Superbac Biotechnology Solutions S.A.

Consolidated Financial Statements

As of December 31, 2021 and 2020 and January 1, 2020

Contents

Report of Independent Registered Public Accounting Firm

Grant Thornton Auditores Independentes Ltda.

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To the Board of Directors and Shareholders of
Superbac Biotechnology Solutions S.A.

Opinion on the consolidated financial statements

We have audited the accompanying consolidated statements of financial position of Superbac Biotechnology Solutions S.A. and subsidiaries (the "Company") as of December 31, 2021 and 2020 and January 1, 2020, and the related consolidated statements of profit or loss, of comprehensive income or loss, of changes in equity, and of cash flows for each of the two years in the period ended December 31, 2021, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020 and January 1, 2020, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2021, in conformity with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB).

Basis for opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

We have served as the Company's auditor since 2021.

Campinas, Brazil, July 11, 2022

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Superbac Biotechnology Solutions S.A.

Consolidated statements of financial position as of

December 31, 2021, 2020 and January 01, 2020

(In thousands of reais - R$)

ASSETS

	Note	2021	2020	January 01, 2020
Current assets				
Cash and cash equivalents	4	56,447	63,991	117,067
Trade accounts receivable	6	125,153	115,598	109,150
Inventories	9	184,853	49,886	29,974
Recoverable taxes	10	5,982	4,460	4,517
Other current assets		3,963	4,401	5,057
Total current assets		376,398	238,336	265,765
Non-current assets				
Financial investments	5	17,265	6,393	-
Trade accounts receivable - related parties	7	6,515	85,528	80,439
Recoverable taxes	10	43,702	31,262	29,725
Deferred income taxes	26	29,636	23,272	34,818
Other non-current assets		259	702	-
Investments	8	-	-	4,190
Investment properties	11	81,963	77,567	1,063
Property, plant and equipment	12	187,266	170,817	164,963
Intangible assets	13	7,308	7,418	8,751
Right-of-use assets	14	6,026	993	2,609
Total non-current assets		379,940	403,952	326,558
Total assets		756,338	642,288	592,323

The accompanying notes are an integral part of these consolidated financial statements.

Superbac Biotechnology Solutions S.A.

Consolidated statements of financial position as of

December 31, 2021, 2020 and January 01, 2020

(In thousands of reais - R$)

LIABILITIES AND EQUITY

	Note	2021	2020	January 01, 2020
Current liabilities				
Trade accounts payable	15	137,327	51,233	43,723
Borrowings and financing	16	243,183	132,905	166,086
Advances from customers	18	118,099	58,362	7,507
Financial instruments	27	2,499	1,197	114
Labor and social security obligations		17,978	5,256	5,595
Tax payable	17	5,832	4,110	4,250
Lease liabilities	19	3,236	1,170	1,303
Other accounts payable		16,857	5,568	17,744
Total current liabilities		545,011	259,801	246,322
Non-current liabilities				
Lease liabilities	19	2,790	-	1,360
Borrowings and financing	16	35,039	100,756	95,995
Trade accounts payable - related parties	7	114,082	-	-
Provision for tax, civil and labor risks	20	1,787	2,662	2,724
Other accounts payable		-	-	4,500
Total non-current liabilities		153,698	103,418	104,579
Equity				
Share capital	21	352,118	352,117	352,117
Treasury shares	21	(5,356)	(5,356)	(5,356)
Capital reserves	21	(72,656)	93,662	93,662
Other comprehensive income	21	(988)	-	-
Accumulated losses	21	(215,489)	(178,752)	(212,263)
Equity attributable to the owners of the Company		57,629	261,671	228,160
Non-controlling interests	21	-	17,398	13,262
Total equity		57,629	279,069	241,422
Total equity and liabilities		756,338	642,288	592,323

The accompanying notes are an integral part of these consolidated financial statements.

Superbac Biotechnology Solutions S.A.

Consolidated statements of profit or loss for the years ended December 31, 2021 and 2020

(In thousands or reais – R$, except for earnings per share)

	Note	2021	2020
Net operating revenue	22	705,985	335,727
Cost of sales	23	(561,708)	(263,376)
Gross profit		144,277	72,351
Operating income (expenses)			
Selling expenses	23	(100,010)	(30,348)
General and administrative expenses	23	(69,166)	(28,161)
Other income, net	24	7,112	37,646
		(162,064)	(20,863)
Profit (loss) before finance income (expenses) and taxes		(17,787)	51,488
Financial income		50,318	40,472
Financial expenses		(65,289)	(32,464)
Exchange rate variation		(8,235)	(8,862)
Financial result, net	25	(23,206)	(854)
Profit (loss) before income tax and social contribution		(40,993)	50,634
Income tax and social contribution			
Current	26	(2,108)	(1,441)
Deferred	26	6,364	(11,546)
Profit (loss) for the year		(36,737)	37,647
Attributable to:			
Equity holders of the Company		(35,435)	33,511
Non-controlling interests		(1,302)	4,136
		(36,737)	37,647
Earnings (loss) per share basic) in R$	21.2	(0.87)	0.83
Earnings (loss) per share diluted) in R$	21.2	(0.80)	0.83

The accompanying notes are an integral part of these consolidated financial statements.

Superbac Biotechnology Solutions S.A.

Consolidated statements of comprehensive income or loss for the years ended December 31, 2021 and 2020

(In thousands of reais - R$)

	2021	2020
Profit (loss) for the year	(36,737)	37,647
Other comprehensive loss	(988)	-
Total comprehensive income (loss) for the year	(37,725)	37,647
Attributable to:		
Equity holders of the Company	(36,423)	33,511
Non-controlling interests	(1,302)	4,136
	(37,725)	37,647

The accompanying notes are an integral part of these consolidated financial statements.

Superbac Biotechnology Solutions S.A.

Consolidated statements of changes in equity for the years ended December 31, 2021 and 2020

(In thousands of reais - R$)

			Capital reserves						
	Share capital	Treasury shares	Share premium	Capital reserve	Other comprehensive income	Accumulated losses	Attributable to the equity holders of the parent	Non-controlling interests	Total
Balance at January 01, 2020	352,117	(5,356)	93,662	-	-	(212,263)	228,160	13,262	241,422
Profit for the year	-	-	-	-	-	33,511	33,511	4,136	37,647
Balance at December 31, 2020	352,117	(5,356)	93,662	-	-	(178,752)	261,671	17,398	279,069
Bonus reserve	-	-	-	8,699	-	-	8,699	-	8,699
Capital increase	1	-	-	-	-	-	1	-	1
Redeemable preference shares	-	-	-	(97,350)	-	-	(97,350)	-	(97,350)
Share based payment	-	-	-	22,049	-	-	22,049	-	22,049
Earn-out provision	-	-	-	(99,716)	-	-	(99,716)	-	(99,716)
Disposal of equity interest	-	-	-	-	-	-	(1,302)	(16,096)	(17,398)
Hedge	-	-	-	-	(988)	-	(988)	-	(988)
Loss for the year	-	-	-	-	-	(36,737)	(35,435)	(1,302)	(36,737)
Balance at December 31, 2021	352,118	(5,356)	93,662	(166,318)	(988)	(215,489)	57,629	-	57,629

The accompanying notes are an integral part of these consolidated financial statements.

Superbac Biotechnology Solutions S.A.

Consolidated statements of cash flows for the years ended December 31, 2021 and 2020

(In thousands of reais - R$)

	Note	2021	2020
Cash flows from operating activities			
Profit (loss) before tax		(40,993)	50,634
Adjusted by:			
Depreciation and amortization	23	12,942	11,470
Amortization of right-of-use assets	23	2,958	741
Write-off of property, plant and equipment	12	5,821	5,416
Write-off of intangible assets	13	243	1,429
Expected credit losses	23	(6,020)	(39,924)
Provisions	23	638	(62)
Investment income	25	(2,226)	(1,369)
Derivative financial instruments		1,302	1,083
Loss on uncollectible trade accounts receivable		5,810	8,296
Interest in real estate negotiation	25	-	(10,475)
Interest expenses on leases	25	258	62
Write-off of equity investment	23	-	(7,905)
Write-off of a contingent consideration (earn-out)	23	(4,500)	(15,047)
Present value adjustment		1,851	1,181
Provision for commissions payable	23	35,449	15,404
Interest on loans and borrowings	25	27,020	19,103
Investment property fair value	24	(5,213)	(28,543)
Share based payment	23	22,049	-
		57,389	11,494
Decrease (increase) in assets:			
Trade accounts receivable	6	(11,196)	(13,552)
Trade accounts receivable - related parties	7	62,917	(5,089)
Inventories	9	(134,967)	(19,912)
Recoverable taxes	10	(16,070)	(2,921)
Other assets		(6,293)	894
Decrease (increase) in liabilities:			
Trade accounts payable	15	86,094	7,510
Labor and social security obligations		12,722	(339)
Tax payable	17	1,722	(140)
Advances from customers	18	59,737	50,855
Trade accounts payable - related parties	7	(82,984)	-
Other liabilities		(16,767)	(20,847)
		(45,085)	(3,541)
Net cash provided by operations		12,304	7,953
Interest paid	16	(21,800)	(17,452)
Net cash used in operating activities		(9,496)	(9,499)

Superbac Biotechnology Solutions S.A.

Consolidated statements of cash flows for the years ended December 31, 2021 and 2020

(In thousands of reais - R$)

	Note	2021	2020
Cash flow from investing activities			
Acquisition of property, plant and equipment	12	(33,581)	(21,223)
Acquisition of intangible assets	13	(1,764)	(1,613)
Amounts received (paid) in equity		(1,302)	12,095
Financial assets	5	(8,646)	(5,024)
Net cash used in investing activities		(45,293)	(15,765)
Cash flow from financing activities			
Capital increase		1	-
Bonus reserve		8,699	-
Repayment of lease liabilities	19	(3,216)	(1,555)
Proceeds from loans and borrowings	16	133,855	158,952
Repayments of loans and borrowings	16	(92,094)	(185,209)
Net cash from (used in) financing activities		47,245	(27,812)
Net decrease in cash and cash equivalents		(7,544)	(53,076)
Cash and cash equivalents at beginning of year		63,991	117,067
Cash and cash equivalents at end of year		56,447	63,991

The accompanying notes are an integral part of these consolidated financial statements.

Notes to consolidated financial statements as of December 31, 2021 and 2020 and January 01, 2020

(In thousands of Reais - R$, unless otherwise stated)

1. Operations

Superbac Biotechnology Solutions S.A. (the “Company” or “SuperBac”) is a privately-held corporation founded in 1995, with its headquarters located at Rua Santa Monica, 1025, in the city of Cotia, Federal State of São Paulo, which, jointly with its direct and indirect subsidiaries (“Consolidated”), is primarily engaged in producing and selling fertilizers, as well as other supplies in the biotechnological market mainly for the agricultural business in Brazil. Information on the Company’s shareholders is disclosed in Note No. 21.

The Company has research and development units for the production process of the agriculture, sanitation, oil & gas and consumer goods segments.

SuperBac operates in the Brazilian biotechnology market, has over 20 years of experience in this segment and uses only non-pathogenic, non-opportunistic and non-genetically modified microorganisms of natural origin.

The Company is a subsidiary of Bio Genesis Participações S.A (“Bio Genesis”), and has investments in subsidiaries and associates, as disclosed in Note No. 8.

Until December, 2021 Superbac held 76.52% of the equity capital of the subsidiary Superbac Indústria e Comércio de Fertilizantes S.A (“Superbac Fertilizantes”).

On December 6, 2021, the Company entered into a reorganization agreement, in which terms and conditions applicable to a financial and corporate reorganization for Superbac were established, providing for the discharge of certain Bio Genesis debts through the assignment and transfer by Bio Genesis to Superbac of 2,132,131 shares representing 23.48% of Superbac Fertilizantes total and voting capital.

With the realization of the assignment and transfer of these shares, Superbac became the owner of 9,081,969 shares, representing 100% of Superbac Fertilizantes total and voting share capital.

The Company's consolidated financial statements for the years ended December 31, 2021 and 2020 were authorized for issuance in accordance with the resolution of the members of the Board of Executive Officers on July 11, 2022.

Covid-19 Impact

On January 31, 2020, the World Health Organization (WHO) declared the Coronavirus disease (Covid-19) a global health emergency. The outbreak triggered significant decisions by governments and private sector entities, which added to the potential impact of the outbreak increased the degree of uncertainty for economic agents and may generate certain significant impacts on the amounts recognized in the companies' financial statements.

Management constantly assesses the impact of the outbreak on the Company's operations and financial position in order to implement the appropriate measures to mitigate the outbreak impacts on operations and on the consolidated financial statements. Up to the date of authorization of these consolidated financial statements for issue, neither material changes in the mix and volumes of products sold, nor material impact on revenues and margins were identified. The Company understands that there is no increase in its customers' credit risk at this time and maintains financial resources invested in first-tier institutions. In addition, no material change to the financial and operational structure was made as a result of this matter.

2. Summary of significant accounting policies

2.1. Basis of preparation and presentation of consolidated financial statements

The consolidated financial statements ("financial statements") have been prepared and are being presented in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"), and interpretations as issued by IFRS Interpretations Committee ("IFRS IC"). All IFRS issued by the IASB, effective at the time of preparing these financial statements have been applied.

IFRS 1 "First-time adoption of International Financial Reporting Standards" has been applied in preparing these financial statements, since this is the first set of financial statements of the Company in compliance with these standards.

