

ASSET VALUATION AND IMPAIRMENT WORKSHOP

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Credibility . Professionalism . Accountability

Application of IPSAS

- IPSAS
- ASSET VALUATION AND IMPAIRMENT WORKSHOP
 - IPSAS 21 & IPSAS 26

SESSION OVERVIEW

- OVERVIEW IPSAS 21 & IPSAS 26
- Impairment identification
- Recognition and measurement
- •Impairment reversals
- Disclosure requirements
- Practical application
- Questions and answers

IPSAS 21 Impairment of Non-Cash-Generating Assets

Effective date

Annual periods beginning on or after January 1, 2006.

Objective

 To ensure that non cash-generating assets are carried at no more than their recoverable service amount, and to prescribe how recoverable service amount is calculated.

IPSAS 21 Impairment of Non-Cash-Generating Assets

- Summary
- IPSAS 21 applies to all non-cash-generating assets, except assets arising from;
- Construction contracts (see IPSAS 11),
- Inventories (see IPSAS 12),
- > Financial assets that are included in the scope of IPSAS 29,
- > Investment property measured at fair value (see IPSAS 16),
- Non-cash-generating property, plant and equipment that is measured at revalued amounts (see IPSAS 17), and other assets in respect of which accounting requirements for impairment are included in another IPSAS.

- An active market is a market in which 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 recognized in the statement of financial position after deducting any accumulated depreciation and accumulated impairment losses thereon
- Cash-generating assets are assets held with the primary objective of generating a commercial return.
- Costs of disposal are incremental costs directly attributable to the disposal of an asset, excluding finance costs and income tax expense.

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- Depreciation (Amortization) is the systematic allocation of the depreciable amount of an asset over its useful life.
- Fair value less costs to sell is the amount obtainable from the sale of an asset in an arm's length transaction between knowledgeable, willing parties, less the costs of disposal.
- Recoverable service amount -the higher of a NCG assets fair value less costs to sell and its value in use.

- An impairment -a loss in the future economic benefits or service potential of an asset, over and above the systematic recognition of the loss of the assets future economic benefits or service potential through depreciation.
- An impairment loss of a non-cash-generating asset the amount by which the carrying amount of an asset exceeds its recoverable service amount
- Value in use of a non-cash-generating asset –the present value of the assets remaining service potential.

Measurement and recognition

- Public sector entities that hold cashgenerating assets shall apply IPSAS 26 to such assets.
- An impairment loss of a non-cashgenerating asset is the amount by which the carrying amount of an asset exceeds its recoverable service amount.
- An impairment loss shall be recognized immediately in surplus or deficit.

Measurement and recognition

 After the recognition of an impairment loss, the depreciation (a mortisation) charge for the asset shall be adjusted in future periods to allocate the asset's revised carrying amount, less its residual value (if any), on a systematic basis over its remaining useful life.

MEASURMENT

- Recoverable service amount is the higher of a non-cash-generating asset's fair value, less costs to sell and its value in use.
- Value in use of a non-cash-generating asset is the present value of the asset's remaining service potential. The present value of the remaining service potential of the asset is determined using any one of the following three approaches, and depends on the availability of data and the nature of the impairment:

Approaches of determining Recoverable amount IPSAS 21 (44-49)

1) Depreciated replacement cost approach

2) Restoration cost approach

3)Service units approach

Approaches of determining Recoverable amount IPSAS 21 (44-49)

- Depreciated replacement cost approach: The present value of the remaining service potential of an asset is determined as the depreciated replacement cost of the asset.
- The replacement cost of an asset is the cost to replace the asset's gross service potential. This cost is depreciated to reflect the asset in its used condition. An asset may be replaced either through reproduction (replication) of the existing asset or through replacement of its gross service potential.

Cont...ed' Depreciated replacement cost approach

The depreciated replacement cost is measured as the <u>reproduction</u> or <u>replacement cost</u> of the asset, whichever is lower, less accumulated depreciation calculated on the basis of such cost, to reflect the already consumed or expired service potential of the asset.

