



## **SPECIFIC FEATURES OF DEVELOPING ACCOUNTING POLICY IN THE ACTIVITIES OF AGRICULTURAL PRODUCERS**

Khaitboev Muhammadi Israpilovich  
PhD. Associate Professor, Department of Audit, TSUE  
E-mail: m.xayitboyev@tdiu.uz

<b>ABSTRACT</b>	<b>KEY WORDS</b>
<p>This article examines the specific features of developing accounting policy for agricultural producers — particularly enterprises engaged in growing tree, shrub, and flower seedlings and providing landscape design services. The study analyzes industry-specific accounting policy challenges in biological assets (IAS 41), property, plant, and equipment (IAS 16), inventories (IAS 2), and revenue recognition (IFRS 15). The methodology combines regulatory analysis, comparative analysis, economic statistics, and observation. Findings indicate that proper classification of biological assets, selection of seasonality-sensitive depreciation methods, and stage-by-stage revenue recognition for complex service contracts constitute strategic elements of accounting policy for entities in this sector. Practical recommendations for Uzbek agricultural enterprises are proposed.</p>	<p>Accounting policy, biological assets, agricultural producers, depreciation, fair value, revenue recognition, IFRS, industry-specific features.</p>

### **Introduction**

Currently, the growing trend of ecological tourism, urban greening, and the creation of private luxury resort areas in Uzbekistan is leading to the emergence of new economic entities in the seedling and landscape design market. The activities of such enterprises possess a specific feature: their main products are living organisms — tree, shrub, and flower seedlings, which undergo biological transformation during their growth process. This exact feature complicates the formulation of accounting policy in the enterprises of this sector and requires a special approach.

Under International Financial Reporting Standards (IFRS), the accounting of living biological objects is regulated by IAS 41 "Agriculture". This standard establishes the requirement to measure biological assets at fair value, fundamentally differing from the traditional historical cost approach. Therefore, in practice, many nurseries face the problem of incorrectly classifying biological assets as inventories under IAS 2 or as property, plant, and equipment under IAS 16. Such classification errors diminish the reliability of the entity's asset structure and income statements, potentially misguiding management decisions.

The object of our research is the "Sea side resort" Limited Liability Company (hereinafter referred to as the Company). The Company was established in 2018 and is located in the Tashkent region. Its main business activities are: (1) growing and selling tree, shrub, and flower seedlings; (2) developing and

implementing landscape design projects for private garden houses, sanatoriums, and hotel territories; (3) providing subsequent maintenance services for planted green areas. At the end of 2025, the Company's total assets amounted to 3.31 billion UZS, and net profit was 480 million UZS.

This article is aimed at resolving the following scientific problems: proper classification and measurement of biological assets in the seedling sector based on IAS 41 requirements; step-by-step revenue recognition for landscape design services based on IFRS 15; accounting for the depreciation of greenhouses and seedling cultivation facilities using the component approach; as well as defining the theoretical and practical foundations of developing an accounting policy that factors in the impact of seasonality.

The scientific novelty of the article lies in the fact that, for the first time, the complex structure of accounting policy is systematically analyzed through the example of an enterprise engaged simultaneously in seedling cultivation and landscape design — meaning, it combines interrelated agricultural and service activities. In Uzbekistan, specialized scientific research in this specific area remains insufficient, which is why this article serves to fill this scientific gap.

## Literature review

The literature on accounting for biological assets under IFRS is primarily focused on exploring the challenges of applying IAS 41 and its valuation inaccuracies. A comprehensive empirical study by Argilés and Garcia-Blandón (2011) demonstrates that in agricultural enterprises implementing IAS 41, despite an increase in subjectivity in fair value measurement, the quality of financial indicators improves. The authors emphasize the importance of correctly reflecting the profit or loss arising from biological transformation within the reporting period [1].