Details of the Company's significant accounting policies are presented in Note No. 2 and the specific notes to the financial statements.

The preparation of financial statements requires the use of certain accounting estimates and also the exercise of judgment by the Company's management in the process of applying accounting policies. Those areas involving a higher degree of judgment or complexity, or where assumptions and estimates are significant to the financial statements, are disclosed in Note No. 3.

The financial statements were prepared based on certain valuation assumptions used in the accounting estimates. The accounting estimates involved in the preparation of the financial statements were based on objective and subjective factors, based on the management's judgment to determine the appropriate amount to be recorded in the financial statements. Significant items subject to these estimates and assumptions include the selection of useful lives of fixed assets and their recoverability in operations, valuation of assets at fair value, analysis of credit risk to determine the expected credit losses, financial, as well as the analysis of other risks for the determination of other provisions, including for contingencies.

Management states that all relevant information to the financial statements, and only such information, is being disclosed and corresponds to that used by Management in its operations.

Management assessed the capacity for the Company and its subsidiaries to continue their operations as a going concern and is convinced that they have the necessary resources and know how to develop their businesses continuously in the future and is not aware of any material uncertainties that may cast significant doubt on its continuity.

The financial statements have been prepared on the historical cost basis, except for certain financial instruments which are measured at their fair values, as described in the accounting policies stated further in this financial statement.

2.2. Basis of consolidation

The financial statements comprise the financial statements of the Company and its subsidiaries as of December 31, 2021 and 2020 and January 1st, 2020.

The Company controls an entity when it is exposed or entitled to variable returns from its involvement with the entity and can affect these returns by exercising its power over the entity. The financial statements of subsidiaries are included in the financial statements from the date on which control commences until the date on which control ceases. In the parent company's individual financial statements, financial information from subsidiaries and jointly controlled entities, as well as associates, are recognized using the equity method.

Generally, there is a presumption that a majority in the voting rights results in control. When this presumption isn’t observed and when the Company has less than a majority of the voting or similar rights of an investee, the Company considers all relevant facts and circumstances to assess whether it has power over an investee, including:

- The contractual arrangement(s) with the other voting holders of the investee;
- Rights arising from other contractual arrangements; and
- The Company's voting rights and potential voting rights.

The Company re-assesses whether it continues to have control over an investee if facts and circumstances indicate that there have been changes in one or more of the elements of control. The consolidation of a subsidiary begins when the Company obtains control over the subsidiary and ends when it ceases to exercise control. Assets, liabilities, income and expenses of a subsidiary acquired during the year are included in the financial statements from the date the Company obtains control until the date it ceases to exercise control over the subsidiary.

The profit or loss and each component of other comprehensive income are attributed to the Company's controlling and non-controlling shareholders.

Profit or loss and each component of other comprehensive income (OCI) are attributed to the Company's controlling and non-controlling shareholders, even if this results in the non-controlling shareholders having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to align their accounting policies with the Company's accounting policies. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Changes in a subsidiary's ownership interest that do not result in loss of control are accounted for as equity transactions.

Upon loss of control, the Company derecognizes related assets, liabilities, non-controlling interest and other components of equity. Any gain or loss arising from the loss of control is recognized in profit or loss. If the Company retains any interest in the former subsidiary, then this interest is measured at its fair value at the date when control is lost.

Transactions eliminated on consolidation

Balances and transactions between related parties and any unrealized revenues or expenses derived from transactions of this nature are eliminated. Unrealized gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Company's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment loss.

The financial statements were prepared in accordance with the consolidation criteria established by IFRS, comprising the financial statements of the Company and its direct and indirect subsidiaries, as shown below:

	Equity interest %			
Subsidiaries and associates	**2021**	**2020**	**January 1, 2020**	**Type of Control**
Sarup HE Participações Ltda. **(a)**	-	-	50%	Joint venture
Theriot Capital Group Inc. **(b)**	55%	55%	55%	Associate
Superbac Ind. e Com. Fertilizantes S.A. **(c)**	100%	76.52%	76.52%	Control

(a) The main activity consists of managing aircraft for commercial purposes. In 2020, the Company proceeded with the sale of Sarup HE Participações Ltda. investment by strategic decision of the Management;

(b) The main activity consists of manufacturing agrobiological products. The company was incorporated in Panama and operates in Panama City; and

(c) The main activity consists of manufacturing fertilizers. The company was incorporated in Brazil and operates in the city of Mandaguari. It was previously named Minorgan.

In preparing the financial statements, the financial statements as of the same reporting date and consistent with the accounting practices described in Note No. 2 were used.

2.3. Functional and presentation currency

The accounting records included in the financial statements of each of the Company's subsidiaries are measured using the currency of the principal of the economic environment in which each subsidiary operates ("the functional currency"). The financial statements are presented in R$ (reais), which is the Company's functional and presentation currency.

2.4. Significant accounting policies

The Company has applied the accounting policies described below consistently for all years presented in these financial statements, unless otherwise stated.

2.4.1. Investments in associates and joint ventures

An associate is an entity over which the Company has significant influence and that is neither a subsidiary nor an interest in a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of the investee, without exercising individual control or joint control over those policies.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have equal rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

The considerations made in determining significant influence or joint control are similar to those required to determine control over subsidiaries. The Company's investment in its associate and joint venture are accounted for using the equity method.

Under the equity method, the investment in an associate or joint venture is initially recognized at cost and is subsequently classified using the equity method. The carrying amount of the investment is adjusted to recognize changes in the Company's share of net assets of the associate or joint venture since the acquisition date. Goodwill related to the associate or joint venture is included in the carrying amount of the investment and is not separately tested for impairment.

The income statement reflects the Company's share of the results of operations of the associate or joint venture. Any change in OCI of these investees is presented as part of the Company's OCI. In addition, where there has been a change recognized directly in the equity of the associate or joint venture, the Company recognizes its share of any changes, when applicable, in the statement of changes in equity. Unrealized gains and losses resulting from transactions between the Company and the associate or joint venture are eliminated to the extent of the interest in the associate or joint venture.

The aggregate of the Company's share of profit or loss of an associate and a joint venture is shown in the income statement, outside operating profit and represents profit or loss after tax and non-controlling interests in the subsidiaries of the associate or joint venture.

The financial statements of the associate or joint venture are prepared for the same reporting period as the Company. When necessary, adjustments are made to bring the accounting policies in line with those of the Company.

After application of the equity method, the Company determines whether it is necessary to recognize an impairment loss on its investment in its associate or joint venture. At each reporting date, the Company determines whether there is objective evidence that the investment in the associate or joint venture is impaired. If there is such evidence, the Company calculates the amount of the impairment as the difference between the recoverable amount of the associate or joint venture and its carrying amount, and then recognizes the loss within in the income statement.

Upon loss of significant influence over the associate or of joint control over the joint venture, the Company measures and recognizes any retained investment at its fair value. Any difference between the carrying amount of the associate or joint venture upon loss of significant influence or joint control and the fair value of the retained investment and the proceeds from the disposal is recognized in profit or loss.

2.4.2. Current versus non-current classification

The Company presents assets and liabilities in the statement of financial position based on current and non-current classification. An asset is classified as current when:

- It is expected to be realized or is intended to be sold or consumed in the normal operating cycle;
- It is held primarily for trading;
- It is expected to be realized within twelve months after the reporting period; or
- Cash or cash equivalents, unless there are restrictions on its exchange, or is used to settle a liability for at least twelve months after the reporting period.

All other assets are classified as non-current.

A liability is classified as current when:

- It is expected to be settled in the normal operating cycle;
- It is held primarily for trading;
- It is due to be settled within twelve months after the reporting period; or
- There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period.

The terms of a liability that may, by option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification. The Company classifies all other liabilities in non-current.

Deferred tax assets and liabilities are classified in non-current assets and liabilities.

2.4.3. Fair value measurement

The Company measures financial instruments and non-financial assets at fair value at each reporting date.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an unforced transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability will occur:

- In the principal market for the asset or liability; or
- In the absence of a principal market, in the most advantageous market for the asset or liability.

The main or most advantageous market must be accessible by the Company.

The fair value of an asset or liability is measured based on the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their best economic interest.

A fair value measurement of a non-financial asset takes into account a market's participant ability to generate economic benefits by using the asset in its best use or by selling it to another market participant that would use the asset in its best use.

The Company uses valuation techniques that are appropriate in the circumstances and for which sufficient data is available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 – Quoted (unadjusted) market prices in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2 – Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable; and
- Level 3 – Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities recognized in the financial statements at fair value on a recurring basis, the Company determines whether transfers have occurred between levels of the hierarchy by re-assessing the categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

For purposes of fair value disclosures, the Company has determined classes of assets and liabilities based on the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy, as explained above. Fair value related disclosures for financial instruments and non-financial assets that are measured at fair value or where fair values are disclosed, are summarized in the respective notes.

2.4.4. Revenue

Revenue comprises the fair value of the consideration received or receivable for the sale of goods or services in the ordinary course of the Company's activities.

The Company applies the model of IFRS 15 to measure and account for revenue from contracts with clients, which establishes the recognition of revenue in an amount that reflects the Company's expected consideration in exchange for the transfer of good or services to a client. The model is based on five steps:

Operating revenue is recognized as soon as all of the conditions below are met:

- Identification of the contract for the sale of goods or provision of services;
- Identification of performance obligations;
- Determination of the contract value;
- Determinations of the amount allocated to each of the performance obligations included in the contract; and
- Revenue recognition over time or when performance obligations are completed.

Recognition of revenue occurs when or as the Company satisfies a performance obligation which consists of transforming the significant risks and benefits of ownership when transferring the good or service to the customer.

Sale of goods

Revenue from the sale of fertilizers and other products is measured as the amount of consideration the Company expects to be entitled to in exchange for those goods. It is recognized when the performance obligation is satisfied, when the control of the goods is transferred to the customer, usually upon physical delivery of the product to the location agreed upon with the customer

The Company determines the sales price analyzing the cost of production and adding an strategic profit margin. A pricing table is elaborated, monitored and updated in a regular basis.

Rendering of Services

Revenue are recognized when services are rendered to the customer and the Company satisfies its performance obligation, under the contract at an amount that reflects the consideration to which the Company expects to be entitled in exchange for those services.

Service revenue is predominantly related to the biological analysis of soils and other materials, whereby the customer sends material to the company, the company performs its analysis, and returns the material back to the customer.

Contract liabilities

A contract liability is recognized if a payment is received or a payment is due (whichever comes first) from a customer before the Company transfers the related goods or services. Contract liabilities are recognized as revenue when the Company has fulfilled its obligations under the contract (the transfer of control of the goods or services to the customer).

Cost for obtaining a contract

The Company pays sales commission to its dealers for each contract they obtain for fertilizer sales. Commissions are recognized immediately in expenses and included as part of employee benefits as the amortization period of the asset is one year or less.

2.4.5. Income and social contribution taxes

Current taxes

Current tax assets and liabilities for the current and previous years are measured at the amount expected to be recovered from or paid to the taxation authorities using the tax rates that are in use by the end of the reporting period and generates taxable income.

The Company is subject to the quarterly taxable income based on accounting records regime.

The annual taxable income based on accounting records regime comprises both corporate income tax (“IRPJ”) and social contribution on net profit (“CSLL”). IRPJ is calculated on taxable profit at a rate of 15%, plus a 10% surtax on taxable profit exceeding R$60 each quarter, whereas CSLL is computed at a rate of 9% on taxable profit, both recognized on an accrual basis. Therefore, additions to accounting profit of temporarily nondeductible expenses or exclusions of temporarily nontaxable income, considered for calculation of the current taxable profit, generate deferred tax assets or liabilities.

Prepaid or recoverable amounts are stated in current or non-current assets, based on their estimated realization.

Current tax expense is the estimated tax payable or receivable on the taxable profit or loss for the year and any adjustment to taxes payable in relation to prior years. The amount of current tax payable or receivable is recognized in the balance sheet as a tax asset or liability for the best estimate of the expected amount of taxes to be paid or received that reflects the uncertainties related to their determination, if any. It is measured based on tax rates enacted at the reporting date.

From time to time, management reviews the tax position in situations in which interpretation of tax regulation is required and records provisions, when appropriate.

Deferred income and social contribution taxes

Deferred income and social contribution taxes ("Deferred tax") are recognized on temporary differences, at the end of each reporting period, between assets and liabilities recognized in

the financial statements and corresponding tax bases used in computing taxable income, including income and social contribution tax losses, where applicable. Deferred tax liabilities are generally recognized on all taxable temporary differences, and deferred tax assets are recognized on all deductible temporary differences only when the Company is likely to recognize future taxable profit at an amount sufficient for such deductible temporary differences to be utilized. Deferred tax assets or liabilities are not recognized on temporary differences resulting from initial recognition (except for business combination) of assets and liabilities in a transaction that does not affect taxable profit or accounting profit. In addition, deferred tax liabilities are not recognized for taxable temporary differences arising from the initial recognition of goodwill.

Deferred tax assets and liabilities are measured at the rates applicable for the period when the liability is expected to be settled or the asset realized, based on tax rates provided for in the tax legislation in force at the end of each year, or when a new legislation has been substantially approved. The measurement of deferred taxes in assets and liabilities reflects the tax consequences that would result, as expected by the Company, at the end of each year, in recovery or settlement of the carrying amount of such assets and liabilities.

The balance of deferred tax assets is reviewed at the end of each reporting period and, when future taxable profits may no longer be available to allow recovering the whole asset or a portion thereof, the asset balance is adjusted for the amount expected to be recovered.