Example 1: Depreciated Replacement Cost Approach

- Significant Long-term Change with Adverse Effect on the Entity in the Technological Environment—Underutilized mainframe computer In 2012, the County of Budalangi purchased a new mainframe computer at a cost of shs.10 million
- County of Budalangi estimated that the useful life of the computer would be seven years and that on average 80 percent of central processing unit (CPU) capacity would be used by the various departments. A buffer of excess CPU time of 20 percent was expected and needed to accommodate scheduling jobs to meet peak period deadlines. Within a few months after acquisition, CPU usage reached 80 percent, but declined to 20 percent in 2015

Example 1: Depreciated Replacement Cost Approach

- because many applications of the departments were converted to run on desktop computers or servers.
- A computer is available on the market at a price of shs 500,000 that can provide the remaining service potential of the mainframe computer using the remaining applications.
- Required
- Determine The impairment Loss.

Example 1: Depreciated Replacement Cost Approach

Solution

- Impairment loss is determined using the depreciated replacement cost approach as follows:
- a Acquisition cost, 201210,000,000
- Accumulated depreciation,

2015 (a
$$\times$$
 4 \div 7) 5,714,286

- Carrying amount, 2015 (b)
 4,285,714
- Replacement cost (c) 500,000
- Accumulated depreciation(c \times 4 \div 7) <u>285,714</u>
- Recoverable Service Amount (d) 214,286
- Impairment loss (b d) 4,071,428

Approaches of determining Recoverable amount

- 2) Restoration cost approach: The present value of the remaining service potential of the asset is determined by subtracting the estimated restoration cost of the asset from the current cost of replacing the remaining service potential of the asset before impairment.
- The latter cost is usually determined as the depreciated reproduction or replacement cost of the asset whichever is lower.

Example: Restoration Cost Approach

- Physical Damage—School bus damaged in road accident
- In 2010, North county Primary School acquired a bus at the cost of shs 200,000 to help students from a nearby village to commute free of charge. The school estimated a useful life of 10 years for the bus. In 2015, the bus sustained damage in a road accident requiring shs 40,000 to be restored to a usable condition. The restoration will not affect the useful life of the asset. The cost of a new bus to deliver a similar service is shs 250,000 in 2015.
- Required
- Determine The impairment Loss.

Example: Restoration Cost Approach

Solution

Acquisition cost, 2010(a)	200,000
 Accumulated depreciation 2015 (a×5÷10) 	100,000
Carrying amount, 2015 (b)	100,000
Replacement cost (c)	250,000
Accumulated depreciation(d)(c × 5 ÷ 10)	125,000
 Depreciated replacement cost 	
(undamaged state)	125,000
Less: restoration cost	<u>-40,000</u>
e Recoverable Service Amount (e)	<u>85,000</u>
Impairment loss (b - e)	15,000

Approaches of determining Recoverable amount

- As in the restoration cost approach, the current cost of replacing the remaining service potential of the asset before impairment is usually determined as the depreciated reproduction or replacement cost of the asset before impairment, whichever is lower
- At each reporting date, review assets to assess for any indication that an asset may be impaired. If impairment is indicated, the entity shall estimate recoverable service amount. Reversal of prior years' impairment losses allowed in certain instances.

Approaches of determining Recoverable amount

• 3) Service units approach: The present value of the remaining service potential of the asset is determined by reducing the current cost of the remaining service potential of the asset before impairment to con form with the reduced number of service units expected from the asset in its impaired state.

Example 1: Service Units Approach

- Significant Long-term Change with Adverse Effect on the Entity in the Extent of Use—High rise building partially unoccupied for the foreseeable future.
- In 1999, Budalangi County constructed a 20 story office building for use by the County in downtown Budalangi at the cost of Shs 80 million. The building was expected to have a useful life of 40 years. In 2014, National Safety Regulations required that the top 4 stories of high rise buildings should be left unoccupied for the foreseeable future.