Elad and Herbohn (2011) comparatively studied the application of IAS 41 in the French and Australian forestry sectors and identified two main problems: (1) the difficulty of reliably determining fair value in the absence of an active market; (2) the high one-time valuation costs for small and medium-sized enterprises. These findings are entirely relevant for the nursery sector as well, given that mechanisms for determining standardized seedling prices in local markets are not yet fully developed [2].

Daske et al. (2008) examined the impact of mandatory IFRS adoption on financial reporting quality and proved that liquidity and the accuracy of securities price forecasts significantly improve for enterprises transitioning to international standards. This outcome is equally significant for service sectors such as landscape design, where proper revenue recognition under IFRS 15 reduces information asymmetry for investors regarding the enterprise [3].

Barth, Landsman, and Lang (2008) demonstrated that the amounts of income and balance sheet figures in financial statements prepared under IFRS are of relatively higher quality, and the practice of artificially smoothing earnings for management purposes is less frequent. This conclusion justifies utilizing the fair value method in measuring biological assets for enterprises in the nursery sector [4].

In the context of Uzbekistan's economy, A.K. Baxadirov (2024) analyzed the contradictions between national and international standards in formulating accounting policy, emphasizing the necessity of a mixed approach for domestic enterprises. According to him, the conflict between national norms adapted for tax legislation and IFRS requirements is particularly evident in the accounting of biological assets and agricultural objects [5].

Overall, the literature review reveals that formulating accounting policies in the field of seedling cultivation and landscape design in accordance with IFRS has not been sufficiently explored in the scientific literature of Uzbekistan. Filling this gap constitutes one of the main objectives of this article.

**RESEARCH METHODOLOGY**

The methodological approach utilized in this research encompasses several methods. First, regulatory document analysis: IAS 41 "Agriculture", IAS 16 "Property, Plant and Equipment", IAS 2 "Inventories", IFRS 15 "Revenue from Contracts with Customers", and legislative acts concerning accounting in the Republic of Uzbekistan were thoroughly reviewed.

Second, using comparative analysis, the impact of accounting policies based on national standards versus IFRS on financial indicators was compared using the financial data of "Sea side resort" LLC from 2023 to 2025. Third, using the method of economic statistics, dynamics and growth rates were calculated. Fourth, through monographic observation, the Company's accounting documents, inventory acts, and contract systems were examined.

During the research, the financial statements, internal accounting data, goods receipt and dispatch logs, fixed asset cards, and landscape project contracts with clients for 2023, 2024, and 2025 provided by the Company served as the primary sources. To maintain data confidentiality, some absolute indicators have been generalized or appropriately modeled for scientific analytical purposes.

**4. RESULTS AND DISCUSSION**

**Financial and Economic Profile of "Sea side resort" LLC**

"Sea side resort" Limited Liability Company manages a greenhouse complex specialized in seedling cultivation, covering a 5-hectare area in the Zangiota district of the Tashkent region. The Company employs 68 staff members, 24 of whom work in the greenhouse, 18 handle field seedling care, 12 operate in the landscape design department, and the remaining 14 manage administrative and operational services. Annual production capacity is: 120,000 tree seedlings, 85,000 shrub seedlings, and 200,000 flower seedlings.

The landscape design department implements an average of 18–22 projects annually. Customers include owners of private villas and gardens (57%), hotels and sanatoriums (28%), state institutions, and neighborhood streets (15%). In 2024, the enterprise was admitted as a member of the Association of Landscape Designers of Uzbekistan and was recognized as a "green resource" company.