Deferred tax assets and liabilities are offset if a legally enforceable offset right exists, and when they refer to taxes levied by the same taxation authority on the same taxable entity.

Sales tax

Expenses and assets are recognized net of the amount of sales tax, except:

- When sales tax incurred on a purchase of assets or services is not recoverable, sales tax is recognized as part of the acquisition cost of the asset or as part of the expense item, as the case may be; and
- When accounts receivable and payable are stated with the amount of sales tax included.

The net amount of sales tax recoverable, or payable to, the tax authority is included as part of receivables or payables in the balance sheet.

2.4.6. Foreign currency

In preparing these financial statements, the transactions in foreign currency, i.e. any currency other than the functional currency, are recorded at the exchange rates prevailing at each transaction date. At the end of each reporting period, monetary items in foreign currency are translated at the rates prevailing at the reporting date. Non-monetary items in foreign currency recognized at fair value are translated using the exchange rate prevailing at the date when the fair value is determined.

Non-monetary items that are measured at the historical cost in a foreign currency must be translated into the functional currency using the exchange rate prevailing at the transaction date.

Foreign exchange gains and losses on monetary assets and liabilities denominated in foreign currency are recognized in profit or loss for the year.

2.4.7. Property, plant and equipment

Recognition and measurement

Property, plant and equipment items are measured at historical acquisition, buildup or construction cost (including interest and other finance charges), less accumulated depreciation and accumulated impairment losses, when applicable.

Cost includes expenses directly attributable to the acquisition of an asset. The cost of self-constructed assets includes materials and direct labor, any other costs attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, the costs of dismantling and restoring the site where the asset is located and borrowing costs on qualifying assets.

Gains or losses on disposal of a property, plant and equipment item are determined by comparing the disposal proceeds with the carrying amount of the asset and are recognized on a net basis under “Other revenues” in profit or loss.

Subsequent costs

The cost of replacing a component of property, plant and equipment is recognized in the carrying amount of the item when it is likely that the economic benefits embodied therein will flow to the Company and its subsidiaries and its cost may be reliably measured. The costs of day-to-day maintenance of property, plant and equipment are recognized in profit or loss as incurred.

Subsequent costs are included in the residual value of the property, plant and equipment item or recognized as a specific item, as appropriate, only if the economic benefits associated with those items are probable and the amounts can be measured reliably. The residual value of the replaced item is derecognized. All other repair and maintenance costs are recognized directly in profit or loss, as incurred.

Depreciation

Accumulated depreciation is recorded in profit or loss for the year using the straight-line method at the rates presented in Note No. 12, which take into consideration the economic useful lives of the assets and their recoverable amount.

The residual values, useful lives and depreciation methods of assets are reviewed and adjusted, if necessary, whenever there is an indication of significant change since the last reporting date.

2.4.8. Leases

The Company assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Company as a lessee

The Company applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Company recognizes lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

i) Right-of-use assets

The Company recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets.

If the ownership of the leased asset is transferred to the Company at the end of the lease term or if the cost reflects exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

Right-of-use assets are also subject to depreciation and impairment, as described in Note No. 2.4.13 - Impairment of non-financial assets.

ii) Lease liabilities

At the commencement date of the lease, the Company recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees.

The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Company and payments of penalties for terminating the lease, if the lease term is shortened through the company exercising the option to terminate the lease.

In calculating the present value of lease payments, the Company uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable.

After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

The company's lease liabilities are included in loans and borrowings.

iii) Short-term leases and leases of low-value assets

The Company applies the short-term lease recognition exemption to its short-term leases of machinery and equipment (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered to be low value. Lease payments on short-term leases and leases of low-value assets are recognized as expense on a straight-line basis over the lease term.

2.4.9. Investment properties

Investment properties are measured initially at cost, including transaction costs. The carrying amount includes replacement cost of part of an investment property existing at the time when such cost is incurred, provided that recognition criteria are met; excluding daily service costs of such investment property. Subsequent to initial recognition, investment properties are stated at fair value, which reflects market conditions at the reporting date.

Gains or losses arising from changes in the fair values of investment properties are included in profit or loss in the period in which they arise.

Investment properties are derecognized either when they have been disposed of (i.e., at the date the recipient obtains control) or when they are permanently withdrawn from use and no future economic benefit is expected from their disposal. The difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss in the period of derecognition. In determining the amount of consideration from the derecognition of investment property the Company considers the effects of variable consideration, existence of a significant financing component, non-cash consideration, and consideration payable to the buyer (if any).

Transfers are made to (or from) investment property only when there is a change in use. If owner-occupied property becomes an investment property, the Company accounts for such property in accordance with the policy stated under property, plant and equipment up to the date of change in use.

2.4.10. Intangible assets

Intangible assets acquired separately

Finite-lived intangible assets acquired separately are recorded at cost, less amortization and impairment losses.

The useful life of intangible assets is assessed as finite or indefinite.

Intangible assets with finite life are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired.

Amortization is recognized using the straight-line method based on the estimated useful life of the assets. The estimated useful life and amortization method are reviewed at the end of each reporting period and the effect of any changes in estimates is accounted for prospectively.

Indefinite-lived intangible assets acquired separately are recorded at cost, less impairment losses, which are measured on an annual basis.

Intangible assets with indefinite useful lives are not amortized, but are tested annually for impairment, either individually or at the cash-generating unit level. The assessment of indefinite useful life is reviewed annually to determine whether this assessment continues to be justified. If not, the change in useful life from indefinite to definite is made on a prospective basis.

An intangible asset is derecognized upon disposal (i.e. the date on which the beneficiary obtains control of the related asset) or when no future economic benefits are expected from its use or sale.

Gains and losses arising upon derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and included in profit or loss.

Research and development costs

Research costs are expensed as incurred and development expenditures relating to technological innovations of existing products are capitalized when the Company can demonstrate:

- The technical feasibility of completing the intangible asset so that the asset will be available for use or sale;
- Its intention and ability to complete the intangible asset and use or sell the asset;
- How the asset will generate future economic benefits;
- The availability of technical, financial and other resources to complete the asset development and use or sell the asset; and
- The ability to measure reliably the expenditure attributable to the intangible asset during development.

Following initial recognition, the asset is carried at cost less any accumulated amortization and accumulated impairment losses. Amortization of the asset begins when development is complete and the asset is available for use. It is amortized over the period of expected future benefit. During the period of development, the asset is tested for impairment annually.

2.4.11. Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.

The financial instruments held by the Company and its subsidiaries are classified in the categories mentioned below, in accordance with management's intention, in compliance with the following accounting criteria:

(i) Financial assets

Financial assets are classified, on initial recognition, as subsequently measured at amortized cost, at fair value through other comprehensive income and at fair value through profit or loss. The classification of financial assets upon initial recognition depends on the characteristics of the contractual cash flows of the financial asset and the Company's business model for managing these financial assets.

Financial assets are presented as current assets, except for those with maturities greater than 12 months after the reporting date.

All regular purchases or sales of financial assets are recognized and written off on the trade date. Regular purchases or sales correspond to purchases or sales of financial assets that require the delivery of assets within the period established by standard or market practice.

Financial instrument assets are initially recognized at fair value plus transaction costs for all financial assets not classified as at fair value through profit or loss.

All recognized financial assets are subsequently measured, in full, at amortized cost or fair value, depending on the classification of the financial assets.

Financial assets measured at amortized cost

These assets are subsequently measured at amortized cost using the effective interest method. Amortized cost is reduced by impairment losses.

Interest income, foreign exchange gains and losses and impairment losses are recognized in the income statement.

The Company's financial assets at amortized cost include trade receivables and receivables from related parties, included in non-current assets.

Financial assets measured at fair value through profit or loss

A financial asset is classified at fair value through profit or loss when classified as held for trading and designated as such upon initial recognition. Financial assets are classified at fair value through profit or loss if the Company manages these investments and takes buying and selling decisions based on its fair values, according to the Company's documented risk management and investment strategy. Transaction costs are recognized in profit or loss as incurred. Financial assets recorded at fair value through profit or loss are measured at fair value, and any changes in the fair value of such assets, which take into consideration any gain, are recognized in profit or loss for the period.

Derecognition

The Company derecognizes a financial asset (or, when applicable, a portion of a financial asset or part of a group of similar financial assets) when:

- The rights to receive cash flows from the asset have expired; or
- The Company has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either **(a)** the Company has transferred substantially all the risks and rewards of the asset, or **(b)** the Company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

Impairment of financial assets

The Company recognizes an allowance for expected credit losses for all debt instruments not held at fair value through profit or loss. Expected credit losses are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Company expects to receive, discounted at an approximation of the original effective interest rate.
The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

The impairment methodology applied depends on whether there has been a significant increase in credit risk. For trade receivables, the Company applies the simplified approach as permitted by IFRS 9 and therefore recognizes lifetime expected losses from the initial recognition of receivables.

The Company considers a financial asset to be in default when contractual payments are 180 days past due. However, in certain cases, the Company may also consider a financial asset to be in default when internal or external information indicates that it is unlikely to collect all contractual amounts outstanding before considering any credit enhancements held by the Company.

A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Additional disclosures regarding the impairment of financial assets are also provided in the following notes:

- Trade Accounts Receivable – Note No. 6; and
- Financial Instruments – Note No. 27

(ii) Financial liabilities

Financial liabilities are classified, upon initial recognition, as financial liabilities at fair value through profit or loss or financial liabilities at amortized cost. All financial liabilities are initially measured at fair value, plus or minus, in the case of financial liabilities that are not at fair value through profit or loss, transaction costs that are directly attributable to the issue of the financial liability. The Company's financial liabilities include trade and other payables, loans and borrowings and derivative financial instruments.

All financial liabilities are subsequently measured at amortized cost using the effective interest method or at fair value through profit or loss.

Financial liabilities measured at fair value through profit or loss

Financial liabilities are classified at fair value through profit or loss when the financial liability is **(i)** a contingent consideration of a buyer in a business combination; **(ii)** held for trading; or **(iii)** designated at fair value through profit or loss.

Financial liabilities at fair value through profit or loss are presented at fair value, and any gains or losses arising from changes in fair value are recognized in profit or loss to the extent that they are not part of a designated hedging relationship. The net gain or loss recognized in profit or loss includes any interest paid on financial liabilities.

However, for financial liabilities designated at fair value through profit or loss, the amount of changes in the fair value of a financial liability attributable to changes in credit risk of that liability is recognized in other comprehensive income, unless the recognition of the effects of changes in credit risk of the liability in other comprehensive income would result in or increase the accounting mismatch in profit or loss. The remaining amount of the change in fair value of the liability is recognized in profit or loss. Changes in fair value attributable to the credit risk of the financial liability recognized in other comprehensive income are not subsequently recycled to profit or loss; they are otherwise transferred to retained earnings when the financial liability is derecognized.

Financial liabilities at amortized cost

After initial recognition, other financial liabilities subject to interest are subsequently measured at amortized cost using the effective interest rate method. Gains and losses are recognized in profit or loss when the liabilities are derecognized as well as through the effective interest rate amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate method. Amortization under the effective interest rate method is included as a finance cost in the income statement.

Derecognition

A financial liability is derecognized when the obligation under the liability is extinguished, i.e. when the obligation specified in the contract is discharged, cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in the income statement.

Derivative financial instruments and hedge accounting

Derivative financial instruments are accounted for at FVTPL except for derivatives designated as hedging instruments in cash flow hedge relationships, which require a specific accounting treatment. To qualify for hedge accounting, the hedging relationship must meet all of the following requirements:

- There is an economic relationship between the hedged item and the hedging instrument;
- The effect of credit risk does not dominate the value changes that result from that economic relationship, and
- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the entity actually hedges and the quantity of the hedging instrument that the entity actually uses to hedge that quantity of hedged item.

For the reporting periods under review, the Company has designated certain forward currency contracts as hedging instruments in cash flow hedge relationships. These arrangements have been entered into to mitigate foreign currency exchange risk arising from certain transactions of raw material purchases and machinery financing denominated in foreign currency.

All derivative financial instruments used for hedge accounting are recognised initially at fair value and reported subsequently at fair value in the consolidated statement of financial position.

To the extent that the hedge is effective, changes in the fair value of derivatives designated as hedging instruments in cash flow hedges are recognised in other comprehensive income and included within the cash flow hedge reserve in equity. Any ineffectiveness in the hedge relationship is recognised immediately in profit or loss.

The Company holds derivative financial instruments to hedge risks related to foreign currencies and are not speculative in nature. The derivative financial instruments held by the Company are mostly comprised of non-deliverable forward (NDF) contracts.

Until the period ended December 31, 2020 the company did not adopt the hedge accounting policy, therefore the changes in the fair value of any of these derivative instruments were immediately recognized in profit or loss, under "Financial Result".

In the year of 2021, the Company adopted the hedge accounting policy and its effective portion began to be recognized in other comprehensive income, in Equity, as described in Note No. 27, Financial Instruments.

2.4.12. Inventories

Inventory balances are substantially comprised of raw materials, work-in-process, packaging material, finished products and consumables. These are recorded at the average acquisition or production cost, adjusted to the net realizable value, when this is lower than cost. Net realizable value is the selling price in the ordinary course of business less the estimated costs to sell. The production cost reflects the total industrial cost absorption method.