Example: Service Units Approach

- The building has a fair value less costs to sell of shs 45 million in 2014 after regulations came into force. The current replacement cost of a similar 20 story building is shs 85 million.
- Required; Determine The impairment Loss.

solution

a Acquisition cost, 1999

Accumulated depreciation,

2014 (a×15÷40)

Carrying amount, 2014

80,000,000

30,000,000(a)

50,000,000(b)

Example: Service Units Approach

- Replacement cost (20 story building)
 85,000,000 (c)
- Accumulated depreciation (c × 15 ÷ 40) 31,875,000
- Depreciated replacement cost before
 adjustment for remaining service units 53,125,000(d)
- Value in Use (e) of the building after the regulation came into force (d × 16 ÷ 20)
- Fair value (f) less costs to sell of the building after regulation came into force 45,000,000
- Recoverable service amount -g (higher of e and f)
- Impairment loss (b g)

45,000,000

5,000,000

Application of Approaches(which Approach should we use?)

- IPSAS 21 (50). The choice of the most appropriate approach to measuring value in use depends on the availability of data and the nature of the impairment:
- (a) Impairments identified from significant longterm changes in the technological, legal or government policy environment are generally measurable using a depreciated replacement cost approach or a service units approach, when appropriate;

Application of Approaches(which Approach should we use?)

- (b) Impairments identified from a significant longterm change in the extent or manner of use, including that identified from the cessation or near cessation of demand, are generally measurable using a depreciated replacement cost or a service units approach when appropriate; and
- (c) Impairments identified from physical damage are generally measurable using a restoration cost approach or a depreciated replacement cost approach when appropriate.

RECOGNITION IPSAS 21 (51-57)

- An entity shall disclose the following for each class of assets:
- (a) The amount of impairment losses recognized in surplus or deficit during the period and the line item(s) of the statement of financial performance in which those impairment losses are included.
- (b) The amount of reversals of impairment losses recognized in surplus or deficit during the period and the line item(s) of the statement of financial performance in which those impairment losses are reversed.

 An entity shall assess at each reporting date whether there is any indication that an impairment loss recognized in prior periods for an asset may no longer exist or may have decreased.

- Indications of decrease in impairment:
- External sources of information
- (a) Resurgence of the demand or need for services provided by the asset.
- (b) Significant long-term changes with a favorable effect on the entity have taken place during the period, or will take place in the near future, in the technological, legal or government policy environment in which the entity operates.

- Internal sources of information
- (c) Significant long-term changes with a favorable effect on the entity have taken place during the period,
- (d) A decision to resume construction of the asset that was previously halted before it was completed or in a usable condition.
- (e) Evidence is available from internal reporting that indicates that the service performance of the asset is, or will be, significantly better than expected.

- Other indicators include:
- (a)A significant rise in an asset's market value; or
- (b) A significant long-term increase in the demand or need for the services provided by the asset. indicates that the service performance of the asset is, or will be, significantly better than

- An impairment loss recognized in prior periods for an asset shall be reversed if, and only if, there has been a change in the estimates used to determine the asset's recoverable service amount since the last impairment loss was recognized.
- If this is the case, the carrying amount of the asset shall, except as described in paragraph 68, be increased to its recoverable service amount.
- That increase is a reversal of an impairment loss.

- 68. The increased carrying amount of an asset attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined (net of depreciation or amortization) had no impairment loss been recognized for the asset in prior periods.
- 69. A reversal of an impairment loss for an asset shall be recognized immediately in surplus or deficit. (as what?)

• 70. After a reversal of an impairment loss is recognized, the depreciation (amortization) charge for the asset shall be adjusted in future periods to allocate the asset's revised carrying amount, less its residual value (if any), on a systematic basis over its remaining useful life.

- Criteria used to classify assets as either;
- cash generating assets or
- non-cash-generating assets

Disclosures by class of assets [IPSAS 21.73-77]:

- impairment losses recognized in surplus or deficit
- impairment losses reversed in surplus or deficit
- line item(s) of the statement of statement of financial performance affected If an impairment loss (reversal) is individually material the following should be disclosed
- events and circumstances resulting in the (reversal) impairment loss

An entity that reports segment information in accordance with IPSAS 18, "Segment Reporting" shall disclose the following for each segment reported by the entity:

- (a) The amount of impairment losses recognized in surplus or deficit during the period.
- (b) The amount of reversals of impairment losses recognized in surplus or deficit during the period.