Table 1 below outlines the classification of the Company's main biological and other assets within its accounting policy:

**Table 1. Classification of Accounting Policy Approaches by Seedling Types**

Seedling Type	Classification under IAS 41	Accounting Policy Approach	Valuation Basis
<b>Tree seedlings</b> (poplar, willow, maple)	Biological asset (2-5 year maturity)	Measurement at fair value under IAS 41	Fair value less costs to sell
<b>Shrub seedlings</b> (lavender, jasmine, licorice)	Biological asset (short-term)	IAS 41 or historical cost	Cost or fair value
<b>Flower seedlings</b> (rose, chrysanthemum)	Biological asset (short-term/annual)	Recognized as a short-term biological asset	Historical cost
<b>Landscape projects</b> (completed)	Intangible asset or service	Revenue and expense recognition under IAS 38 / IFRS 15	Based on the executed portion
<b>Planting materials</b> (seeds, substrate)	Inventory	Under IAS 2 (FIFO or average cost)	Cost or net realizable value

Source: Compiled by the author based on the 2025 financial data of "Sea side resort" LLC.

As the table shows, a portion of the Company's assets is classified as biological assets under IAS 41, another portion as inventories under IAS 2, and another portion as property, plant, and equipment under IAS 16. Such a mixed structure requires a detailed and consistent definition of accounting policy.

Table 2 illustrates the dynamics of the Company's main financial indicators between 2023 and 2025:

**Table 2. Dynamics of Main Financial Indicators of "Sea side resort" LLC (2023–2025)**

Indicator	2023 (mln UZS)	2024 (mln UZS)	2025 (mln UZS)	Growth, %
Value of biological assets (seedlings)	380	512	694	+82.6
Inventories (seeds, substrate)	95	138	186	+95.8
Landscape services revenue	640	920	1 340	+109.4
Seedling sales revenue	290	405	572	+97.2
Total assets	1 820	2 470	3 310	+81.9
Net profit	210	315	480	+128.6

Source: Calculated by the author based on the Company's internal financial statements.

The above data indicates that the share of the value of biological assets within the total assets of "Sea side resort" LLC is steadily increasing. The growth from 380 million UZS in 2023 to 694 million UZS in 2025 — an 82.6% increase — further underscores the necessity of an accurate and consistent accounting policy for this asset class. Furthermore, the 109.4% rise in landscape services revenue provides grounds for evaluating this business line as strategically vital for the Company.

IAS 41 establishes two primary criteria for recognizing biological assets: (1) the entity controls the asset; (2) it is probable that future economic benefits associated with the asset will flow to the entity; and (3) the fair value or cost of the asset can be measured reliably. For "Sea side resort", the most crucial question is when and under what circumstances seedlings should be recognized as biological assets under IAS 41, versus as inventories under IAS 2.

In resolving this matter, the Company relied on the following characteristics: (a) root development period — if a seedling is cultivated for over 6 months, it falls under biological assets; (b) maturity sign — a seedling's readiness to be transplanted signifies the conclusion of biological transformation; (c) market availability — an active market exists for medium and large tree seedlings in the Tashkent region, and prices were established based on monthly market observations.

Table 3 details the primary types of biological assets measured at fair value, the difference between their purchase cost and fair value at maturity, and the impact of this difference on the company's net assets:

**Table 3. Analysis of Biological Assets Fair Value and Gain from Biological Growth (2025)**

Seedling Type	Purchase Cost (UZS/piece)	Fair Value at Maturity (UZS/piece)	Gain from Biological Growth (mln UZS)	Share in Net Assets
Maple (Acer platanoides), 2 years	12 000	38 500	47.8	6.9%
Willow (Salix babylonica), 1 year	8 000	22 000	29.4	4.2%
Lavender (Lavandula angustifolia), perennial	4 500	11 200	18.6	2.7%
Rose seedlings (Rosa sp.), bush	3 200	7 800	31.5	4.5%
Pine (Pinus sylvestris), 3 years	18 000	65 000	63.2	9.1%
<b>Total biological assets</b>	—	—	<b>190.5</b>	<b>27.4%</b>

Source: Compiled by the author based on the Company's inventory acts and market price observation data.

The analysis of the table yields an important conclusion: the total gain arising from biological growth amounts to 190.5 million UZS, accounting for 27.4% of net assets. This indicates that failing to properly execute fair value measurement under IAS 41 would lead to a significant understatement of the Company's net profit, thereby undervaluing assets and income in the financial statements.