2.4.13. Impairment of non-financial assets

At the end of each year, the Company reassesses the carrying amount of tangible and intangible assets, mainly property, plant and equipment and intangible assets to be held and used in the Company's operations, to periodically test them for impairment or whenever events or changes in circumstances indicate that an asset or group of assets is impaired.

Intangible assets with indefinite useful lives, such as Goodwill, or not yet available for use are tested for impairment at least once a year and whenever there is evidence of impairment.

The recoverable amount is the higher of the asset's fair value less costs of disposal and its value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimated future cash flows were not adjusted.

If the recoverable amount of an asset (or CGU) is lower than its carrying amount, the carrying amount of this asset (or CGU) is written down to its recoverable amount. Impairment loss is recognized immediately in profit or loss.

The fair value less costs of disposal is determined, whenever possible, based on recent market transactions between knowledgeable and interested parties with similar assets. In the absence of such observable transactions, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

When an impairment loss is subsequently reversed, the carrying amount of the asset (or CGU) increases to the reviewed estimated recoverable amount, if it does not exceed the carrying amount that would have been determined if no impairment loss had been recognized for the asset (or CGU) in prior years. The reversal of impairment loss is immediately recognized in profit or loss.

As of December 31, 2021 and 2020, no events were identified that indicated the need to recognize a provision for impairment losses and, therefore, no provision for impairment losses was recognized in the financial statements for the years then ended.

2.4.14. Cash and cash equivalents

Cash and cash equivalents include balances in bank checking accounts and highly liquid short-term deposits, maturing within three months from the contract date and subject to an insignificant risk of changes in value. These balances are held for the purpose of meeting short-term cash commitments rather than for investment or any other purposes.

2.4.15. Preferred shares

The preferred shares are separated into liability and equity components, based on the terms of the contract.

Upon issuance of preferred shares, the fair value of the liability component is determined using a market rate for an equivalent non-convertible instrument. This amount is classified as a financial liability instrument measured at amortized cost (net of transaction costs) until extinguished upon conversion or redemption.

The remainder of the proceeds are allocated to the conversion option that is recognized and included in equity. Transaction costs are deducted from equity, net of associated income tax. The carrying amount of the conversion option is not remeasured in subsequent years.

Transaction costs are apportioned between the liability and equity components of the convertible preference shares, based on the allocation of proceeds to the liability and equity components when the instruments are initially recognized.

2.4.16. Treasury shares

Own equity instruments that are reacquired (treasury shares) are recognized at cost and deducted from equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity Instruments. Any difference between the carrying amount and the consideration, if reissued, is recognized in the share premium.

2.4.17. Provisions

General

Provisions are recognized for present obligations (legal or constructive) arising from past events whose amounts can be reliably estimated and where settlement is deemed probable.

The provision recognized is the best estimate of the consideration required to settle the obligation at each year end, considering risks and uncertainties relating to the obligation. When a provision is measured based on the cash flows estimated to settle the obligations, its carrying amount corresponds to the present value of those cash flows (when the effect of the time value of money is relevant).

When some or all economic benefits required to settle a provision are expected to be recovered from a third party, an asset is recognized if, and only if, the reimbursement is virtually certain and the amount can be measured reliably.

The expense relating to any provision is presented in the income statement, net of any reimbursement

Provisions for tax, civil and labor risks

Provisions are recognized for all contingencies related to legal proceedings for which it is probable that an outflow of resources will be required to settle the contingency/obligation and a reasonable estimate can be made.

The assessment of the probability of loss includes the assessment of available evidence, the hierarchy of laws, available jurisprudence, most recent court decisions and their relevance in the legal system, as well as the assessment of external legal advisors.

Provisions are reassessed and adjusted to consider changes in circumstances, such as applicable statute of limitations, findings from tax inspections, or additional exposures identified based on new issues or court decisions.

2.4.18. Share-based payments

Some employees (senior executives) of the Company receive remuneration in the form of shares, whereby the employees render services as consideration for equity instruments (equity-settled transactions).

These payments are settled in equity. Therefore, an expense is recognized every year based on the fair value of the equity-settled transactions calculated at the grant date, against equity. The fair value is expensed over the period until the vesting date with recognition of the corresponding equity amount. Fair value is determined using the Monte Carlo pricing model for class “A” stock options and Black &, Scholes and Merton pricing model for class “B” stock options. See Note No. 21.1 Share-based payments for further information.

2.5. First-time adoption of IFRS

These financial statements, for the year ended December 31, 2021, are the first that the Company has prepared in accordance with IFRS. For periods up to and including December 31, 2020, the Company prepared its financial statements in accordance with local accounting principles generally accepted in Brazil (Local GAAP).

Accordingly, the Company has prepared financial statements in accordance with IFRS applicable until December 31, 2021, together with comparative period data for the year ended December 31, 2020, as described in the summary of significant accounting policies. In preparing the financial statements, the Company's opening statement of financial position was prepared as at January 1, 2020, the Company's date of transition to IFRS. This note explains the principal adjustments made by the Company in restating its Local GAAP financial statements, including the statement of financial position as at January 1, 2020 and the financial statements as of, and for, the year ended December 31, 2020

The Company has applied the following application exemptions:

- The Company did not apply IAS 21 The Effects of Changes in Foreign Exchange Rates retrospectively to fair value adjustments and goodwill from business combinations that occurred before the date of transition to IFRS. Such fair value adjustments and goodwill are treated as assets and liabilities of the parent rather than as assets and liabilities of the acquiree.

Therefore, those assets and liabilities are already expressed in the functional currency of the parent company or are non-monetary foreign currency items and no further translation differences occur.

Estimates:

The estimates at January 1, 2020 and December 31, 2021 are consistent with those made for the same dates in accordance with Local GAAP (after adjustments to reflect any differences in accounting policies) with the exception of items where the application of Local GAAP did not require estimation.

The estimates used by the Company to present these amounts in accordance with IFRS reflect conditions on January 1, 2021, the date of transition to IFRS and on December 31, 2021.

Upon adoption there was no material impact on our consolidated financial position.

2.6. Financial income and expenses

The Company's financial income and expenses comprise:

- Interest income and expenses;
- Discounts granted and obtained;
- Bank fees and other expenses;
- Foreign exchange gains/losses on financial assets and liabilities; and
- Net gains/losses on financial assets measured at fair value through profit or loss;

Financial income and expenses are recognized on an accrual basis using the effective interest rate method.

2.7. Present value adjustment of assets and liabilities

Non-current monetary assets and liabilities are monetarily restated, and therefore adjusted to their present value. The present value adjustment of current monetary assets and liabilities is calculated and only recorded when the effect is considered significant in relation to the financial statements as a whole. For reporting and materiality determination purposes, the present value adjustment is calculated by using contractual cash flows and the explicit, sometimes implicit, interest rate of the corresponding assets and liabilities.

When the adjustment to present value on receivables occurs, the calculated value reduces the balance of accounts receivable, as well as sales revenue, and the reversal of the adjustment is made according to the fluency of terms in financial revenue.

When the adjustment to present value occurs on accounts payable, the calculated value reduces inventory and suppliers balances, and the reversal of the adjustment occurs according to the fluency of the terms under "Financial expenses".

2.8. Trade accounts receivable

Trade accounts receivable correspond to amounts receivable from customers for the sale of products in the ordinary course of the Company’s and its subsidiary’s activities, net of the present value adjustment, calculated based on rates established by management, and net of the expected credit losses, which is recognized when it is expected that the Company and its subsidiary will not be able to receive all amounts due in accordance with the terms of these accounts receivable, based on risk analysis and taking into account the historical performance of customers (expected loss). Furthermore, the Company chose to separate the financial component from the credit risk component when allocating the respective present value adjustment between finance income and operating expenses, respectively.

If the collection period is equivalent to one year or less, trade accounts receivable are classified in current assets; otherwise they are presented in non-current assets.

2.9. Earnings (loss) per share

The Company calculates basic earnings per share based on the weighted average number of common shares outstanding in the year corresponding to profit or loss. Diluted earnings per share are calculated by adjusting the weighted average number of common shares outstanding, assuming the conversion of all dilutive potential shares, according to IAS 33 - Earnings per share.

2.10. Trade accounts payable

Trade accounts payable are obligations payable for goods or services that have been acquired from suppliers in the ordinary course of business and are classified as current liabilities if payment is due within one year or less. Otherwise, trade accounts payable are stated as non-current liabilities.

These accounts payable are initially recognized at fair value and subsequently measured at amortized cost using the effective interest rate method. In calculating the present value of trade accounts payable, the Company used as a reference the risk-free rates provided by official sources.

Eventually the company operates with confirming operations, where it postpones the payment of its invoices in a short term but optimizes its cash flow.

2.11. Adoption of new and revised International Financial Reporting Standards (IFRS)

During the year of 2021, the IASB issued the revision of the rules below, already in force in the year of 2021. Some accounting pronouncements that became effective as of January 1, 2021, having adopted and without physical impact on the Company's results and financial position were as follows:

- IFRS 16 – Leases;
- IFRS 4 - Insurance Contracts;
- IFRS 3 - Business Combination;
- IFRS 37 - Provisions, Contingent Liabilities and Contingent Assets;
- IAS 16 - Fixed Assets; IFRS 7 - Financial Instruments: Disclosures;
- IFRS 9 Financial Instruments - Financial Instruments.

Additionally, the IASB is preparing new pronouncements and revisions of existing pronouncements, which will become effective only on January 1, 2023, as follows:

- IAS 1 - Presentation of Financial Statements
- IAS 8 - Accounting Policies, Estimate Change and Error Correction
- IFRS 17 - Insurance Contracts

3. Significant accounting judgments, estimates and assumptions

The areas that require a higher level of judgment and have greater complexity, as well as those in which assumptions and estimates are significant for the financial statements are disclosed as follows:

a) Impairment of non-financial assets

Impairment exists when the carrying value of an asset or cash generating unit exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use.

The fair value less costs of disposal calculation is based on available data from binding sales transactions for similar assets or market prices less incremental costs of disposing of the asset.

Management reviews the net carrying amount of assets on an annual basis and/or whenever a specific event occurs, with the purpose of assessing events or changes in economic, operational or technological circumstances that may indicate depreciation or impairment loss. When such evidence is found and the net carrying amount exceeds the recoverable amount, a provision for impairment is recorded adjusting the net carrying amount to the recoverable amount. These losses are recognized in profit or loss for the year as identified.

b) Fair value measurement of financial instruments

When the fair values of financial assets and financial liabilities recorded in the statement of financial position cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including the discounted cash flow model.

The inputs considered in these models are taken from observable markets where possible.

In situations where these inputs cannot be derived from observable markets, a degree of judgment is required to establish their fair values. The associated judgments include assessment of liquidity risk, credit risk and volatility. Changes in assumptions regarding these factors could affect the fair value of financial instruments. Additional information about the assumptions used in measuring fair values is included in the note of financial instruments.

c) Provisions for tax, civil and labor contingencies

The Company recognizes a provision for civil and labor proceedings. The assessment of the likelihood of loss includes assessment of available evidence, the hierarchy of laws, available case law, the most recent court decisions and their relevance in the legal system, as well as the opinion of external legal advisors. The provisions are reassessed and adjusted considering changes in existing circumstances, such as the applicable statutes of limitation, tax inspection conclusions, or additional exposures identified based on new matters or court decisions.

Expected credit losses

Allowances for losses on financial assets are based on assumptions about default risk and expected loss rates. The Company applies judgment in establishing these assumptions and in selecting the data for the impairment calculation, based on future estimates at the end of each year, the Company's history and existing market conditions. Details of the key assumptions and data used are disclosed in the accounts receivable note.

Recoverability of deferred tax assets

Deferred tax assets are recognized for all unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgment is required to determine the amount of the deferred tax asset that can be recognized, based on the likely timing and level of future taxable profits, together with future tax planning strategies. For further details on deferred taxes, see Note No. 26.

Development costs

Development costs are capitalized in accordance with the accounting policy described in Note No. 2.4.10 on intangible assets. The initial capitalization of costs is based on management's judgment that technological and economic feasibility will generally be confirmed when a product development project has reached a certain point following an established project management model. In determining the amounts to be capitalized, Management makes assumptions about the project's expected future cash generation, discount rates to be applied and the expected period of benefits.

4. Cash and cash equivalents

	2021	**2020**	**January 01, 2020**
Bank accounts	31,327	24,098	17,872
Short-term investment **(a)**	13,551	34,593	87,692
Bank Deposit Certificates (CDB) **(b)**	8,737	5,158	2,846
Investment funds **(c)**	2,832	142	8,657
Total	**56,447**	**63,991**	**117,067**

(a) Financial investments carried out in fixed interest rates and measured at amortized cost with annual remuneration of 65% to 114% of CDI - Interbank Deposit Certificate and immediate liquidity (65% to 80% of CDI as of December 31, 2020 and January 1, 2020).

(b) Financial investments are held in financial institutions and measured at amortized cost, plus income earned up to the balance sheet date. The Company keeps in investment portfolio automatic bank deposit certificate - CBD, with low risk, profitability indexed interest CDI and in 2021 that yielded between 5% to 100% (between 97% to 100% in 2020 and 100% on January 1, 2020).

(c) Investment funds are held in financial institutions and measured at amortized cost, plus income earned through the reporting date. They are kept in an investment portfolio with immediate liquidity and profitability of 100% of the CDI.

5. Financial investments

Financial investments are represented by resources invested in low-risk fixed income assets, and may be subject to change in value, according to the type of asset.

