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Challenges with the financial reporting of biological assets in a public entity

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Abstract

Fair value accounting of biological assets in the public sector was introduced with the adoption of the public sector specific accounting standard, Generally Recognised Accounting Standard (GRAP) 101. The public sector currently reports on various bases of accounting. Public entities and municipalities report in terms of accrual accounting and government departments report on the modified cash basis. As the lack of a uniform basis of accounting impedes the comparability of financial information, this article details the challenges that AsgiSA-EC faced in the application of GRAP 101 and how it was successfully dealt with. The issues addressed can be used as a guide to other public sector institutions that still need to convert to fair value accounting of biological assets.

Keywords: fair value; biological assets; public sector; GRAP 101, accounting challenges; modified cash/ accrual basis

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Fair value accounting of biological assets in the public sector was introduced with the adoption of the public sector specific accounting standard, Generally Recognised Accounting Standard (GRAP) 101. The public sector currently reports on various bases of accounting. Public entities and municipalities report in terms of accrual accounting and government departments report on the modified cash basis. As the lack of a uniform basis of accounting impedes the comparability of financial information, this article details the challenges that AsgiSA-EC faced in the application of GRAP 101 and how it was successfully dealt with. The issues addressed can be used as a guide to other public sector institutions that still need to convert to fair value accounting of biological assets.

Keywords: fair value; biological assets; public entity; public sector; GRAP 101, accounting challenges; modified cash basis; accrual basis

INTRODUCTION

The accounting of biological assets, other than livestock, was introduced to the accounting fraternity with the development of the International Accounting Standard (IAS) 41 (IASB, 2011;par.B1-B7). The adopted IAS 41 replaced the previously applied AC 205 standard which only addressed the recognition of livestock as a biological asset (Shuttleworth, 2002). A government-specific accounting standard on the reporting of biological assets, Generally Recognised Accounting Practice (GRAP) 101 (ASB, 2006), was derived from the principles of IAS 41. An evaluation of the financial statements of the public entities reporting on biological assets, confirmed that an implementation norm was not established to recognise, measure and value biological assets as the requirements of GRAP 101 was not unanimously

applied. A uniform application of GRAP 101 will enhance comparability and subsequently the value of financial information on biological assets amid the public and private sectors.

The article details the challenges experienced by Accelerated and Shared Growth Initiative South Africa – Eastern Cape (AsgiSA-EC) in the fair value reporting of biological assets with the objective to provide guidelines to the public sector with the implementation of the GRAP standard on reporting the fair value of biological assets.

The literature review, research methodology, research findings, including the seven challenges experienced with the fair valuing of biological assets, are discussed before reaching the conclusion and making recommendations to assist the public sector with these challenges.

LITERATURE REVIEW

The effective accounting for, and reporting on the fair value of biological assets has been a challenge since its introduction in 2006 in South Africa (ASB, 2006). Even in the private sector, which is regarded as the frontrunners in compliance with accounting standards, challenges with the implementation of their equivalent accounting standard, IAS 41, are evident (Elad & Herbohn, 2011). Elad & Herbohn's (2011:94) research conducted on the fair valuing of biological assets in the private sector, revealed that from a total of 103 companies studied from three different countries a mere 11% of Australian companies, 19% of the companies in the United Kingdom and 25% of the companies studied from France applied the principles of fair value accounting). The underlying methods of determining the fair value of biological assets by these organisations in the application of IAS 41 demonstrate that a uniform application of the standard does not exist even in the private sector. The study by Elad and Herbohn (2011:105) further highlighted the inconsistency in the auditors'

expression of an opinion on the non-implementation of the requirements of the standard as a result of the non-existence of an implementation norm.

In a study conducted in Kenya, Maina and Wingard (2013) found that the most significant challenge is the lack of an active and transparent market when determining fair value of biological assets for small and medium-sized entities (SMEs). Sitko and Jayne (2012) points out that with the exception of South Africa, commodity exchanges in Africa have not yet achieved the necessary market size to function efficiently. They state that the governments in the region, e.g. Zambia, regularly intervenes in cereal markets to ensure adequate food supplies at tolerable prices (Sitko & Jayne, 2012:281), but that government intervention is not necessarily incompatible with commodity exchange development as long as it does not introduce major unpredictability into the market.

