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## Quantitative Analysis of Financial Statements Based on Changes, Percentages, and Trends on the Balance Sheet and Expenditure Realization Report of the Directorate General of Forestry Planning and Environmental Management for the Fiscal Year 2019–2024

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**Abstract:** This study aims to analyze the quality of the financial statements of the Directorate General of Forestry Planning and Environmental Management in supporting transparency and accountability in budget management for the 2019–2024 Fiscal Year. The analysis is focused on the Balance Sheet and Expenditure Realization Report using a descriptive quantitative approach. The analysis techniques used include the analysis of changes in financial statements (horizontal analysis), percentage analysis per component (vertical analysis), and trend analysis (trend analysis). The results showed that the financial position of the Directorate General of Forestry Planning and Environmental Management during the study period fluctuated, especially in the asset and equity components, while liabilities were at a relatively small level compared to total assets. The rate of realization of expenditure against the budget is consistently above 90 percent, which reflects the effectiveness of budget implementation. Trend analysis shows that the realization of spending tends to increase in the long term, despite fluctuations between budget years. Overall, the results of the analysis indicate that the financial management at the Directorate General of Forestry Planning and Environmental Management has shown a positive direction and is supported by the presentation of consistent and reliable financial statements. Thus, the quality of the financial statements produced has played a role in increasing transparency and accountability in budget management.

**Keyword:** Government Financial Statements, Balance Sheet, Realization Of Expenditure, Trend Analysis, Accountability.

### INTRODUCTION

Regulation of the Minister of Finance Number 210/PMK.05/2023 concerning Guidelines for the Preparation and Submission of Financial Statements of State Ministries/Institutions requires each State Ministry/Institution to prepare Financial Statements

which are carried out in stages from the smallest accounting unit to the reporting unit based on the rules of government accounting standards in accordance with the rules of government accounting standards mandate of Government Regulation Number 71 of 2010 concerning Government Accounting Standards. One of the roles of Financial Statements in Government Accounting Standards is as a medium that provides information about the financial position and all transactions carried out by an entity, both accounting entities and reporting entities. In accordance with the principles of periodicity and universality in Law number 17 of 2003 concerning State Finance, the Financial Statements are prepared every fiscal year which is presented reasonably in accordance with the type of expenditure and budget.

In the central government's financial reporting structure, the Directorate General of Forestry Planning and Environmental Management is an Accounting Unit for Budget Users at the Echelon I Level (UAPPA E1) under the Ministry of Environment and Forestry. The Financial Statements at the Echelon I Level are prepared based on the consolidated report of work units that are hierarchically subordinate. In the preparation of financial statements, the Directorate General of Forestry Planning and Environmental Management as a reporting entity needs to anticipate and minimize recording errors in financial reporting by compiling financial statement analysis, reviewing past transactions and making policies for future transactions in accordance with government accounting standards, so that it is expected that Financial Statements from the work unit level to the Echelon I level in particular can in accordance with the rules of government accounting standards, so that it can contribute to the ministry's report to get the best opinion from the Financial Audit Agency.

Although the financial statements have been prepared and audited annually by the Financial Audit Board, the presentation of the financial statements needs to be further analyzed to assess the development of the financial position and the performance of expenditure implementation over time. Quantitative analysis of financial statements is necessary to identify changes, structures, and trends in key items in the financial statements, so that the information produced is not purely descriptive, but is able to provide a more comprehensive picture of the entity's financial condition.

Quantitative analysis of financial statements can be carried out through horizontal analysis, percentage analysis per component (vertical analysis), and trend analysis. The three analysis techniques allow an assessment of the dynamics of changes in the post value of financial statements, funding structures, and trends in the development of financial performance over a certain period of time. In the context of the public sector, the analysis is relevant to assess the effectiveness of the implementation of expenditure as well as the stability of the government's financial position.

Based on this background, this study aims to analyze the financial statements of the Directorate General of Forestry Planning and Environmental Management for the 2019–2024 Fiscal Year with a focus on the Balance Sheet and Expenditure Realization Report using a quantitative approach. The results of the research are expected to contribute to assessing the quality of financial statements and support efforts to increase transparency and accountability in budget management within the central government.

## **METHOD**

### **Types and Approaches to Research**

This study uses a descriptive quantitative approach with the aim of analyzing the financial statements of the Directorate General of Forestry Planning and Environmental Management objectively based on the available numerical data. The descriptive quantitative approach was chosen because this study does not aim to test hypotheses, but rather to describe and analyze financial conditions through the calculation of changes, percentages, and trends over financial statement headings.