- 77. An entity shall disclose the following for each material impairment loss recognized or reversed during the period:
- (a) The events and circumstances that led to the recognition or reversal of the impairment loss.
- (b) The amount of the impairment loss recognized or reversed.
- (c) The nature of the asset.
- (d) The segment to which the asset belongs, if the entity reports segment information in accordance with IPSAS 18.

- (e) Whether the recoverable service amount of the asset is its fair value less costs to sell or its value in use.
- (f) If the recoverable service amount is fair value less costs to sell, the basis used to determine fair value less costs to sell (such as whether fair value was determined by reference to an active market).
- (g) If the recoverable service amount is value in use, the approach used to determine value in use.

- Summary
- •IPSAS 26 applies to the accounting for the impairment of all cash-generating assets except;
- inventories (see IPSAS 12),
- assets arising from construction contracts (see IPSAS 11),
- financial assets that are within the scope of IPSAS 29,
- investment property measured at fair value (see IPSAS 16),

- Effective date
- Periods beginning on or after April 1, 2009.
 Earlier application is encouraged.
- Objective
- To prescribe the procedures that an entity applies to determine whether a cash-generating asset is impaired and to ensure that impairment losses are recognised. This standard also specifies when an entity shall reverse an impairment loss and prescribes disclosures.

Summary

- cash-generating property, plant, and equipment that is measured at revalued amounts (see IPSAS 17),
- deferred tax assets, assets arising from employee benefits (see IPSAS 25),
- intangible assets that are regularly revalued to fair value,
- goodwill

Summary

 biological assets related to agricultural activity measured at fair value less estimated point-of-sale costs, deferred acquisition costs and intangible assets arising from an insurer's contractual rights under insurance contracts, noncurrent assets classified as held for sale and discontinued operations, and other cash-generating assets in respect of which accounting requirements for impairment are included in another IPSAS.

Summary

 An impairment is a loss in the future economic benefits or service potential of an asset, over and above the systematic recognition of the loss of the asset 's future economic benefits or service potential through depreciation.

Definitions [IPSAS 26 (13)]

- A cash-generating unit -is the smallest identifiable group of assets held with the primary objective of generating a commercial return that generates cash inflows from continuing use that are largely independent of the cash inflows from other assets or groups of assets.
- Recoverable amount-is the higher of an asset's or a cash-generating unit's fair value less costs to sell and its value in use.

Cont..'d Definitions [IPSAS 26 (13)]

- Value in use of a cash-generating asset is the present value of the estimated future cash flows expected to be derived from the continuing use of an asset and from its disposal at the end of its useful life.
- Depreciation Depreciation and amortization are the systematic allocation of the depreciable amount of an asset over its useful life. In the case of an intangible asset, the term "amortization" is generally used instead of "depreciation." Both terms have the same meaning.

Cont..'d Definitions [IPSAS 26 (13)]

- Impairment-This Standard defines an "impairment" as a loss in the future economic benefits or service potential of an asset, over and above the systematic recognition of the loss of the asset's future economic benefits or service potential through depreciation.
- similar to IPSAS 21914)

Practical example on impairment

 A county may have a municipal parking garage that is currently being used at 25 percent of capacity. It is held for commercial purposes, and management has estimated that it generates a commercial rate of return when usage is at 75 percent of capacity and above. The decline in usage has not been accompanied by a significant increase in parking charges. The asset is regarded as impaired because its carrying amount exceeds its recoverable amount.

Indicators of impairment

Internal sources of information

- (e) Significant changes with an adverse effect on the entity have taken place during the period, or are expected to take place in the near future, in the extent to which, or the manner in which, an asset is used or is expected to be used. These changes include the asset becoming idle, plans to discontinue or restructure the operations etc
- (f) A decision to halt the construction of the asset before it is complete; and
- (g) Evidence from internal reporting that indicates decline of economic performance of an asset is, or will be, worse than expected.