	2021	2020	January 01, 2020
Financial investments **(a)**	17,265	6,393	-
Total	**17,265**	**6,393**	**-**

(a) Investment held in low risk fixed interest rate modality and measured at amortized cost with annual remuneration of 100% of the CDI (100% on December 31, 2020 and January 01, 2020 of the CDI - Interbank Deposit Certificate), without immediate liquidity and due date over than 12 months. These investments are given as collateral for financial liabilities.

6. Trade accounts receivable

a) Breakdown

	2021	2020	January 01, 2020
Domestic customers	165,576	160,190	192,485
Foreign customers	47	47	47
Present value adjustment **(*)**	(9,110)	(7,259)	(6,078)
Expected credit losses	(31,360)	(37,380)	(77,304)
Total	**125,153**	**115,598**	**109,150**

(*) Present value calculated based on the 1.55% on December 31, 2021, and 1.35% on December 31, 2020 rate charged by the Company to its customers.

b) Trade accounts receivable by maturity

The credit risk of trade accounts receivable is due to the possibility of the Company not receiving amounts arising from sales transactions. To mitigate this risk, the Company adopts the practice of analyzing overdue invoices per customer by means of an aging list.

Below is the maturity schedule of the Company's receivables on their respective dates:

Current	**2021**	**2020**	**January 01, 2020**
Up to 30 days	4,108	3,278	2,805
From 31 to 60 days	1,042	1,870	3,587
From 61 to 90 days	1,942	955	2,693
From 91 to 180 days	110,856	99,835	82,360
From 181 to 360 days	18,688	18,304	23,694
Total	**136,636**	**124,242**	**115,139**
Overdue:			
Up to 30 days	67	1,103	595
From 31 to 90 days	154	200	696
From 91 to 180 days	1,846	2,846	482
From 181 to 360 days	174	2,922	17,601
Over 360 days	26,746	28,924	58,019
Total	**28,987**	**35,995**	**77,393**
Total gross carrying amount of receivables	**165,623**	**160,237**	**192,532**

c) Changes in expected credit losses

Balance at January 1, 2020	**(77,304)**
(Recognition)/reversal	(5,897)
Loss from non-collectable customers	8,296
ECL reversal - José Pupin **(i)**	37,525
Balance at December 31, 2020	**(37,380)**
Recognition of the year	(3,629)
Reversal/receipt of the year	9,649
Balance at December 31, 2021	**(31,360)**

The company recognizes an allowance for expected credit losses (ECL) using a prospective analysis, through calculating the percentage of invoices issued that were paid after more than 180 days past due, or never paid. This constitutes the simplified method as allowed by IFRS 9.

(i) In June 2020, the Company's subsidiary Superbac Indústria e Comércio de Fertilizantes S.A. finalized negotiations of the customer's credit balance amounting to R$37,525, which balance was fully allocated as expected credit loss and was written off upon formalization of the negotiation agreement (Note No. 23).

As settlement of the balance, the Company received, as payment, the property called Fazenda Branca, evaluated by an independent contractor at R$48,026 (Note No. 11), of which R$37,525 refers to the credit balance and R$10,475 to price-level restatement (Note No. 25).

7. Balances and transactions with related parties

During its operations, rights and obligations are entered into between related parties, arising from commercial and financial transactions.

Business transactions between related parties, such as the rendering of services, are carried out under specific conditions agreed upon between the parties, which, due to their specific characteristics, are not comparable with similar transactions with unrelated parties.

Financial transactions with related parties arising from loan transactions between key management personnel and other related parties are carried out under specific conditions, and no interest is charged or payment terms are defined in these transactions.

Balances and transactions between the Company, its parent company and other related parties are as follows:

	2021	2020	January 01, 2020
Accounts receivable – non-current			
Shareholders			
Bio Genesis Participações S.A **(a)**	-	79,315	74,661
Luiz Augusto Chacon de Freitas Filho **(b)**	6,515	6,213	5,778
Total	**6,515**	**85,528**	**80,439**
Accounts payable – non-current noncurrent			
Shareholders			
Bio Genesis Participações S.A **(a)**	**70,921**	**-**	**-**
Sommerville Investments B.V. **(c)**	**3,433**	**-**	**-**
Orjen Investments Pte. Ltd. **(d)**	**39,728**	**-**	**-**
Other Related Parties			
Total	**114,082**	**-**	**-**

Transactions that affect profit or loss:

	2021	2020
Financial and administrative expenses		
Subsidiary		
SB Participações and shareholders	-	384
Other related parties		
Green Science Technology Serviços e Participações Ltda.	3,146	3,438
GIC Patrimonial Ltda	214	209
OCHMAN, Real Amadeo Advogados ASSOC	863	304
Total	**4,223**	**4,335**

(a) These refer to loans entered into by Bio Genesis with Superbac:

In March 2017, Bio Gênesis took out an intercompany loan from Superbac in the amount of R$29,460 restated at the CDI rate - Interbank Deposit Certificate, for the repurchase of 2,015,395 registered common shares of minority shareholder Amilar Venture Partners II, which on that date represented 19.63% of Bio Genesis' capital.

In April 2017, Bio Gênesis took out an intercompany loan from Superbac in the amount of R$8,000, restated at the CDI rate, to acquire 1,225,000 registered common shares of Superbac Fertilizantes.

Interest and monetary restatement are recorded under financial revenues and totaled R$1,140 over fiscal year 2020 (R$1,474 on January 01, 2020).

In 2021:

These amounts were offset by the following events:

	2021
Redeemable preference shares	54,516
Interest - CDI rate	416
Earn-out provision	99,716
Interest - CDI rate	762
Accounts receivable	(84,489)
Total accounts payable	**70,921**

(b) Refers to a loan contract conceded on May 5, 2018, in the amount of R$5,055, maturing in 2023, adjusted by the CDI;

(c) Refers to Redeemable preference shares in the total amount of R$ 3,407 restated at CDI rate at the total expense amount of R$ 26; and

(d) Refers to Redeemable preference shares in the total amount of R$ 39,427 restated at CDI rate at the total expense amount of R$ 301.

Key management personnel compensation

Key management personnel consist of the Executive Board and the Management Board.

On December 31, 2021, the total compensation of the Company's statutory officers, including all types of compensation, amounted to R$12,552 (R$9,325 in 2020), recorded under "General and administrative expenses" in profit or loss.

	2021	2020
Short-term benefits		
Salary or pro-labore	7,396	7,366
Bonus	5,156	1,959
Total	**12,552**	**9,325**

Share-based payment is detailed in Note No. 21.1 – Equity - Stock Options.

8. Investments

The composition of investments in subsidiaries and joint ventures presented in the financial statements is as follows:

	Participation					
Associate	**2021**	**2020**	**January 01, 2020**	**2021**	**2020**	**January 01, 2020**
Sarup HE Participações Ltda.	-	-	50%	-	-	4,190
Theriot Capital Group Inc.	55%	55%	55%	2,248	2,248	2,248
(-) Impairment Provision				(2,248)	(2,248)	(2,248)
Total				**-**	**-**	**4,190**

The company had carried out an impairment analysis of Theriot investment. As a result of such assessment, impairment loss was recorded as the Company doesn't expect to receive dividends from this associate.

The relevant information of the subsidiary Superbac Indústria e Comércio de Fertilizantes S.A. is as follows:

Summarised balance sheet	**2021**	**2020**	**2019**
Current Assets			
Cash and cash equivalents	45,202	47,089	70,456
Other current assets	330,719	176,484	167,055
Total Current Assets	**375,921**	**223,573**	**237,511**
Non-current Assets			
Property, plant and equipment	170,545	154,972	145,493
Other non- current assets	160,106	137,788	55,784
Total Non-current Assets	**330,651**	**292,760**	**201,277**
Total Assets	**706,572**	**516,333**	**438,788**
Current Liabilities			
Financial liabilities	235,689	128,995	165,811
Other current liabilities	274,902	102,928	57,183
Total Current Liabilities	**510,591**	**231,923**	**222,994**
Non-current liabilities			
Financial liabilities	33,623	92,469	95,847
Other non- current liabilities	73,088	102,230	64,869
Total Non-current liabilities	**106,711**	**194,699**	**160,716**
Equity	89,270	89,711	55,078
Total Liabilities and Equity	**706,572**	**516,333**	**438,788**

Summarised statements of comprehensive income	2021	2020	2019
Revenue	700,634	330,382	280,042
Finance income	41,164	34,336	6,863
Finance expense	(61,557)	(31,236)	(34,664)
Depreciation and amortization	(15,900)	(12,211)	(3,775)
Income tax (expense) income	5,084	(12,987)	9,813
Profit (loss) for the year	**546**	**34,633**	**(16,771)**
Other Comprehensive income (loss)	(988)	-	-
Total comprehensive income (loss) for the year	**(442)**	**34,633**	**(16,771)**

9. Inventories

	2021	2020	January 01, 2020
Raw material	121,007	33,415	18,537
Work-in-process	16,329	2,865	1,025
Packaging material	2,314	1,302	1,511
Finished product	9,166	5,252	3,809
Consumables	9,231	5,502	2,535
Advance to suppliers	26,806	1,550	2,557
Total	**184,853**	**49,886**	**29,974**

Inventory balances are stated at cost or net realizable value, whichever is lower.

Management estimates that the realization of the inventories will take place in less than one year, therefore the balance is recorded in current assets.

Inventories recognized as an expense during the year ended December 31, 2021 amounted to R$ 561,708 (R$ 263,376 on December 31, 2020). Those expenses were included in cost of sales. No provision is made for losses due to obsolescence and/or damage, as it understands that the products do not lose their shelf life and that inventory turnover is high.

10. Recoverable taxes

	2021	2020	January 01, 2020
PIS and Cofins **(a)**	35,938	23,209	21,555
Prepaid IRPJ and CSLL **(b)**	7,595	7,595	7,595
Withholding Income Tax (IRRF) on short-term investments	4,807	4,460	4,093
State VAT (ICMS)	1,221	218	805
Other recoverable taxes	123	240	194
Total	**49,684**	**35,722**	**34,242**
Current	5,982	4,460	4,517
Non-current	**43,702**	**31,262**	**29,725**

a) PIS and Cofins credits are generated in the purchase of inputs and machinery as well as in the rendering of transportation services, which may be offset against federal taxes and contributions; and

b) The balance of prepaid IRPJ and CSLL refers to amounts prepaid on estimated taxable profit in prior years.

11. Investment properties

	2021	2020	January 01, 2020
Other	-	40	40
Properties held for sale	81,963	77,527	1,023
Total	**81,963**	**77,567**	**1,063**

Changes in properties held for sale are as follows:

	2021	2020	January 01, 2020
Initial Balance	77,567	1,063	1,976
Fair value	5,213	28,543	-
Additions	-	48,026	-
Write-off	(817)	(65)	(913)
Balance at December 31	**81,963**	**77,567**	**1,063**

The Company holds the assets described above as investment properties mainly for the purpose of capital appreciation. The fair value, less costs to sell the business, is greater than the carrying values of the related assets. There are no liabilities associated with the assets held for sale. Accordingly, no impairment loss was recognized for the year ended December 31, 2021, or 2020.

In June 2020, direct subsidiary Superbac Indústria e Comércio de Fertilizantes S.A. received, as payment of receivables from customer José Pupin, the ownership of the property called Fazenda Branca, valued at R$48,026. On December 31, 2020 the fair value was updated in R$ 28,543 (total R$ 76,569). It is noteworthy that this property is given as collateral for a loan obtained with Tricury bank. On December 31, 2021 the fair value was updated in R$ 5,213 (total R$ 81,782).

The property is located in the municipality of Tangará da Serra, Federal State of Mato Grosso, and is available to the Subsidiary for future negotiations for selling. For more details, see Note No. 6 - Accounts Receivable (item c, **(i)**).

12. Property, plant and equipment

		2021							
	Rates	Cost	Accumulated depreciation	Net	Acquisition	Write-offs	Transfers	Depreciation	Net
Land	-	4,801	-	**4,801**	-	-	-	-	**4,801**
Buildings	4%	63,256	(3,242)	**60,014**	1,582	-	14,457	(2,804)	**73,249**
Leasehold improvements	4%	4,097	(743)	**3,354**	102	(28)	-	(400)	**3,028**
Machinery and equipment	12%	57,649	(11,516)	**46,133**	5,215	(3,156)	7,061	(6,450)	**48,803**
Vehicles	20%	4,141	(2,613)	**1,528**	1,738	(988)	-	(669)	**1,609**
Furniture	12%	2,978	(645)	**2,333**	138	(506)	208	(256)	**1,917**
Facilities	10%	3,172	(499)	**2,673**	766	(958)	790	(272)	**2,999**
IT equipment	20%	2,964	(1,817)	**1,147**	479	(148)	-	(440)	**1,038**
Construction in progress **(i)**	-	48,824	-	**48,824**	23,473	(22)	(22,516)	-	**49,759**
Other	-	2,018	(2,008)	**10**	88	(15)	-	(20)	**63**
Total		**193,900**	**(23,083)**	**170,817**	**33,581**	**(5,821)**	**-**	**(11,311)**	**187,266**

		2020							
	Rates	Cost	Accumulated depreciation	Net	Acquisition	Write-offs	Transfers	Depreciation	Net
Land	-	4,801	-	**4,801**	-	-	-	-	**4,801**
Buildings	4%	62,089	(775)	**61,314**	1,015	-	152	(2,467)	**60,014**
Leasehold improvements	4%	3,671	(387)	**3,284**	247	-	179	(356)	**3,354**
Machinery and equipment	12%	45,554	(6,057)	**39,497**	471	(2,486)	14,110	(5,459)	**46,133**
Vehicles	20%	4,259	(2,077)	**2,182**	34	-	(152)	(536)	**1,528**
Furniture	12%	2,681	(373)	**2,308**	84	(9)	222	(272)	**2,333**
Facilities	10%	2,463	(315)	**2,148**	244	(50)	515	(184)	**2,673**
IT equipment	20%	2,728	(1,197)	**1,531**	119	-	117	(620)	**1,147**
Advances to suppliers	-	362	-	**362**	-	-	(362)	-	**-**
Machinery and equipment leased	-	4,196	-	**4,196**	-	-	(4,196)	-	**-**
Construction in progress **(i)**	-	36,589	-	**36,589**	19,004	(2,871)	(3,898)	-	**48,824**
Other	-	8,700	(1,949)	**6,751**	5	-	(6,687)	(59)	**10**
Total		**178,093**	**(13,130)**	**164,963**	**21,223**	**(5,416)**	**-**	**(9,953)**	**170,817**

(i) Construction in progress refers to the Superbac Innovation Center biofactory, a biotechnology Research and Development complex of the Company expected to be activated during 2022.