## **Object and Period of Research**

The object of the research is the financial statements of the Directorate General of Forestry Planning and Environmental Management as the Accounting Unit for Budget Users at the Echelon I Level. The research period covers the Fiscal Year 2019 to 2024, with a focus on analysis on consistently, and measurably so that the results of the analysis obtained can objectively describe the condition and development of financial statements and Expenditure Realization Report that has been prepared in accordance with Government Accounting Standards.

## **Data Types and Sources**

The data used in this study is secondary data, in the form of annual financial reports of the Directorate General of Forestry Planning and Environmental Management for the 2019–2024 Fiscal Year. Data is obtained from financial statement documents that have been prepared and ratified in accordance with the provisions of laws and regulations in the field of state financial management. The data analyzed includes the components of assets, liabilities, and equity on the Balance Sheet as well as the realization of expenditure in the Expenditure Realization Report.

## **Data Collection Techniques**

The data collection technique used in this study is documentation, namely by collecting and studying the financial statement documents of the Directorate General of Forestry Planning and Environmental Management for the 2019–2024 Fiscal Year. The document is used as a basis for conducting quantitative calculations and analysis of financial statements.

## **Data Analysis Techniques**

The data analysis techniques used in this study include: 1. Horizontal Analysis This analysis is used to measure the change in the value of each financial statement heading from one period to the next. Changes are calculated in the form of absolute values and percentages, so that the direction and magnitude of changes in the balance sheet components and expenditure realization can be known.

2. Percentage Analysis per Component (Vertical Analysis) This analysis is carried out by calculating the proportion of each financial statement post to the total. In the Balance Sheet, each component of assets, liabilities, and equity is analyzed against total assets, while in the Expenditure Realization Report, each type of expenditure is analyzed against the total realization of expenditure.

This analysis aims to assess the financial structure and composition of spending. 3. Trend Analysis Trend analysis was used to determine the trend of development of financial positions and expenditure realization during the study period. The analysis is carried out using the base year as a comparator to assess the direction of development of each financial statement post over time.

The results of the three analysis techniques are then interpreted descriptively to provide an overview of the condition and development of the financial statements of the Directorate General of Forestry Planning and Environmental Management in supporting transparency and accountability in budget management.

## **Research Instruments**

The research instrument used in this study is a financial statement analysis sheet, which is a non-test instrument prepared by researchers to collect and process numerical data from the financial statements of the Directorate General of Forestry Planning and Environmental Management for the 2019–2024 Fiscal Year. This instrument is used to record, classify, and calculate financial data sourced from the Balance Sheet and Expenditure Realization Report.

The financial statement analysis sheet contains the following components: 1.Data on the value of assets, liabilities, and equity on the Balance Sheet. 2.Expenditure realization data based on the type of expenditure in the Expenditure Realization Report. 3.Column for calculating value changes between periods (horizontal analysis). 4.The column calculates the percentage of each component to the total (vertical analysis). 5.Trend index calculation column by base year (trend analysis).

This research instrument is used as a tool to ensure that the data processing process is carried out systematically, consistently, and measurably so that the results of the analysis obtained can objectively describe the condition and development of financial statements.

## RESULTS AND DISCUSSION

The balance sheet describes the financial position of the Directorate General of Forestry Planning and Environmental Management regarding assets, liabilities and equity on a specific date. In this chapter, the balance sheet from 2019 to the last position in 2024 will be analyzed.

Assets are economic resources that are controlled and/or owned by the government as a result of past events and from which future economic and/or social benefits are expected to be obtained, both by the government and the community, and can be measured in monetary units, including non-financial resources necessary for the provision of services to the general public and resources that are maintained for historical and cultural reasons.

The analysis of assets aims to determine the growth in the value of each post in the balance sheet over a certain period of time at the Directorate General of Forestry Planning and Environmental Management, which consists of Current Assets, Fixed Assets, and Other Assets.

**Table 1. Balance Sheet 2020-2024**

Yes	Year	ASSETS	OBLIGATIONS	EQUITY
1	2020	887.290.552.276	10.185.167.640	877.105.384.636
2	2021	885.410.717.657	835.845.140	884.574.872.517
3	2022	913.210.514.656	17.424.593.500	895.785.921.156
4	2023	816.898.864.112	21.522.262.683	795.376.601.429
5	2024	804.040.485.426	18.960.037.670	785.080.447.756

The discussion on the realization of expenditure by the Directorate General of Forestry Planning and Environmental Management for the 2020–2024 Fiscal Year was carried out to assess the performance of budget implementation and the effectiveness of expenditure absorption during the research period. This analysis is compiled based on the data of the Expenditure Realization Report using the analysis approach of changes, percentages, and trends, so that it can describe the dynamics of expenditure realization from year to year and its development trend in the medium term.