Indicators of impairment

- External Sources of information
- (a) Decline in assets market value
- (b) Environmental significant changes.
- (c) Increase in Market interest rates
- Internal sources of information
- (d) Evidence is available of obsolescence or physical damage of an asset;

Measuring Recoverable Amount

- Is the higher of an asset's fair value less costs to sell and its value in use.
- If either of these amounts exceeds the asset's carrying amount, the asset is not impaired.

Measuring Recoverable Amount cont"ed

Value in Use

The following elements shall be reflected in the calculation of an asset's value in use:

- (a) An estimate of the future cash flows the entity expects to derive from the asset;
- (b) Expectations about possible variations in the amount or timing of those future cash flows;
- (c) The time value of money, represented by the current market risk-free rate of interest;

Measuring Recoverable Amount cont"ed

- Value in Use cont...d'
- (d) The price for bearing the uncertainty inherent in the asset; and
- (e) Other factors, such as illiquidity, that market participants would reflect in pricing the future cash flows the entity expects to derive from the asset.

- In measuring value in use, an entity shall:
- (a) Base cash flow projections on reasonable and supportable assumptions that represent management's best estimate of the range of economic conditions that will exist over the remaining useful life of the asset.
- (b) Base cash flow projections on the most recent financial budgets/forecasts approved by management, but shall exclude any estimated future cash inflows or outflows expected to arise from future restructurings or from improving or enhancing the asset's performance.

- In measuring value in use, an entity shall:
- Projections based on these budgets/forecasts shall cover a maximum period of five years, unless a longer period can be justified; and
- (c) Estimate cash flow projections beyond the period covered by the most recent budgets /forecasts.
- Estimates of future cash flows shall not include:
- (a) Cash inflows or outflows from financing activities; or
- (b) Income tax receipts or payments.

MEASUREMENT AND RECOGNITION-VALUE IN USE

- Discount Rate (68)
- The discount rate (rates) shall be a pre-tax rate (rates) that reflect(s)
- current market assessments of:
- (a) The time value of money, represented by the current risk-free rate of interest; and
- (b) The risks specific to the asset for which the future cash flow estimates have not been adjusted.

- Recognizing and Measuring an Impairment Loss of an Individual Asset
- If, and only if, the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset shall be reduced to its recoverable amount. That reduction is an impairment loss.
- An impairment loss shall be recognized immediately in surplus or deficit.₍₇₃₎

- Recognizing and Measuring an Impairment Loss of an Individual Asset (cont..'ed)
- When the amount estimated for an impairment loss is greater than the carrying amount of the asset to which it relates, an entity shall recognize a liability if, and only if, that is required by another Standard (74).
- After the recognition of an impairment loss, the depreciation (amortization) charge for the asset shall be adjusted in future periods to allocate the asset's revised carrying amount, less its residual value (if any), on a systematic basis over its remaining useful life. (75)

- Impairment Loss for a Cash-Generating Unit (IPSAS 91-
- An impairment loss shall be recognized for a cash-generating unit if, and only if, the recoverable amount of the unit is less than the carrying amount of the unit. The impairment loss shall be allocated to reduce the carrying amount of the cash-generating assets of the unit on a pro rata basis, based on the carrying amount of each asset in the unit.

- Impairment Loss for a Cash-Generating Unit (IPSAS 91-
- These reductions in carrying amounts shall be treated as impairment losses on individual assets and recognized in accordance with paragraph 73.
- In allocating an impairment loss in accordance with paragraph 91,

- Impairment Loss for a Cash-Generating Unit (IPSAS 91-
- an entity shall not reduce the carrying amount of an asset below the highest of:
- (a) Its fair value less costs to sell (if determinable);
- (b) Its value in use (if determinable); and
- (c) Zero.
- The amount of the impairment loss that would otherwise have been allocated to the asset shall be allocated pro rata to the other cash generating assets of the unit.

- An impairment loss shall be recognized immediately in surplus or deficit. When the amount estimated for an impairment loss exceeds the carrying amount of the asset to which it relates, an entity shall recognize a liability if, and only if, that is required by another IPSAS.
- After the recognition of an impairment loss, the depreciation (amortization) charge for the asset shall be adjusted in future periods to allocate the asset's revised carrying amount, less its residual value (if any), on a systematic basis over its remaining useful life.
- Value in use of a cash-generating asset is the present value of estimated future cash flows expected to be derived from the continuing use of an asset, and from its disposal at the end of its useful life.