In South Africa, public entities should comply with GRAP. In practice it is found that a number of public entities have not implemented GRAP and are still using the modified cash basis of accounting.

Reporting on the modified cash basis of accounting recognises transactions and events only when cash is either received or paid. Transactions incurred on debt, e.g. normal purchases and sales where the creditors and debtors will pay or be paid later, is not recorded in the financial records when the transaction occur. Recording is done only when the actual cash is received or paid on the credit sales and/or purchases (IPSASB, 2011).

The public sector entities that report in terms of the modified cash basis of accounting will recognise a biological asset on payment. Biological assets of a value not exceeding R5 000 will not be capitalised and disclosed as an asset on the financial records. National Treasury issued a circular excluding purchases of a value lower than R5 000 from the asset listing and these purchases are directly expensed (South Africa, 2009). Biological assets exceeding

R5 000 is recorded on the financial records as an asset with no consideration to the fair valuing principles in terms of the modified cash basis of accounting. Biological assets will thus either be disclosed as expenses or an asset held at cost.

GRAP requires public entities to apply the principles of accrual accounting. Transactions are recorded as and when they occur and include both cash and credit transactions. Biological assets accounted for in terms of the accrual basis of accounting is recognised when purchased or at delivery, whichever event occurs first. Accrual basis of accounting will reflect the biological asset as a non-current asset in the financial records when these assets are held for a period longer than 12 months. The principles of GRAP 101 will be applied to measure and disclose the biological assets on the financial statements at reporting date. As the users of financial statements need to make informed decisions on the information at hand, accrual financial statements are considered to be more reliable than those presented on the modified cash basis (IPSASB, 2011).

The absence of implementation guidelines for the accounting and reporting of biological assets in terms of GRAP 101 is one of the reasons why public entities do not comply with the required accounting standard.

RESEARCH METHODOLOGY

Public sector entities that need to account for biological assets were identified by evaluating the core business operations per entity listed in the Public Finance Management Act No. 1 of 1999 as amended by Act No. 29 of 1999 (PFMA) (South Africa, 1999). The financial statements of these entities were analysed by means of content analysis techniques to determine the accounting basis applied to account for biological assets. A total of ten entities were identified that account for biological assets. Of these ten entities, only one, AsgiSA-EC, adopted the fair value accounting principles in terms of the prescribed standard of GRAP 101. The formal audit reports and schedules by the Auditor General were used as control

measures for the assessment of the implementation and compliance to GRAP 101 by AsgiSA-EC.

RESEARCH FINDINGS

The detailed review of the financial statements of the listed public entities confirmed that ten entities were required to report on biological assets. Of these only AsgiSA-EC fair values biological assets and reports in terms of the requirements of GRAP 101 (AsgiSA-EC, 2011). Limited application of GRAP 101 was identified at the Eastern Cape Parks Board who only accounts for the biological assets earmarked for sale within 12 months of the reporting date (ECPB, 2009). Fair value accounting of biological assets is not applied at the other eight entities.

The biological assets held by the non-compliant eight entities are accounted for as (i) an expense; (ii) at point of sale only and (iii) on the modified cash basis of accounting. The Eastern Cape Rural Finance Corporation Limited (ECRFC) discloses the biological assets purchases at transaction date as an expense. Subsequent valuations are not performed as the biological assets are accounted as part of an administered fund (ECRFC, 2011). The South African National Parks and the Limpopo Tourism and Parks Board only account for biological assets when they are sold. The revenue derived from the sale of the biological assets is recorded with no consideration given to the fair valuing or accounting for any asset (SANParks, 2011; South Africa, 2010b). The remaining five entities account for biological assets on the modified cash basis of accounting and thus only record actual purchases of biological assets (South Africa, 2010a; South Africa, 2011a; South Africa, 2011b; Casidra, 2010).

Challenges experienced with the fair valuing of biological assets

The challenges identified in the fair valuing of biological assets in the public sector, with specific reference to AsgiSA-EC, are the following:

Challenge 1: The absence of an active market

In the absence of markets, management needs to rely on estimates and judgements to determine the fair value of the biological assets. GRAP 101 (ASB, 2006:par.22) provides guidance to management to calculate a fair value when active markets do not exist for the biological assets held (AsgiSA-EC, 2011; Maina, 2010:60).