Management annually assesses the recoverable value of assets with the objective of assessing events or changes in economic, operating or technological circumstances that may indicate deterioration or impairment. If such evidences are identified and the net book value exceeds the recoverable amount, a provision for impairment is recognized, adjusting the net book value to the recoverable amount. The Company and its subsidiaries perform preventive maintenance annually, and its assets and cash generating units are maintained at value in use, since this is the highest in relation to the sale value.

For the years ended December 31, 2021, 2020 and as of January 01, 2020, management has not identified indicators that property, plant and equipment could show signs of impairment.

The estimated useful lives of property, plant and equipment for the current and comparative year are as follows:

	Useful life
Buildings	25
Improvements in third party real estate	25
Machines and equipment	08
Vehicles	05
Furniture and utensils	08
Installations	10
Tools	07
IT equipment	05
Communication equipment	10

Collateral

As of December 31, 2021, the Company and its subsidiaries have property, plant and equipment items pledged as collateral for financial transactions. Such items include the facilities of units "*Fábrica 1*", "*Fábrica 2*" and CPBAC (Bac research center), as well as "*Fazenda Experimental*" (Experimental Farm), all belonging to Superbac Fertilizantes.

	2021	**2020**	**January 01, 2020**
Vehicles	1,592	814	1,558
Machines and equipment	4,784	5,504	6,210
Mortgage (Fábrica 1, Fazenda experimental. and CPBAC)	8,583	9,277	9,973
Total	**14,959**	**15,595**	**17,741**

13. Intangible assets

	2021							
	Rates	Cost	Accumulated amortization	Net	Addition	Write-offs	Amortization	Net
Non-compete agreement **(a)**	25%	3,000	(2,584)	416	-	-	(416)	**-**
Product development	-	5,108	-	5,108	1,686	(243)	(661)	**5,890**
Software	20%	3,554	(1,660)	1,894	78	-	(554)	**1,418**
Total		**11,662**	**(4,244)**	**7,418**	**1,764**	**(243)**	**(1,631)**	**7,308**

	2020								
	Rates	Cost	Accumulated amortization	Net	Addition	Transfers	Write-offs	Amortization	Net
Non-compete agreement **(a)**	25%	3,000	(1,588)	1,412	-	-	-	(996)	**416**
Product development	-	5,337	-	5,337	1,565	(366)	(1,428)	-	**5,108**
Software	20%	3,141	(1,139)	2,002	48	366	(1)	(521)	**1,894**
Total		**11,478**	**(2,727)**	**8,751**	**1,613**	**-**	**(1,429)**	**(1,517)**	**7,418**

(a) With the sale of the shares of Minorgan's minority shareholder, Beatriz Ribeiro, a four-year non-compete agreement was signed for the additional remuneration to the share purchase and sale agreement in the amount to R$3,000 (R$2,007 net of amortization), which was amortized over four years.

14. Right of use

The Company has lease transactions of assets such as properties and machinery.

The average term of property lease contracts is 3 years; however, they may include extension options. The contracts are updated at a rate of 1.35%.

The lease terms are negotiated individually and contain a wide range of terms and conditions, without covenants, and the leased assets cannot be used as collateral for loans.

Depreciation of the right-of-use asset is allocated on a systematic and straight-line basis, based on the contract period. The useful life will be periodically reassessed in order to capture changes in the intention to continue the lease, either due to strategic reasons or to the intention of the lessor.

Considering that both the lessor and the lessee have the right to terminate the contract at any time, subject to the reimbursements provided for therein, the Company understands that these contracts should be treated as lease, recording the expense in profit or loss for the year over the lease term.

Changes in right of use are as follows:

	Right of use
Initial amount	**3,940**
Depreciation	(1,331)
Balance at January 1, 2020	**2,609**
Depreciation	(741)
Write-offs	(875)
Balance at December 31, 2020	**993**
Additions	7,991
Write-offs	(2,958)
Balance at December 31, 2021	**6,026**

The estimated useful life of the assets is 3 years

15. Trade accounts payable

Accounts payable to suppliers are obligations payable for goods or services that were purchased in the normal course of business. The average payment time corresponds to 55 days (54 by December 31, 2021 and 77 by January 01,2020).

	2021	**2020**	**January 01, 2020**
Forfaiting	20,834	-	-
Local suppliers	60,098	29,206	33,375
Foreign suppliers	56,395	22,027	10,348
Total	**137,327**	**51,233**	**43,723**

Information about the Company's liquidity risk management process is included in the explanatory note relating to financial instruments.

16. Borrowings and financing

Below is presented information about the contractual terms of interest-bearing borrowings and financing, which are measured at amortized cost.

	Interest rate	2021	2020	January 01, 2020
Debentures **(a)**	16.79%	64,827	71,675	78,751
Working capital **(b)**	6.29% up to 28.97%	148,127	128,533	141,164
Finame **(c)**	5.50% up to 21.25%	280	869	1,781
Lease	16.46%	4,162	5,096	4,535
BNDES **(d)**	7.00% up to 12.72%	8,781	11,504	14,223
Foreign loans **(e)**	6.06% up to 24.19%	40,401	12,043	24,714
Factoring	16.07% up to 33.49%	16,951	7,755	-
Transactions costs		(5,307)	(3,814)	(3,087)
Total		**278,222**	**233,661**	**262,081**
Current		243,183	132,905	166,086
Non-current		**35,039**	**100,756**	**95,995**

The payment schedule of the long-term installments due is shown below, as of December 31, 2021:

	2023	2024	2025	Total
Working capital **(b)**	25,412	1,019	158	**26,589**
Lease	988	1,194	337	**2,519**
BNDES **(d)**	2,840	2,840	251	**5,931**
Total	**29,240**	**5,053**	**746**	**35,039**

(a) Debentures

On February 6, 2018, Superbac Fertilizantes carried out the 1st (first) private issue of simple debentures, not convertible into shares, unsecured, with additional collateral and security, in a single series, maturing on May 20, 2020 in the total amount of R$50,000, and remuneration of CDI + 5%. The funds obtained by the issuer through the payment of the Debentures were used to promote the supply of fertilizers and/or pesticides to agribusiness producers. The issuance paid off in February 2019.

On October 15, 2018, Superbac Fertilizantes conducted the 2nd (second) issue of single-series, non-privileged, unsecured nonconvertible debentures, with additional security interest and personal guarantee, for public distribution, with restricted distribution efforts, under firm placement guarantee, maturing on June 15, 2023, in the total amount of R$100,000 and yield at CDI + 3.8%. The funds obtained by the issuer through payment of Debentures will be used for the early settlement of working capital financial instruments as well as for the ordinary management of the issuer's business.

In March 17, 2022 the Company obtained the waiver for non-compliance with the contractual obligations contained in the financial restriction clauses (covenants) and has the following due dates:

	2022	2023	2024	2025	Total
Debentures	11,202	14,300	17,875	21,450	**64,827**

(b) Working capital

Loans taken out from financial institutions, under various working capital categories, have variable finance charges, which depends on the Company's risk at the time they are taken out, in line with the Brazilian economic scenario. These loans are intended to meet the Company's operating cash flow needs due to the seasonality of the agribusiness market.

The Company has DCC (Direct Consumer Credit for Vehicles) and BCN (Bank Credit Note), being standard and regular conditions of BCN are indexed to the CDI/Selic, payment of debt, and monthly/quarterly or semiannual interest, depending on the contract.

The Company also has ARCs (Agricultural Receivables Certificates), fixed income securities backed by credit operations in the agribusiness sector with remuneration between 6.80% pa and 11.17% pa.

(c) Finame

Loans obtained through the Financing Fund for the Acquisition of Industrial Machinery and Equipment (FINAME) have financial charges equivalent to fixed rates and the Long-Term Interest Rate (TJLP) plus a fixed spread.

The average amortization term of the contracts in this modality is 12 months, with interest paid monthly and other conditions as defined in the contracts.

(d) Inova Agro Project - BNDES

Loans obtained from BNDES are intended to **(i)** finance the project for "Construction of a biotechnology research center for agribusiness and a model farm for tests of agronomic effectiveness" of the products developed by the Company at its plant in Mandaguari, Federal State of Paraná; and **(ii)** acquisition of machinery and equipment.

(e) Borrowings and financing in foreign currency

The loan obtained from financial institutions under the credit line for import financing (FINIMP) is intended to finance the goods acquired from international suppliers and optimize the Company's operating cash flow and are in US dollars.

The average repayment period for contracts of this type is 6 months, with repayment conditions and interest defined in contracts.

Changes in borrowings and financing are as follows:

	2021	**2020**
Balance at January 1	**233,661**	**262,081**
Borrowings received	133,855	158,952
Interest incurred	27,020	19,103
Repayment	(92,094)	(185,209)
Payment of interest	(21,800)	(17,452)
Funding cost	(2,420)	(3,814)
Balance at December 31	**278,222**	**233,661**

Guarantees

The guarantees provided for loans and borrowings consist on financed assets, mortgages, promissory notes, short-term investments, and assignment of receivables.

Covenants

Financing agreements classified as debentures (item **(a)**) were subject to financial covenants.

The Company's subsidiary obtained a waiver for non-compliance with the contractual obligations contained in financial covenants relating to the second issue, which was granted through the minutes registered on December 3, 2020.

Until December 31, 2021, the Company had not obtained the aforementioned waiver, therefore the debenture amounts were reclassified to the short term.

17. Tax payable

	2021	**2020**	**January 01, 2020**
State VAT (ICMS)	2,354	408	413
Withholding income tax (IRRF)	46	11	40
Tax on financial transactions (IOF)	2,262	2,131	1,796
Tax payment plans	892	1,298	-
Other tax payable	278	262	2,001
Total	**5,832**	**4,110**	**4,250**

18. Advances from customers

The Company has contracts with customers that provide for prepayments. The aim is to ensure the supply of the product, on a priority basis, according to customer demand.

The balance as of December 31, 2021 is R$118,099 (R$58,362 as of December 31, 2020 and R$7,507 as of January 1, 2020) and refers to prepayments for the harvest period, from June to December, ending the cycle with the issue of all invoices upon delivery of products.

19. Lease liabilities

Lease liabilities were measured at the present value of the remaining lease payments, discounted using the incremental borrowing rate of approximately 5% per year, varying according to the term of each contract, and are broken down as follows.

By December 31, 2021, changes in lease liabilities are as follows:

	Properties
Balance at January 1, 2020	**2,663**
Accrued interest	62
Payments	(1,555)
Balance at December 31, 2020	**1,170**
Additions	7,814
Accrued interest	258
Payments	(3,216)
Balance at December 31, 2021	**6,026**

The aging list of leases below shows the payments that will be due after the reporting date, in accordance with IAS 17:

	2021	2020	January 01, 2020
Within 1 year	3,644	1,271	1,361
From 1 to 5 years	2,950	783	1,421
Total	**6,594**	**2,054**	**2,782**
Present value of minimum payments	6,026	1,170	2,663
Current	3,236	1,170	1,303
Non-current	**2,790**	**-**	**1,360**

20. Provision for tax, civil and labor risks

	2021	2020	January 01, 2020
Civil	1,106	1,106	-
Labor	681	1,556	2,724
Total	**1,787**	**2,662**	**2,724**

	Civil	Labor	Total
Balance as of January 1, 2020	-	2,724	**2,724**
Additions	1,106	1,168	**2,274**
Reversals	-	(2,336)	**(2,336)**
Balance as of December 31, 2020	**1,106**	**1,556**	**2,662**
Additions	-	1,690	**1,690**
Reversals	-	(2,565)	**(2,565)**
Balance as of December 31, 2021	**1,106**	**681**	**1,787**

The Company is a party in 11 lawsuits (7 lawsuits as of December 31, 2020 and 9 lawsuits on January 1, 2020) whose likelihood of loss is assessed as possible, amounting to R$ 10,244 (R$7,088 as of December 31, 2020). The main proceedings are the following:

(i) Environmental violation notices referring to unauthorized activities or those considered polluting activities by the environmental authority. Possible likelihood of loss estimated, R$3,511 as of December 31, 2021 (R$3,554 at December 31, 2020); and

(ii) Other lawsuits related to commercial disputes in the sale of fertilizers totaling R$6,733 as of December 31, 2021 (R$3,534 as of December 31, 2020), classified as a possible risk of loss.