**Table 2. Budget and Expenditure Realization 2020-2024**

No	Year	Budget	Shopping	Prosentase
1	2020	447.060.836.000	403.868.152.731	90,34
2	2021	532.555.897.000	528.161.819.137	99,18
3	2022	411.730.791.000	409.223.573.573	99,39
4	2023	885.938.634.000	883.832.426.878	99,76

5	2024	783.485.844.000	765.184.928.328	97,66
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**Neraca Analysis**

Changes in Assets, Liabilities and Equities

**Table 3. Asset Change Analysis**

Year	Assets (Rp)	Change (Rp)	Change (%)
2020	887.290.552.276	–	–
2021	885.410.717.657	1.879.834.619	-0,21%
2022	913.210.514.656	+27.799.796.999	+3,14%
2023	816.898.864.112	96.311.650.544	-10,55%
2024	804.040.485.426	12.858.378.686	-1,57%

**Table 4. Liability Change Analysis**

Year	Liability (Rp)	Change (%)
2020	10.185.167.640	–
2021	835.845.140	-91,79%
2022	17.424.593.500	+1.984,67%
2023	21.522.262.683	+23,52%
2024	18.960.037.670	-11,90%

**Table 5. Equity Change Analysis**

Year	Equity (Rp)	Change (%)
2020	877.105.384.636	–
2021	884.574.872.517	+0,85%
2022	895.785.921.156	+1,27%
2023	795.376.601.429	-11,21%
2024	785.080.447.756	-1,29%

Percentage Analysis per Component (Common Size Analysis)

**Table 6. Percentage Analysis**

Year	Liability (%)	Equity (%)
2020	1,15%	98,85%
2021	0,09%	99,91%
2022	1,91%	98,09%
2023	2,63%	97,37%
2024	2,36%	97,64%

Trend Analysis

Asset Trend Index (Base year = 2020 = 100%)

**Table 7. Asset Trend Analysis**

Year	Trend Indices
2020	100,00
2021	99,79
2022	102,92
2023	92,07
2024	90,62

The data in Table 3 to Table 7 present the results of a quantitative analysis of the Balance Sheet of the Directorate General of Forestry Planning and Environmental Management for the 2020–2024 Fiscal Year. The analysis was conducted using change analysis approaches, percentage analysis per component, and trend analysis to provide an overview of the dynamics of financial positions, funding structures, and trends in the development of assets, liabilities, and equities during the study period.

### Change Analysis

The results of the change analysis show that the financial position of the Directorate General of Forestry Planning and Environmental Management during the 2020–2024 Fiscal Year period has fluctuated. The value of assets was relatively stable at the beginning of the research period and increased in Fiscal Year 2022, but experienced a significant decline in Fiscal Year 2023 and continued in Fiscal Year 2024. The change had a direct impact on the decline in equity in the last two years of the study.

Liabilities show quite sharp changes between fiscal years, but nominally remain at a low level relative to total assets. These fluctuations in liabilities do not significantly change the funding structure, so the entity's financial risks remain relatively controlled. Overall, changes in assets and liabilities have a direct effect on the dynamics of equity as the difference between assets and liabilities.

### Percentage Analysis

The results of the percentage analysis per component show that the balance sheet structure of the Directorate General of Forestry Planning and Environmental Management is dominated by equity with a proportion above 97 percent every year. Meanwhile, liabilities only account for less than 3 percent of total assets. This condition reflects a relatively strong financial structure and suggests that asset management does not depend on financing through large amounts of liabilities.

The dominance of equity in the balance sheet structure also indicates that the entity has adequate financial capacity to support the execution of its duties and functions. With a relatively stable percentage structure, financial statements are able to provide a clear picture of the composition of the entity's financial position from year to year.

### Conclusions Based on Trend Analysis

The results of trend analysis using Fiscal Year 2020 as the base year show that asset values have a downward trend at the end of the research period. Although it had increased in the 2022 Fiscal Year, the asset trend index declined continuously in the 2023 and 2024 Fiscal Years. This shows that there are challenges in maintaining the sustainability of the value of assets under management.