The absence of active markets requires management to assess the available markets and market information and to perform a review on the economic trends and conditions from the previous reporting date to the current reporting date. Should the economy appear to have been stable during the financial period, the most recent market prices may be used in the calculation of the fair values of the biological assets (ASB, 2006:par.22; Maina 2010:60; Munjanja, 2008:23).

Management needs to assess similar market information in instances where the biological asset is so scarce or rare that an active market has not existed during the reporting period, or where the economic trends are significant and historic information is considered to be unreliable (ASB, 2006:par.22). Information on the similarities between the biological assets identified, the valuation methods applied and the calculations are to be documented. Section 55(1) of the PFMA, requires a portfolio of evidence to be maintained for all calculations, data, assumptions, market information, techniques and estimates applied by management to support the information disclosed on the financial records (South Africa, 1999).

Unavailable active markets and market information may result in management deriving at judgements and estimates from sector benchmarks at the reporting date. The sector

information applied in the valuation should be narrated and supported by substantiating evidence of the variables and prices used in the valuation process (ASB, 2006:par.22; Maina, 2010:60).

The fair valuing of biological assets in the absence of active markets may be a costly exercise in the public sector. To validate the judgements, assumptions and estimates applied, an independent review by the internal auditors will provide guidance and recommendations in support of the overall valuation process. The internal audit report will support management during the external audit process where public accountability takes priority. Van Schweitzer (2009) regards internal audit reviews as the ‘conscience of the organisation’ as it provides stakeholders with assurance of responsible public fund spending.

Challenge 2: A lack of available valuation techniques

As public entities in South Africa do not apply a uniform approach to account for biological assets, guidance has not been given on how management should value these biological assets. The physical valuation process and the underlying factors that management should consider when valuing biological assets are not guided or detailed in manuals or policy documents. In addition, when crops mature on a date different from the reporting, and thus valuation date, management should consider factors such as the growth/maturity stages and discounting of market prices. AsgiSA-EC experienced a challenge on valuing biological assets at financial year-end when the biological assets will only mature later. The planting of crops, specifically soya beans, dry beans and maize, is done from October to December. Harvesting occurs once the biological transformation process has completed and the expected moisture levels have been reached, usually around June. The financial year-end is on 31 March (the middle of the agricultural year) when the plants are in a growing stage and thus not in a condition to be harvested (Asgisa-EC, 2011:1). Management needs to consider the agricultural timeframes and growth factors in the calculations supporting the fair value determination.

The application of different accounting principles by similar entities might be as a result of the lack of guidance from National Treasury. Treasury provides entities with interpretation guideline publications and prescribes specific requirements regarding the financial statements of the public sector. However, guidance and industry norms are not channelled to public entities to guide the valuation process and available techniques. The estimates and assumptions applied are to be developed and reviewed by internal auditors and possibly experts, and detailed in a tailor-made policy. The assumptions and techniques applied are further not distributed to similar entities to set an industry norm or standard.

The lack of guidance may result in unreliable fair values when experts and internal auditors do not assist the public entity to determine a basis for the calculations. However, this lack of guidance does not exempt management from applying the requirements of GRAP 101. Ignorance to the GRAP 101 requirements may result in a qualified audit opinion from the office of the Auditor General. The Board and specifically the Chief Executive Officer and Chief Financial Officer of the entity may be held personally accountable for the non-compliance by the Standing Committee on Public Accounts (SCOPA) (Heathcote & Human, 2008:24).

Challenge 3: A lack of understanding and application of the GRAP requirements

To meet the definition of a biological asset, GRAP 101 requires ‘service potential’ to be considered in conjunction with the ‘future economic benefits’ which may be anticipated by a public entity. The service potential of a public entity might refer to the ability of the entity to sign contractual agreements to sustain operations. It may also refer to the relationships between stakeholders and the ability for the entity to perform in order to deliver on predetermined objectives that are set by government (ASB, 2006:par.13).

