important consideration point while determining the estimates.

On transition to Ind AS, agricultural produce is to be recognized on the date of transition at fair value less cost to sell at the point of harvest, with corresponding impact in retained earnings. The estimates that are being considered when ascertaining the fair values must reflect conditions that existed on the date of transition. This would have an impact on deferred taxes, since Ind AS 12 – Income taxes requires tax provision to be determined on the balance sheet liability method, as against the income statement liability that would have hitherto been adopted in the Previous GAAP.

Inventory

Ind AS 41: 13 states that agricultural produce harvested from an entity's biological assets shall be measured at its fair value less costs to sell at the point of harvest and that such measurement is the cost at that date when applying Ind AS 2 Inventories or another applicable Standard. Ind AS 2 requires inventory to be measured at the lower of cost and net realizable value.[4] So, basically agricultural produce at the point of harvest is scoped in Ind AS 41 and agricultural produce after the point of harvesting is treated as inventory as per Ind AS 2.

It is important to understand the difference between fair value as addressed by Ind AS 41 and net realizable value per Ind AS 2. Net realizable value is an entity specific value, but fair value is not. Hence, NRV for inventories may not equal fair value less costs to sell. Contracted sales prices should be taken into account in determining entity specific net realizable value in terms of Ind AS 2.7, but those contract prices are not necessarily taken into account in measuring fair value.

On transition to Ind AS, inventory measurement would undergo a change, with a corresponding impact in retained earnings on the date of transition, and an impact on deferred taxes to be calculated on the basis of Ind AS 12.

The cost of agricultural produce that would be considered for valuation of inventory as per Ind AS 2 would be the fair value less cost to sell at the point of harvest of the said agricultural produce.

For instance, black tea or made tea would be the inventory that is produced from the harvested green leaf and for valuation of black tea companies would need to consider the fair value less cost to sell of the green leaf (agricultural produce) at the point of harvest and the other costs of conversion (manufacturing overheads). This would be a change from the method of valuation under the previous GAAP as per which companies would have generally considered the plucking costs / wages, other cultivation costs and conversion costs for the valuation of black tea. Other examples of inventory would be processed latex from harvested latex, raw coffee beans from picked beans, oil from palm oil fruits and so on.

Government grants

Ind AS 41 sets out specific rules for accounting for government grants related to agricultural activity. The table below summarizes such applicability:

Nature of the grant	Accounting Standard applicable	How accounted
Government grant in relation to bearer plant	Ind AS 20 – Government grants	Since bearer plants are required to be accounted as per Ind AS 16 Property, Plant and Equipment, per Ind AS 20.24, the grants related to bearer plants are to be presented in the balance sheet by setting up the grant as deferred income. Such deferred income is recognized in the profit or loss on a systematic basis over the useful life of the asset.
Government grant in relation to a biological asset (where the biological asset is measured at its fair value less costs to sell)	Ind AS 41 – Agriculture	• Unconditional grant to be recognized in the profit or loss when and only when the grant becomes receivable. • Conditional grant to be recognized in the profit or loss when the conditions are met.
Government grant in relation to a biological asset (where the biological asset is measured at its cost less any accumulated depreciation and any impairment loss)	Ind AS 20 – Government grants	As stated under 'Government grant in relation to bearer plant' above.

[4]Net realizable value is defined as the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

Examples of government grants:

Nature of the grant	Sector	Ind AS 20	Ind AS 41
Revenue subsidy provided by Tea Board towards manufacture of orthodox tea that arises on production of orthodox tea (refer note 1 below).	Tea	x	
Replanting subsidy (refer note 1 below).	Tea	x	
New Planting Subsidy and Replanting subsidy by Rubber Board (refer note 1 below)	Rubber		x
Export incentives	Coffee	x	
Subsidy for raising coffee seedlings in nursery, replanting subsidy provided by Coffee Board (refer note 1 below)	Coffee	x	
Capital subsidy (refer note 2 below).	Tea Rubber Coffee	x	

Notes

1. In previous GAAP, recognized as other operating revenue.
2. In previous GAAP, generally reduced from Property Plant & Equipment (PPE).

Our insights

Companies would now be required to recognize and measure agricultural produce at fair value less cost to sell at the point of harvest. Since such value would be the cost of inventory after harvest, measurement of inventory in Ind AS would vary from the previous GAAP. Further, government grants are accounted differently in Ind AS when compared to the previous GAAP. All these would have an impact on retained earnings, taxes as well as the current earnings. Selection of fair value method, determination of the volume of the produce are expected to be challenges, coupled with a need for extensive disclosures in the financial statements. Companies would be required to develop appropriate risk control matrices that address agricultural produce, inventory and government grants and maintain robust documentation to support the development and review of estimates. Companies, would therefore, be well advised to start early in their journey of Ind AS adoption.

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