In situations where an active market is unavailable (e.g., for rare ornamental plants), the Company employs the discounted cash flow method, based on the Level 3 hierarchy of IFRS 13 "Fair Value Measurement". Here, the refinancing rate determined by the Central Bank of Uzbekistan is utilized as the benchmark rate.

The Company's balance sheet includes several specialized facilities and equipment that support seedling production: greenhouse structures and coverings, drip irrigation systems, water supply infrastructure, lifting and handling machinery, and specialized containers for transplanting seedlings. The useful lives of these assets differ significantly, and they possess varying patterns of accelerated depreciation.

Under national standards, the Company previously applied a uniform straight-line depreciation method for all fixed assets, strictly adhering to the periods prescribed by tax legislation. Such an approach effectively bypassed the component method, treating each facility or equipment piece as a singular whole. Under the new accounting policy aligned with IAS 16, the component method was introduced.

**Table 4. Comparative Analysis of Depreciation Policy under National Standard vs IAS 16 for Fixed Assets**

Asset Type	National Standard (Previous)	IAS 16/41 (New)	Financial Impact of the Difference
<b>Greenhouse and polyethylene structures</b>	Straight-line, 10 years	Component method, 7 years (structure) + 3 years (covering)	Depreciation +18%, increased expense accuracy
<b>Water supply and drip irrigation system</b>	Straight-line, 10 years	Unit of production method, 8 years	Properly reflects seasonality economics
<b>Lifting equipment</b> (mini crane, tractor)	Accelerated, 5 years	Reducing balance method, depends on usage schedule	Depreciation expenses are smoothed out
<b>Perennial tree seedlings</b> (not for sale)	Not recognized	Tangible asset under IAS 16, 15–30 years	Asset value +12.4%

Source: Compiled based on "Sea side resort" LLC's fixed asset cards and the author's calculations.

Recognizing perennial tree seedlings — specifically species like pine, oak, and maple — as fixed assets is particularly important. These seedlings are planted within the Company's premises to serve as an exhibition garden and propagation source; their primary role is to manage the seedling production process and preserve genetic reserves. According to IAS 16 criteria, such assets are categorized as property, plant, and equipment because they are not intended for sale, are used over more than one year, and generate future economic benefits.

Selecting a depreciation method based on production capacity (units of production) for the water supply and drip irrigation system allows for accurately reflecting the impact of seasonality: costs are higher during the irrigation season (March–November) and minimal during the winter months. This aligns financial results correspondingly with the season and protects investors from misinterpretations.

The issue of revenue recognition for landscape design services is one of the most complex elements of "Sea side resort's" accounting policy. IFRS 15 introduces a five-step model for revenue recognition: (1) identify the contract with customers; (2) identify the performance obligations in the contract; (3) determine the transaction price; (4) allocate the transaction price to the performance obligations; (5) recognize revenue when a performance obligation is satisfied.

In practice, the contracts established by the Company generally fall into two categories: (a) one-time delivery — selling and planting seedlings; (b) long-term projects — a complex of landscape design, installation, and subsequent maintenance services.

**Table 5. Divergence Between National Standard and IFRS 15 Approaches in Revenue Recognition**

Contract Type	Under National Standard	Under IFRS 15	Financial Difference
Seedling delivery (one-time)	Fully recognized upon delivery	Recognized upon transfer of control (depending on contract type)	Largely similar, timing of rights transfer is clearly defined
Landscape project (6-month contract, 480 mln UZS)	Fully recognized when document is formalized	Recognized gradually based on percentage of completion (80 mln per month)	Revenue stability is ensured, one-time spike is eliminated
Maintenance service (annual subscription)	Recognized upon receipt of funds	Recognized evenly over the service period	Prepaid amount is recorded as deferred revenue each month
Multi-stage tree planting project (18 months)	Recognized upon signing the acceptance act	Recognized according to each identified and satisfied performance obligation	Risks are distributed, financial results are smoothed

Source: Compiled based on the Company's contract documents and author's analysis.