‘Service potential’ to public entities is seldom measured in terms of a pure economic value. One of the biggest challenges for AsgiSA-EC is that it does not own any land. The lands used

in the agricultural production and biological transformation processes belong to the communities. Community contracts are signed between the relevant Chief of the community and the individual land owners of the patches of land. AsgiSA-EC in turns signs a contract with the Chief and the community representative for the rights to plant on the community lands. Service potential to AsgiSA-EC will not only relate to the biological transformation but also the strengthening of the relationships with the community for the future use of the lands (AsgiSA-EC, 2011:107).

Public entities should define their service potential strategies to determine how future economic benefits will derive from the controlled biological assets. Public entities should not disregard the recognition and accounting of biological assets merely as a result of not defining service potential abilities. The 'service potential' criteria for AsgiSA-EC will be measured on whether the communities are willing to extend their land usage contracts. In the event of communities cancelling their contracts with AsgiSA-EC there will be no service potential for the public entity and the definition of a biological asset will need to be reassessed by management.

Challenge 4: High costs related to the fair value accounting of biological assets

The costs associated with the determining of the fair value of biological assets are excessive, especially when an expert needs to perform the valuation. There are specific requirements that need to be met when an expert is consulted or contracted in the valuation e.g. professional membership to a recognised professional body, such as a valuer's institution, is required by the office of the Auditor General. Management needs to perform an assessment on the qualifications and experience of the valuer before contracting the individual. This review will ensure that the best valuation methods are applied in the accounting of biological assets (IRBA, 2011).

Management will remain responsible for the valuation process despite the use of experts. The management oversight might result in additional costs being incurred as a result of extensive feedback that the expert may be required to provide. The responsibilities of the contracted expert during the valuation process should be stipulated and agreed upon by the parties prior to the valuation. Management needs to implement measures to ensure that the work performed by the expert is objective and unbiased (*IRBA, 2011*). *Management remains* accountable for the information compiled and presented by the expert; as such management should assess the work performed, approve and accept the valuation process and results as prepared by the expert. The underlying valuation documentation and calculation will be subject to the statutory audit by the office of the Auditor General and management must therefore be able to provide the auditors with appropriate audit evidence that support the valuation process.

In the public sector, where discounting is not a standard practice and calculations of this nature are not performed regularly, the review of the calculations performed may be subject to an external review. An external review will result in additional costs for the public entity, which may not have been budgeted for (Van Schweitzer, 2009:19). In terms of GRAP 101, the discounted cash flow model needs to be applied to determine the fair value of the biological assets, with special consideration of the condition and location of the biological assets at financial year-end (ASB, 2006:par.25).

Costs associated with the auditing of biological asset valuations might be substantial for the public sector. In terms of paragraph 27.2 of the National Treasury Regulations and section 51(1)(a)(ii) of the PFMA, all public entities are required to have an internal audit function, either in-house or as an external appointed audit firm to the entity (South Africa, 1999; South Africa, 2005). Effective and efficient controls should be derived from the internal audit processes by management when recommendations for improvements by the auditors are

implemented (ISSAI, 2011a; ISSAI, 2011b). The stated legislation requires the internal audit function to perform a review of the controls on the information systems, the financial and operational information and the effectiveness of these operations, the safeguarding of the entity's assets and the compliance with the prescribed laws and regulations applicable to the entity (South Africa, 2005; South Africa, 1999). The safeguarding of the biological assets held by the public entity will form part of the scope of the internal audit. Tests of control will be developed and executed by the internal auditors to assess the risks identified at the entity, the control requirements in terms of the approved policies and the procedures established (South Africa, 2005; South Africa, 1999).

Challenge 5: A lack of guidance and/or templates on policies or procedures that should be adopted by the entity

Section 50(1) of the PFMA requires an accounting authority (the Board) of a public entity to safeguard all assets and records of the entity and to manage the finances in the best interest of the entity. Furthermore, section 51 of the PFMA requires an efficient and effective financial and control system to be established and carried out (section 57) by each employee of the public entity (South Africa, 1999; South Africa, 2005). Compliance with the PFMA will be addressed as the entity develops, approves and implements policies detailing the legal requirements and the desired procedures. Currently each public entity assesses the available guide and develops policies and procedures on the financial components applicable to the entity (South Africa, 1999; South Africa, 2005).