In general, the results of trend analysis indicate that although the financial structure remains stable, more attention is needed to asset management in order for the downward trend in asset value to be controlled. This trend information provides an important basis for management to evaluate and plan asset management in the next period

### Analysis of Changes in Budget Realization Reports – Expenditure on Financial Statements

**Table 8. Analysis of Expenditure Changes for FY 2020–2024**

Year	Budget (Rp)	Expenditure Realization (Rp)	Change of Expenditure (Rp)	Change (%)
2020	447.060.836.000	403.868.152.731	–	–
2021	532.555.897.000	528.161.819.137	+124.293.666.406	+30,78%
2022	411.730.791.000	409.223.573.573	-118.938.245.564	-22,53%

<b>2023</b>	885.938.634.000	883.832.426.878	+474.608.853.305	+116,04%
<b>2024</b>	783.485.844.000	765.184.928.328	-118.647.498.550	-13,42%

**Table 9. Analysis of Percentage of Expenditure Realization**

<b>Year</b>	<b>Budget (Rp)</b>	<b>Shopping (Rp)</b>	<b>Realization Rate (%)</b>
2020	447.060.836.000	403.868.152.731	90,34
2021	532.555.897.000	528.161.819.137	99,18
2022	411.730.791.000	409.223.573.573	99,39
2023	885.938.634.000	883.832.426.878	99,76
2024	783.485.844.000	765.184.928.328	97,66

**Table 10. Shopping Trend Analysis**

<b>Year</b>	<b>Expenditure Realization (Rp)</b>	<b>Trend Indices</b>
2020	403.868.152.731	100,00
2021	528.161.819.137	130,78
2022	409.223.573.573	101,32
2023	883.832.426.878	218,77
2024	765.184.928.328	189,45

The analysis of expenditure trends was carried out to determine the trend of the development of the realization of expenditure by the Directorate General of Forestry Planning and Environmental Management during the 2020–2024 Fiscal Year period using 2020 as the base year. The results of the analysis show that the realization of expenditure has fluctuated significantly between fiscal years, but in general it shows a tendency to increase in the medium term.

In Fiscal Year 2021, the expenditure trend index reached 130.78 percent, which shows an increase in expenditure realization by 30.78 percent compared to the 2020 base year. This increase reflects the expansion of the implementation of activities and an increase in budget absorption compared to the previous year. Furthermore, in the 2022 Fiscal Year, the expenditure trend index was at 101.32 percent, which shows that the realization of expenditure is relatively stable and at almost the same level as the base year, despite a decline compared to the 2021 Fiscal Year.

A very significant increase occurred in the 2023 Fiscal Year, with the spending trend index reaching 218.77 percent. This figure shows that the realization of spending has more than doubled compared to the base year of 2020. This condition indicates an increase in the intensity of the implementation of programs and activities, which can be attributed to an increase in budget allocation and an acceleration of the implementation of expenditure in that year.

In the 2024 Fiscal Year, the spending trend index was recorded at 189.45 percent. Despite a decline compared to the 2023 Fiscal Year, the realization of expenditure in 2024 still shows a much higher level than the base year. This indicates that overall, the realization of expenditure by the Directorate General of Forestry Planning and Environmental Management during the study period shows an increasing trend, although it is accompanied by fluctuations between budget years.

The results of this trend analysis show that expenditure management at the Directorate General of Forestry Planning and Environmental Management tends to develop positively in the 2020–2024 period, which reflects an increase in the scale of implementation of programs and activities as well as the effectiveness of budget utilization in supporting the achievement of organizational goals.

## CONCLUSION

Based on the results of the quantitative analysis of the Balance Sheet and the Expenditure Realization Report of the Directorate General of Forestry Planning and Environmental Management for the 2020–2024 Fiscal Year, some suggestions that can be given are as follows. 1) In the aspect of asset management, it is necessary to strengthen asset management in a sustainable manner, especially for fixed assets that have a tendency to decline in value at the end of the research period.

These efforts can be carried out through improving the quality of recording, inventory, and evaluation of asset utilization so that the value of assets managed can be maintained and optimized in accordance with organizational goals. 2) In the aspect of expenditure implementation, fluctuations in expenditure realization between fiscal years show the need to improve the quality of budget planning and control of the implementation of activities.

A more realistic and needs-based budget preparation is expected to reduce the volatility of expenditure realization and improve the consistency of budget implementation performance from year to year. 3) In terms of presentation and utilization of financial statements, the analysis of changes, percentages, and trends needs to be used as a routine evaluation tool in managerial decision-making.

The continuous use of quantitative analysis will help management in monitoring the development of financial position and expenditure performance in a more objective and measurable manner. 4) For further research, it is recommended that the analysis be expanded to include other components of financial statements or combine quantitative approaches with qualitative analyses to obtain a more comprehensive picture of the quality of public sector financial management.

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