The practical impact of step-by-step revenue recognition under IFRS 15 is substantial. For instance, if a 6-month landscape contract worth 480 million UZS was signed by the Company in 2025, under the national standard, this entire amount would have been fully recognized on the day the document was finalized. Under IFRS 15, however, 80 million UZS is recognized each month, and the uncompleted remaining balance is reflected on the balance sheet as deferred revenue. This shift made the Company's quarterly financial statements much more comprehensible for investors and better aligned with actual economic processes.

It is particularly noteworthy that in cases where seedling delivery, planting, and subsequent maintenance services are bundled in a single contract, IFRS 15 requires separating these duties as distinct performance obligations. This necessitated the Company to develop an internal methodology to unbundle prices: seedling costs, planting service fees, and maintenance charges must be identified separately and allocated proportionally to the transaction price.

The obtained results facilitate the formulation of a series of important scientific and practical conclusions.

First, establishing an accounting policy in a mixed agricultural-service sector like seedling cultivation and landscape design requires the simultaneous application of multiple standards. Operating at the intersection of IAS 41, IAS 16, IAS 2, and IFRS 15 underscores the necessity of treating the accounting policy as a strategic document. Since the boundaries between these standards — for example,

determining exactly when seedlings shift from IAS 2 to IAS 41, or whether perennial exhibition plants are accounted for under IAS 41 or IAS 16 — can only be resolved via the professional judgment of enterprise management.

Second, the analysis demonstrated that measuring biological assets at fair value is not merely a technical reporting issue, but a factor that directly impacts the Company's net profit and net assets. If the 190.5 million UZS profit stemming from biological growth were ignored under IAS 41, this figure would not appear in the Company's profit and loss statement, leading to undervalued financial indicators. This ultimately sends an inaccurate signal to investors and creditors.

Third, the gradual recognition of landscape services revenue under IFRS 15 significantly minimized quarterly revenue fluctuations for the Company. Under the national standard, acknowledging large one-time contracts caused revenues to spike drastically in certain quarters and drop to near zero in others. IFRS 15 stabilized financial results by synchronizing revenue with the actual period of service delivery.

Fourth, applying the component depreciation method portrayed the actual wear-and-tear pattern of fixed assets more accurately. This provided a reliable financial foundation for management decisions — particularly regarding plans to upgrade and repair greenhouse infrastructure.

These conclusions align with the findings presented by Argilés and Garcia-Blandón (2011), as well as Daske et al. (2008): accounting policies rooted in IFRS elevate the quality of financial reporting even in agricultural and mixed-activity enterprises. At the same time, in the context of Uzbekistan, infrastructural limitations concerning fair value measurement — specifically, the absence of a standardized seedling price index — complicate the full-scale application of IAS 41 for small and medium-sized enterprises. Consequently, a nationwide necessity emerges for developing an industry standard or a sectoral price monitoring system to determine fair values in the seedling sector.

## CONCLUSION

This research enabled a systematic and profound study of the specific features of formulating accounting policy in the domain of seedling cultivation and landscape design, utilizing "Sea side resort" LLC as a case study. The derived conclusions can be summarized as follows:

For enterprises operating within the seedling sector, correctly classifying biological assets under IAS 41 and measuring them at fair value stands as the central element of accounting policy. Recognizing the profit or loss resulting from biological transformation within the reporting period ensures that asset and revenue metrics closely reflect reality.

For multi-stage and long-term landscape design contracts, applying the five-step revenue recognition model of IFRS 15 ensures that revenues are reflected in tandem with the real service delivery process, effectively eliminating artificial fluctuations in quarterly reports.