Technical Memorandum 16 of 2009, issued by the office of the Auditor General on 3 July 2009, provided guidance to departments and public entities on the treatment of biological assets on the financial records (office of the Auditor General, 2009). The memorandum highlighted that the intended use of the biological asset should be considered by management to determine the standard of GRAP that should be applied in the accounting treatment. The

accounting treatment guidance can assist management to compile an entity specific internal control policy and procedure manual. The policy and related procedure manual on the biological assets should detail the requirements of the legislative requirements and those of GRAP 101. The objective of the procedure manual is to provide guidance on the identification, recognition, valuation, safeguarding, reporting and managing of the biological assets (South Africa, 1999; South Africa, 2005).

The entity specific policy needs to address the unique circumstances of the entity and the management of its biological assets. Management will need to assess the nature of the biological assets held and the intended use of these assets. A review of the mandate of the public entity and the operational activities may be required to establish the various kinds of biological assets applicable to the entity. Detailed guidance on the biological assets needs to be included in the manuals to provide clarity to the users of financial information on the distinction of the biological assets (Office of the Auditor General, 2009). The biological assets held by the entity are thus evaluated by management to determine the required internal controls. Detailed guidance and assistance on the application of the standards and the related controls are not available to management to ensure a uniform application of controls and accounting principles.

The lack of an industry norm was highlighted when the Technical Memorandum detailed that; biological assets actively managed will be reported in terms of GRAP 101; while biological assets held for recreational purposes and those held for a period longer than 12 months, in the production or supply of goods and services, will be treated as Property, Plant and Equipment (GRAP 17) (ASB, 2004; office of the Auditor General, 2009). GRAP 12, Inventories will be applied to the biological assets that are used in the production of goods or further biological assets. Biological assets held by a public entity for investment purposes will be treated and disclosed in terms of GRAP 16, Investment Property.

Challenge 6: Unavailable templates or application process of an accounting policy in terms of GRAP 101

Section 55(1) of the PFMA and paragraph 28.1.6 of the Treasury Regulations requires an accounting authority (the Board of the public entity) to prepare financial statements for each financial year in terms of the standards approved by the ASB. The financial statements of an entity should include accounting policies detailing the principles and methods applied in the recognition, measurement, valuation and disclosure of biological assets. The accounting policies should be based on the requirements of GRAP 101 as the ASB prescribed this standard as the basis of accounting for public entities with departments reporting in terms of the modified cash basis (South Africa, 2005; South Africa, 1999; ASB, 2006:par.02). A lack of a uniform application of the standards of GRAP at public entity level resulted in only one entity, AsgiSA-EC, applying the required principles. The application of the multiple bases of accounting impaired the objective of enabling users of financial information to compare financial results of the public sector to other industries.

The accounting policy and the organisational policy of the entity should be aligned to one another and to GRAP 101. These policies should be reviewed on an annual basis by management and the Board ensure that legislative requirements and development are incorporated and that the accounting treatment is still relevant and applicable (South Africa, 1999:section 51).

Challenge 7: Restricted budgets and budget management reporting with fair value accounting

The fair value accounting of biological assets at each reporting date, being year-end, may result in a fair value adjustment (ASB, 2006:par.15; ASB, 2006:par.30; ASB, 2006:par.17). A fair value adjustment will occur when the fair value of the biological asset exceeds the value at which the biological assets have been recorded on the financial system. A positive fair

value adjustment will result in a credit on the financial system; thus an increase in the revenue reported on by public entities. In turn, a negative fair value adjustment will result in a debit on the financial system, thus an expense. The fair value adjustment on the biological assets will impact on the net surplus or deficit of the public entity.

When fair value adjustments result in a net deficit the financial information will not comply with the Treasury Regulations. Budget management of a public entity is regulated by the PFMA and the Treasury Regulations. Under no circumstances may a public entity budget for a deficit, as regulated by section 53 (3) of the PFMA. The entity budget will detail the projected cash flows and anticipated revenues and expenses. There will not be any consideration for the non-cash-based fair value adjustments on the biological assets included in the entity budget. The actual financial results of the entity will include these fair value adjustments and can result in a reported net deficit for the entity. The onus will be on management to provide management plans and documentation to the Standing Committee to substantiate the accounting deficit. Management will be able to misrepresent the financial results of the entity when a fair value profit ‘hides’ the actual deficit incurred for the year.