Redesignation of Assets IPSAS 26(112-113)

- The redesignation of an asset from a cashgenerating asset to a non-cash generating asset or from a non-cash-generating asset to a cashgenerating asset shall only occur when there is clear evidence that such a redesignation is appropriate.
- A redesignation, by itself, does not necessarily trigger an impairment test or a reversal of an impairment loss. At the subsequent reporting date after a redesignation, an entity shall consider, as a minimum, the listed indications in paragraph 25.

DISCLOSURE [IPSAS 26 (114-125)]

- An entity is required to disclose the criteria applied to distinguish following classes of assets [IPSAS 26.114]:
- cash generating assets
- non-cash-generating assets
- Disclosures by class of assets [IPSAS 26.115]:
- impairment losses recognized in surplus or deficit
- impairment losses reversed in surplus or deficit
- line item(s) of the statement of statement of financial performance affected
- Disclosure by reported segment [IPSAS 26.119]
- impairment losses recognized
- impairment losses reversed

DISCLOSURE

- If an impairment loss (reversal) is individually material the following should be disclosed [IPSAS 26.120]
- Events and circumstances resulting in the (reversal) impairment loss
- Amount of the loss or reversal
- for an individual asset:
 - nature of the asset
 - the segment to which the asset belongs

DISCLOSURE

- If an impairment loss (reversal) is individually material the following should be disclosed [IPSAS 26.120]
- whether the recoverable service amounts is (i) fair value less cost to sell or (ii) value in use
- when recoverable amounts is fair value less cost to sell: the basis used to determine fair value less disposal cost (active market, recent prices,...)

- A public hospital has ten wards, nine of which are used for fee-paying patients on a commercial basis, and the other is used for non-fee-paying patients. Patients from both wards jointly use other hospital facilities (for example, operating facilities). The extent to which the asset is held with the objective of providing a commercial return needs to be considered to determine whether the entity should apply the provisions of this Standard or IPSAS 21. If, as in this example, the non-cash-generating component is an insignificant component of the arrangement as a whole, the entity applies IPSAS 26, rather than IPSAS 21.
- Source: IPSAS 26

 An entity may have municipal parking garage that is currently being used at 25 percent of capacity. It is held for commercial purposes and management has estimated that it generates a commercial rate of return when usage is at 75 percent of capacity and above. The decline in usage has not been accompanied by a significant increase in parking charges. The asset is regarded as impaired because its carrying amount exceeds its recoverable amount. Source: IPSAS 26

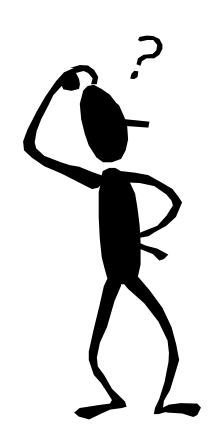
- Reduction in Demand Related to a Single-Product Unit
- Background: A government has an electricity-generating utility. The utility has two turbine generators in a single electric plant. In the current period, a major manufacturing plant in the area closed and demand for power was significantly reduced. In response, the government shut down one of the generators.
- Analysis: The individual turbine generators do not generate cash flows in and of themselves. Therefore the cash-generating unit to be used in determining an impairment is the electric plant as a whole.

- Government Air Freight Unit that Leases an Aircraft
- Background: Emirates is the air freight unit of a government entity. It operates three aircraft, a landing strip, and a number of hangers and other buildings, including maintenance and fueling facilities. Because of declining demand for its services, Emirates leases one aircraft for a five-year period to a private sector entity.
- Under the terms of the lease, Emirates is required to allow the lessee to use the landing strip and is responsible for all maintenance to the aircraft.

- Government Air Freight Unit that Leases an Aircraft
- Analysis: Because of the terms of the lease, the leased aircraft cannot be considered to generate cash inflows that are largely independent of the cash inflows from Emirates as a whole. Therefore, it is likely that the cash-generating unit to which the aircraft belongs is Emirates as a whole.









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