There is no expected resolution date for these lawsuits.

21. Equity

a) Share capital

The share capital at December 31, 2021 is R$352,118, represented by 86,413,223 shares, all nominative and without par-value, of which 43,206,612 common shares and 43,206,611 preferred shares.

On December 31, 2020 and January 1, 2020, share capital amounts to R$352,117 and is represented by 44,579,715 registered no-par-value common shares, of which 40,805,221 are common shares, and 3,774,494 are preferred shares.

On December 22, 2021, the company issued 32,076,006 new Class C shares, preferred, nominative, with no nominal value and no voting rights, with priority in the reimbursement of capital, without premium, convertible into common shares issued by the Company, in the event of the Conversion Event which were subscribed by Sommerville Investments B.V.

The company also issued 9,756,502 new Class C shares, preferred, nominative, with no nominal value and no voting rights, but with priority in the reimbursement of capital, without premium, convertible into common shares issued by the Company, in the event of the Conversion Event which were subscribed by Orjen Investments PTE Ltd. 1,000 class D preferred shares were issued, with no nominal value, without voting rights, with priority in the reimbursement of capital, without premium, mandatorily redeemable in the event of the Liquidity Event. At the issue price of R$ 8,699.55 per share of which R$ 1.00 per share was allocated to the formation of the Company's share capital and R$ 8,698.55 per share was allocated to the Capital Reserve account due to goodwill in the subscription of the shares.

The shares are held as follows:

	2021		2020	
Shareholders	**Shares**	**%**	**Shares**	**%**
Bio-Gênesis Participações S.A	33,974,972	39.32	19,284,334	43.25
Sommerville Investments B.V	45,798,513	53	14,881,554	33.38
Orjen Investments PTE Ltd.	405	-	3,774,494	8.47
Bio-Tec Participações S.A	1,062,851	1.23	2,196,319	4.93
Bio Serviços Holding Ltda.	1,117,905	1.29	-	-
Sb Participações S.A	971,146	1.12	971,146	2.18
Fourbac Participações S.A	930,900	1.08	930,900	2.09
Daniel Citron	503,140	0.58	503,140	1.13
Treasury shares	486,849	0.56	486,849	1.09
André Jafferian	489,172	0.57	473,609	1.06
Fabrício Gonçalves Drumond	331,947	0.38	331,947	0.74
Ajneto Participações Ltda	320,154	0.37	320,154	0.72
Luiz Augusto Chacon de Freitas Filho	319,801	0.37	319,801	0.72
Morungaba Participações Ltda.	105,468	0.12	105,468	0.24
Total	**86,413,223**		**44,579,715**	

b) Legal reserve

Pursuant to the Brazilian Corporation Law, the Company allocates 5% of its annual net profit to the legal reserve, until it reaches 20% of the share capital amount. This reserve can be used to increase capital or absorb losses, however it cannot be used to distribute dividends.

c) Income reserve

The remaining percentage of net income will be allocated to “income reserve”, which is intended to the Company’s working capital and for the development of its activities.

d) Premium reserve on share issue

Refers to the recognition of a capital reserve arising from additional amounts above the equity value of the share, received as a capital contribution reduced by premium on the acquisition of shares of the subsidiary Superbac Fertilizantes.

e) Bonus reserve

It refers to the constitution of capital reserve arising from the issuance of a subscription bonus that will entitle the subscriber of the shares, in the event of the Liquidity Event.

f) Dividends

According to the Company’s Articles of Incorporation, shareholders are entitled to the allocation of annual minimum dividends of 25% on net income, calculated under the terms of the Brazilian Corporation Law.

g) Treasury shares

During the year ended December 31, 2017, the Company repurchased shares of certain shareholders in the amount of R$10,114.

In 2018 the Company carried out repurchase of shares in the amount of R$4,758, thus totaling R$5,356 in shares that it will hold in treasury.

h) Other comprehensive income

Effect of the effective portion of the foreign currency hedge, since the Company adopts hedge accounting, therefore the variations in the fair value of derivative financial instruments held to hedge against foreign currency risks are recognized in equity net of taxes.

21.1. Stock Options

Stock option plan

The Company offers a stock option compensation plan for its top management, this compensation plan was introduced after its approval by shareholders in the general meetings occurred on June 11, 2021 and November 8, 2021.

The Stock Option Plan aims to stimulate and promote retention of the company’s executives and senior management team, as well as assuring the alignment with the objectives of the Company, shareholders, and mitigate the risks in the generation of value of the Company by the loss of its executives, strengthening their commitment and productivity in the long-term results. Both of the Company’s stock option plans are settled in equity and cannot be settled in cash.

In 2021, two types of stock options were granted to the company's top management:

Date of grant	Stock class	Conditions for acquiring the rights	Acceleration condition	Exercise period	Exercise price per share	Call option fair value	Total stock granted
June 11, 2021	Class "A" preference shares	From 1 to 5 years of service, until April 14, 2026. Vesting once every year (20%)	Reorganization where Superbac is not the remaining company; Liquidity event or IPO	Up to 12 months after vesting	30% of the share's book value	45,009	**4% of the capital of the company**
November 8, 2021	Class "B" Preference shares	At the end of 3 years of service	Liquidity event, non-including IPO	Up to 1 month after vesting	R$ 0,00012935	1,202	**32.047**
Total						**46,211**	

The Company has measured the fair value of services received as consideration for equity instruments of the entity indirectly, by reference to the fair value of the equity instruments granted.

The fair value of each option granted was estimated at the grant date, as per below:

- Class "A" stock option's fair value was estimated by using the Monte Carlo Pricing Model taking into account the following inputs: **(a)** expectation of dividends of 0%, since there is no expectation of dividend payment during the vesting period of the options **(b)** expectation of volatility of approximately 44.9%, and **(c)** a weighted average risk-free interest rate of 7,4% p.a.; and
- Class "B" stock option's fair value was estimated by using the options pricing model "Black, Scholes and Merton" taking into account the following assumptions: **(a)** expectation of dividends of 0%, since there is no expectation of dividend payment during the vesting period of the options **(b)** expectation of volatility of nearly 44.75%, and **(c)** a weighted average risk-free interest rate of 12,2% p.a.

The share-based transaction's expenses are deemed to be related to services to be incurred during the vesting period and therefore are accounted for throughout this timeframe under personnel expenses, with an offsetting entry in equity. After vesting, the equity is not derecognized.

The outstanding shares and the respective expense is recognized under profit or loss as General and administrative expenses (Note No. 23) and for the year ended December 31, 2021, respectively, were as follows:

	Class "A" Shares	Class "B" Shares
Quantity as of December 31 2020	**-**	**-**
Granted	1.811.950	32.047
Exercised	-	-
Canceled	-	-
Quantity as of December 31 2021	**1.811.950**	**32.047**

	Expenses	Expenses
For the year ended December 31, 2020	-	-
For the year ended December 31, 2021	R$ 21,991	R$ 58

i) Redeemable preference shares

Were issued 1,000 redeemable preference shares, with no nominal value, without voting rights, with priority in the reimbursement of capital, without premium, mandatorily redeemable in the event of the Liquidity Event at the issue price of R$ 97,350.45 per share.

The total amount of R$ 97,350 was recognized as a Related-party liability and allocated to the Capital Reserve account, restated at the CDI rate - Interbank Deposit Certificate and the total expense amount of R$ 743 was recognized in Financial Costs.

21.2. Earnings (loss) per share

The Company calculates basic earnings per share using the weighted average number of common shares outstanding during the year.

Diluted earnings per share are calculated by adjusting the weighted average number of outstanding common shares assuming the conversion of all potential shares, in accordance with IAS 33 - Earnings per Share.

Basic earnings per share	**2021**	**2020**
Profit (Loss) for the year attributable to owners of the parent	(35,435)	33,511
Weighted average number of ordinary shares	41.009.175	40.805.221
Weighted average number of treasury shares	(486.849)	(486.849)
Weighted average number of ordinary shares	40.522.326	40.318.372
Basic gain (loss) attributable to ordinary equity holders of the parent	**(0,87)**	**R$ 0,83**
Diluted earnings per share		
Profit (Loss) for the year attributable to owners of the parent	(35,435)	33,511
Weighted average number of ordinary shares (except treasury shares)	40.522.326	40.318.372
Weighted average number of convertible preferred shares	3.552.983	-
Weighted average number of diluted shares	44.075.309	40.318.372
Diluted gain (loss) attributable to ordinary equity holders of the parent	**(0,80)**	**0,83**

22. Operating revenue

	2021	**2020**
Gross sales		
Sales of goods	785,046	376,707
Services rendered	1,164	1,372
Present value adjustment	(31,594)	(20,696)
Gross sales adjusted	**754,616**	**357,383**
Sales deductions:		
Sales taxes	(30,161)	(13,218)
Returns	(18,470)	(8,438)
Total net operating revenue	**705,985**	**335,727**

23. Operating costs and expenses

	2021	2020
Supplies	(475,444)	(201,908)
Personnel expenses and costs	(69,997)	(54,886)
Share based payment	(22,049)	-
External services expenses and costs	(28,451)	(36,440)
Freight expenses and costs	(39,725)	(24,446)
Commissions expenses	(35,449)	(15,404)
Maintenance expenses and costs	(14,008)	(13,079)
Depreciation and amortization	(12,942)	(11,470)
Consumables expenses and costs	(19,710)	(4,769)
Electric power expenses and costs	(6,888)	(3,660)
Travel expenses and costs	(1,309)	(3,442)
Non-collectable customers	(5,810)	(8,296)
Amortization of right-of-use	(2,958)	(741)
Expenses and costs with vehicles	(359)	(511)
Expected credit losses	6,020	39,924
Provision for tax, civil and labor risks	(638)	62
Reversal of earn-out **(i)**	4,500	15,047
Other expenses	(5,667)	2,134
Total	**(730,884)**	**(321.885)**
Classified as:		
Cost of sales	(561,708)	(263,376)
Selling expenses	(100,010)	(30,348)
General and administrative expenses	(69,166)	(28,161)
Total	**(730,884)**	**(321,885)**

(i) The Company partially reversed the provision for earn-out due to non-compliance with the performance clauses set forth in the contract, which decreased the Company's obligation to the seller of Minorgan.

24. Other operating income (expenses)

	2021	2020
Gain on sale of investment **(i)**	-	7,905
Investment property fair value	5,213	28,543
Other expenses	1,899	1,198
Total	**7,112**	**37,646**

(i) Sale of the SARUP investment, where the Company received the amount of R$12,095 for the sale of the investment, generating a gain on sale recognized in the income statement in the amount of R$7,905, considering the write-off of the investment of R$4,190 by strategic decision of the Management.

25. Financial result, net

	2021	2020
Financial income		
Short-term investment income	2,226	1,369
Present value adjustment (finance income)	29,744	19,515
Interest received	11,834	5,712
Interest incurred on real estate trading	-	10,475
Derivatives gain	5,862	2,616
Other financial income	652	785
Total	**50,318**	**40,472**
Financial expenses		
Interest on loans and financing	(27,020)	(19,103)
Interest expenses	(11,090)	(1,936)
Interest expenses on lease liabilities	(258)	(62)
Compensation to guarantors	(329)	(329)
Bank charges	(3,732)	(3,443)
Tax on financial transactions (IOF)	(1,777)	(1,650)
Discounts granted	(9,751)	(3,184)
Derivatives losses	(10,685)	(2,467)
Other financial expenses	(647)	(290)
Total	**(65,289)**	**(32,464)**
Foreign exchange rate differences		
Gain	3,797	3,336
Loss	(12,032)	(12,198)
Foreign exchange differences, net	**(8,235)**	**(8,862)**
Total financial loss	**(23,206)**	**(854)**

26. Income tax and social contribution

a) Deferred

The non-deductible or temporarily taxable differences in determining taxable profit are as follows:

	2021	2020	January 01, 2020
Income tax and social contribution losses	22,467	16,833	5,400
Arising from temporary differences:			
Expected credit losses	10,396	12,448	26,108
Present value adjustment	3,097	2,468	2,066
Provision for tax, civil and labor risks	477	655	536
Other provisions	4,676	573	708
Investment property fair value	(11,477)	(9,705)	-
Deferred income and social contribution taxes, net	**29,636**	**23,272**	**34,818**

Changes in deferred income taxes balances

	2020	Addition	Write-off	2021	Impact on P&L
Deferred income tax assets	23,272	13,898	(7,534)	29,636	6,364

	January 01, 2020	Addition	Write-off	2020	Impact on P&L
Deferred income tax assets	34,818	2,668	(14,214)	23,272	(11,546)

b) Estimated period of realization

The projection of the realization of deferred taxes assets was prepared on the basis of the management's best estimates that are based on significant assumptions such as the average net sales price of Superbac fertilizers. However, there are other assumptions that are not under the Company's control, such as inflation indexes, foreign exchange rates, raw material prices practiced in the international market and other economic uncertainties in Brazil, future results may differ from those considered in the preparation of the consolidated projection, as presented below:

2022	5,965
2023	8,563
2024	7,939
Total	**22,467**

c) Reconciliation of the effective income tax and social contribution rate

The income tax and social contribution were calculated based on the taxable income as of December 31, 2021 and 2020.