IMPACT OF FAIR VALUE REPORTING ON THE PUBLIC SECTOR

The adoption of IAS 41 and the related fair value disclosure of biological assets by companies in various countries promote comparability of the performance and position of the biological assets of the various companies. Analytical reviews can be performed on the information disclosed by the various companies to study market trends, sector performance and for the enhancement of management processes in the management accounting and budgetary forecasts.

Likewise, the adoption of GRAP 101 by government entities will ensure that the financial information disclosed by private companies can be compared to overall government

performance. The uniform standard will assist management to assess the performance of the entities to enhance, strengthen and broaden initiatives taken by government to have effective and efficient systems monitoring and reporting on biological assets. The implementation of enhanced systems will focus management's efforts and attention to the development of techniques and methods to focus on the core business being food production and the related fight against hunger and poverty.

As GRAP 101 is based on the requirements of IAS 41 similar challenges in the fair value accounting of biological assets could have been experienced in the private sector in fair valuing biological assets. Fair value accounting in the public entities should not be limited by the challenges that have been identified, as –

- The public entities have converted from South African Generally Accepted Accounting Practices (SA GAAP) to GRAP. The principles of GAAP are based on accrual accounting and all transactions have been recorded in the accounting records before the conversion to GRAP was initiated. Government departments will face a concerning crisis with the conversion to GRAP as non-cash transactions are not recorded in the financial records of the departments.
- Government developed a phase-in approach in the implementation of the requirements of GRAP. The phase-in approach allowed ample time to public entities to study the reporting requirements and to implement policies and procedures to sufficiently address the reporting requirements. The lessons learnt should be analysed and implemented in the conversion to GRAP by the departments.
- The methods, assumptions and disclosure techniques applied by private companies on the fair valuing of the biological assets can be referred to for guidance as the requirements of GRAP 101 are similar to those of IAS 41.

- The public entities in South Africa are part of a select group in the world reporting in terms of accrual accounting in a government environment. The accounting revolution in government commenced in 2003 with the adoption of standards of GAAP and the subsequent GRAP standards. Disclosing transparent information in a government sphere enhances resource allocations and better management of available funding (Van Schaik & Sanderson, 2008).

CONCLUSION

The application of the fair value accounting requirements for biological assets is a challenge in the public sector and an implementation norm has to be established. This article detailed the challenges experienced in the public sector in the fair value accounting of biological assets. The public sector in South Africa applies different bases of accounting. Government departments are reporting on the modified cash basis, while public entities and municipalities report in terms of the accrual basis of accounting. The principles of the accrual basis of accounting and the related accounting for biological assets in terms of GRAP 101 are not implemented consistently in the public sector. This may lead to incorrect analysis and interpretation of the fair value of biological assets and subsequently influence decision making.

A specific limitation of the study is that it focuses on the challenges experienced by one entity, AsgiSA-EC. AsgiSA-EC was the only public entity focussed to implement GRAP 101.

The objective of reporting in terms of GRAP by all spheres of government is to result in comparable financial information in both the public and private sectors. The process to comply with the above objective is not expected to be without challenges. This study aimed to analyse the specific challenges experienced by a public entity that successfully implemented the fair value accounting principles on biological assets and report it in terms of

GRAP 101. Although the challenges identified may be entity specific, it should be a useful guide for other public sector entities with the implementation of GRAP101.

RECOMMENDATIONS

This research identified some specific GRAP 101 implementation challenges for public entities. To enhance the implementation and quality of fair value reporting for biological assets by public entities, it is recommended that National Treasury, who is the custodian of public sector accounting standards:

- assesses the challenges as identified and addressed by Asgi-SA;
- develops detailed guidelines on the interpretation of the standard;
- drafts an accounting policy template that complies with the requirements of GRAP 101;
- develops internal control guidelines to manage, safeguard and report on biological assets; and
- avails market information to assist in the valuation of biological assets.

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