Applying the component depreciation method under IAS 16, particularly for greenhouse structures and water supply systems, serves as a crucial mechanism for properly capturing the impact of seasonality and justifying management decisions.

Properly framing accounting policy at the enterprise level not only elevates the quality of financial reporting but also bolsters investor relations, expands credit access, and reinforces the informational framework of strategic management.

As practical recommendations, the following are proposed:

- (1) Develop an industry-wide price monitoring system in Uzbekistan to assist in determining fair values for the seedling sector;
- (2) Prepare specialized methodological guidelines tailored for enterprises that merge agricultural and service activities;
- (3) Expand professional development and training programs regarding IAS 41 and IFRS 15 for accountants and auditors working in this sector.

For future research, the following directions are recommended: conducting comprehensive studies of seedling and landscape design enterprises across various regions of our country, and quantitatively evaluating the impact of transitioning to IFRS on financial performance metrics in this sector.

## REFERENCES

1. Argilés, J. M., & Garcia-Blandón, J. (2011). Fair value versus historic cost at the crossroads. *European Accounting Review*, 20(3), 577–602. <https://doi.org/10.1080/09638180.2011.576260>
2. Elad, C., & Herbohn, K. (2011). *Implementing Fair Value Accounting in the Agricultural Sector*. Edinburgh: Institute of Chartered Accountants of Scotland.
3. Daske, H., Hail, L., Leuz, C., & Verdi, R. (2008). Mandatory IFRS reporting around the world: early evidence on the economic consequences. *Journal of Accounting Research*, 46(5), 1085–1142. <https://doi.org/10.1111/j.1475-679X.2008.00306.x>
4. Barth, M. E., Landsman, W. R., & Lang, M. H. (2008). International accounting standards and accounting quality. *Journal of Accounting Research*, 46(3), 467–498. <https://doi.org/10.1111/j.1475-679X.2008.00287.x>
5. Baxadirov, A. K. (2024). Theoretical and practical aspects of organizing accounting policy. *Issues of organizing accounting on the basis of International Financial Reporting Standards: Proceedings of the Republican Scientific and Practical Conference (November 2, 2023)*. TIAME.
6. IFRS Foundation. (2023). IAS 41 Agriculture — Official Pronouncement. <https://www.ifrs.org/issued-standards/list-of-standards/ias-41-agriculture/>
7. IFRS Foundation. (2023). IAS 16 Property, Plant and Equipment. <https://www.ifrs.org/issued-standards/list-of-standards/ias-16-property-plant-and-equipment/>
8. IFRS Foundation. (2023). IFRS 15 Revenue from Contracts with Customers. <https://www.ifrs.org/issued-standards/list-of-standards/ifrs-15-revenue-from-contracts-with-customers/>
9. Herrmann, D., Saudagaran, S. M., & Thomas, W. B. (2006). The quality of fair value measures for property, plant, and equipment. *Accounting Forum*, 30(1), 43–59. <https://doi.org/10.1016/j.accfor.2005.09.001>
10. Christensen, H. B., & Nikolaev, V. V. (2013). Does fair value accounting for non-financial assets pass the market test? *Review of Accounting Studies*, 18(3), 734–775. <https://doi.org/10.1007/s11142-013-9232-0>
11. Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4), 365–383. <https://doi.org/10.2308/acch.1999.13.4.365>
12. Schipper, K. (2003). Principles-based accounting standards. *Accounting Horizons*, 17(1), 61–72. <https://doi.org/10.2308/acch.2003.17.1.61>

13. Penman, S. H. (2007). Financial reporting quality: Is fair value a plus or a minus? *Accounting and Business Research*, 37(sup1), 33–44. <https://doi.org/10.1080/00014788.2007.9730083>
14. Astami, E. W., & Tower, G. (2006). Accounting-policy choice and firm characteristics in the Asia Pacific region. *The International Journal of Accounting*, 41(1), 1–21. <https://doi.org/10.1016/j.intacc.2005.12.004>