Reconciliation of the effective income tax and social contribution rate is as follows:

	2021	2020
Profit before income tax and social contribution	(40,993)	50,634
Tax rate	34%	34%
Income tax and social contribution expenses	**13,938**	**(17,216)**
Deferred tax not recognized	(14,081)	(2,881)
Others	4,399	7,110
Income tax and social contribution expenses	**4,256**	**(12,987)**
Current	(2,108)	(1,441)
Deferred	6,364	(11,546)
Total	**4,256**	**(12,987)**
Effective rate	**10.38%**	**25.65%**

Unrecognized deferred tax assets correspond to the portion of tax benefit related to future utilization of net operating losses and temporary differences which the Company did not recognize due to the lack of expectation of utilization in the foreseeable future. As of December 31, 2021, the amount of deferred tax assets not recognized is R$ 28,707 (R$ 14,626 as of December 31, 2020).

27. Financial instruments

The following table shows the carrying amounts and fair values of financial assets and financial liabilities. The carrying amount is a reasonable approximation of fair value.

The methodologies used by the Company to disclose fair value were as follows:

Financial instrument	Classification by category	2021	2020	January 01, 2020
Financial asset				
Cash equivalents	Amortized cost	56,447	63,991	117,067
Long-term investments	Amortized cost	17,265	6,393	-
Trade accounts receivable	Amortized cost	125,153	115,598	109,150
Related-party receivables	Amortized cost	6,515	85,528	80,439
Total		**205,380**	**271,510**	**306,656**
Financial Liabilities				
Trade accounts payable	Amortized cost	137,327	51,233	43,723
Related-party payables	Amortized cost	114,082	-	-
Loans and borrowings	Amortized cost	278,222	233,661	262,081
Financial instruments	Fair value through OCI	2,499	1,197	114
Other accounts payable	Amortized cost	16,857	5,568	17,744
Total		**548,987**	**291,659**	**323,662**

The financial instruments used by the Company are substantially represented by cash and cash equivalents, current and non-current short-term investments, trade accounts receivable and trade accounts payable, loans and borrowings.

The Company enters into financial transactions solely for the purpose of hedging against the exposure of financial variables, and these instruments are managed based on internal policies and controls.

The Company and its subsidiaries conduct derivative financial instrument transactions with limits of exposure to credit risks approved and reviewed by management periodically. The carrying amounts of financial instruments receivable and payable, when compared to the amounts that could be obtained from their trading in an active market, or in the absence of such market, using the net present value adjusted for the current market interest rate, substantially approximate the corresponding market values.

There was no reclassification of financial instruments category in the year ended December 31, 2021.

Financial risk management

The Company is exposed to credit, liquidity and market risks arising from financial instruments. The Company's risk management policies are established to identify and analyze the risks to which the Company is exposed, to define appropriate limits and controls, and to monitor risks and adherence to the defined limits. Risk management policies and controls are reviewed regularly to reflect changes in market conditions and the Company's activities.

Credit risk

The Company manages the credit risk of trade accounts receivable through continuous monitoring of sales financing maturities and terms, supported by the credit policy and internal controls.

Credit risk is the risk that the Company incurs losses arising from a customer or a counterparty in a financial instrument, arising from their failure to meet their contractual obligations.

No credit limit was exceeded during the year, and management does not expect any losses arising from default by these counterparties in excess of the amount already recognized.

The carrying amount of the financial assets represents the maximum credit exposure. The expected credit losses on financial assets recognized in the statement of income are disclosed in Note No. 23.

Accounts receivable and other receivables

The credit risk of accounts receivable is due to the possibility of the Company not receiving amounts arising from sales transactions and is influenced mainly by the individual characteristics of each customer.

Customers are classified in the credit analysis area by assessing the customer's credit quality, taking into consideration its financial position, past experience and other factors. Individual risk limits are determined based on internal or external ratings according to the limits determined by the Board of Directors. The use of credit limits is monitored regularly. The Company limits its exposure to credit risk by obtaining guarantees from customers, being mortgages, pledges, among others.

The Company recognizes an allowance for expected credit losses (ECL) when it is expected that the Company will not be able to receive all amounts due in accordance with the terms of these accounts receivable, based on risk analysis and taking into account the historical performance of customers .

The Company considers a financial asset to be in default when contractual payments are overdue more than 180 days. Based on historical data, the percentage of invoices issued that were paid overdue, or never paid, is calculated. Using a prospective analysis, an allowance is recognized according with the simplified method as allowed by IFRS 9.

As for the credit risk associated to financial investments and cash equivalents, the Company only carries out operations in institutions with low risk assessed by independent rating agencies and with remuneration in low-risk fixed income securities.

Loan agreements

Loan agreements are entered into between the shareholders and the Company and formalized by means of a contractual instrument. The Company understands that the credit risk is low because they are transactions with controlling shareholders that have proven financial capacity to settle the outstanding balance. More details at Note No. 7, balances and transactions with related Parties.

Exposure to credit risk

The book value of the financial assets represents the maximum credit exposure.

The maximum exposure to credit risk on the date of the financial statements was as follows:

	2021	2020	January 01, 2020
Cash and cash equivalents	56,447	63,991	117,067
Long-term investments	17,265	6,393	-
Trade accounts receivable	125,153	115,598	109,150
Loan contracts	6,515	85,528	80,439
Other credits	4,222	5,103	5,057
Total	**209,602**	**276,613**	**311,713**
Current	185,563	183,990	231,274
Noncurrent	24,039	92,623	80,439
Total	**209,602**	**276,613**	**311,713**

Liquidity risk

Liquidity risk is the possible risk that the Company will encounter difficulties in meeting the obligations associated with its financial liabilities.

The risk management policy implies maintaining a safe level of cash and cash equivalents or access to readily obtainable funds through control internal tools such as Policies, Committees, level of indebtedness, definition of expenses and new fundraising.

Exposure to liquidity risk

The book value of the financial liabilities with liquidity risk is shown below:

On December 31, 2021	Carrying amount	Within 12 months	From 12 to 24 months	From 24 to 36 months	Over 36 months
Suppliers	137,327	137,327	-	-	-
Derivative financial instruments	2,499	2,499	-	-	-
Borrowings and financing	278,222	243,183	29,242	5,052	745
Total	**418,048**	**383,009**	**29,242**	**5,052**	**745**

On December 31, 2020	Carrying amount	Within 12 months	From 12 to 24 months	From 24 to 36 months	Over 36 months
Suppliers	51,233	51,233	-	-	-
Derivative financial instruments	1,197	1,197	-	-	-
Borrowings and financing	233,661	132,905	64,729	32,171	3,856
Total	**286,091**	**185,335**	**64,729**	**32,171**	**3,856**

On January 01, 2020	Carrying amount	Within 12 months	From 12 to 24 months	From 24 to 36 months	Over 36 months
Suppliers	43,723	43,723	-	-	-
Derivative financial instruments	114	114	-	-	-
Borrowings and financing	262,081	166,086	48,050	28,051	19,894
Total	**305,918**	**209,923**	**48,050**	**28,051**	**19,894**

The cash flows included in the Company's maturity analysis are not expected to be anticipated or collected at different amounts.

Capital risk management

The Company's objectives in managing its capital are to safeguard its ability to continue as a going concern, in order to provide return to its shareholders and guarantee to other stakeholders, as well as to maintain an appropriate capital structure.

To maintain or adjust the Company's capital structure, management may adjust or reassess the dividend payment policy, return capital to shareholders, sell assets or issue new shares.

The Company monitors capital based on the financial leverage ratio. This ratio is the net debt expressed as a percentage of total capital. The Company includes in net debt the loans and borrowings subject to interest, suppliers and other payables, less cash and cash equivalents. Total capital is calculated by adding shareholders' equity, as shown in the consolidated statement of financial position, and net debt.

	2021	2020	January 01, 2020
Loans and borrowings	278,222	233,661	262,081
Lease liabilities	6,026	1,170	2,663
Suppliers and other accounts payable	154,184	56,801	61,467
(-) Cash and cash equivalents	(56,447)	(63,991)	(117,067)
(-) Long-term investments	(17,265)	(6,393)	-
Net debt	**364,720**	**221,248**	**209,144**
Net worth	57,629	279,069	241,422
Total capital	**422,349**	**500,317**	**450,566**
Financial leverage ratio	86.36%	44.22%	46.42%

To achieve the overall objective, the Company's capital management, among other things, aims to ensure that it meets the financial commitments associated with the loans and borrowings that define capital structure requirements.

No changes were made to capital management objectives, policies or processes during the years ended December 31, 2021 and 2020. Although there was an increase in operating leverage, there was no change in capital management, since there was an expressive increase in raw materials, and therefore an increase in inventory. It becomes more representative compared to other numbers on the balance sheet. This is in line with the Company's operating strategies and capital management.

Interest rate risk

The Company is exposed to risks related to variable interest rates and the impact on its cash flow, due to loans and borrowings, exposed to interest rates linked to its debts, mainly to the variation of the CDI - Interbank Deposit Certificate. The Company's management monitors fluctuations in these rates regularly.

Variable rate instruments	2021	2020	January 01, 2020
Cash equivalents	56,447	63,991	117,067
Long-term investments	17,265	6,393	-
Related-party receivables	6,515	85,528	80,439
Loans and borrowings	(278,222)	(233,661)	(262,081)
Total	**(197,995)**	**(77,749)**	**(64,575)**

At the reporting date, the profile of the Company's financial instruments (assets and liabilities) bear interest at rate of 65% to 114.33% of CDI rate.

Sensitivity analysis

The Company has short-term investments and financial liabilities indexed to the variation of the CDI rate. We present below a sensitivity analysis to possible changes in interest rates in the range of 25% and 50% indicating an impact on the Company's financial situation.

		Impact on P&L and Equity	
		Scenario I	Scenario II
Variable rate instruments	**2021**	**25%**	**50%**
Cash equivalents	56,447	1,183	2,366
Long-term investments	17,265	362	724
Related-party receivables	6,515	137	273
Loans and borrowings	(237,821)	(3,549)	(10,245)
Total	**(157,594)**	**(1,867)**	**(6,882)**

		Impact on P&L and Equity	
		Scenario I	Scenario II
Variable rate instruments	**2020**	**25%**	**50%**
Cash equivalents	63,991	431	862
Long-term investments	6,393	43	86
Related-party receivables	85,528	576	1,153
Loans and borrowings	(221,618)	(1,493)	(2,987)
Total	**(65,706)**	**(443)**	**(886)**

Currency risk

Currency risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate due to changes in exchange rates.

The Company's profit or loss are susceptible to oscillations due to the effects of the exchange rate volatility and its impact, which are exclusively denominated in US dollars (US$).

The currency risk exposure in US dollar (US$) is as follows:

	2021	2020	January 01, 2020
Foreign suppliers	56,395	22,027	10,348
Loans and borrowings	40,401	12,043	24,714
Net exposure	**96,796**	**34,070**	**35,062**

Sensitivity analysis of currency exposure

We present below a sensitivity analysis to possible changes in the exchange rate of the US dollar (USD) in the range of 25% and 50% indicating an impact on the Company's financial situation.

		Impact on P&L and Equity	
		Scenario I	Scenario II
	2021	25%	50%
Foreign suppliers	56,395	14,099	28,198
Loans and borrowings	40,401	10,100	20,201
Net exposure	**96,796**	**24,199**	**48,399**

		Impact on P&L and Equity	
		Scenario I	Scenario II
	2020	25%	50%
Foreign suppliers	22,027	5,507	11,014
Loans and borrowings	12,043	3,011	6,022
Net exposure	**34,070**	**8,518**	**17,036**

Operations with derivative financial instruments and hedge accounting

Derivative transactions are intended to protect the Company from foreign currency exposure. The Company does not hold or issue derivative instruments for speculative purposes.

The Company uses forward foreign exchange contracts to mitigate exchange rate exposure arising from raw material purchases in US dollars. These contracts are designated as cash flow hedge.

The Company’s derivative financial instruments are measured at fair value and are summarized below:

	2021	2020
NDF contracts	2,499	1,196
SWAP contracts	-	1
Derivative financial liabilities	**2,499**	**1,197**

Hedge effectiveness is determined at inception of the hedge relationship and at every reporting period end through the assessment of the hedged items and hedging instrument to determine whether there is still an economic relationship between the two.

The critical terms of the foreign currency forwards entered into exactly match the terms of the hedged item. As such the economic relationship and hedge effectiveness are based on the qualitative factors and the use of a hypothetical derivative where appropriate.

Hedge ineffectiveness may arise where the critical terms of the forecast transaction no longer meet those of the hedging instrument, for example if there was a change in the timing of the forecast sales transactions from what was initially estimated or if the volume of currency in the hedged item was below expectations leading to over-hedging.

The hedged items and the hedging instrument are denominated in the same currency and as a result the hedging ratio is always one to one.

All derivative financial instruments used for hedge accounting are recognised initially at fair value and reported subsequently at fair value in the consolidated statement of financial position.

To the extent the hedge is effective, changes in the fair value of derivatives designated as hedging instruments in cash flow hedges are recognised in other comprehensive income and included within the cash flow hedge reserve in equity. Any ineffectiveness in the hedge relationship is recognized immediately in profit or loss.

At the time the hedged item affects profit or loss, any gain or loss previously recognised in other comprehensive income is reclassified from equity to profit or loss and presented as a reclassification adjustment within other comprehensive income.

If a forecast transaction is no longer expected to occur, any related gain or loss recognised in other comprehensive income is transferred immediately to profit or loss. If the hedging relationship ceases to meet the effectiveness conditions, hedge accounting is discontinued, and the related gain or loss is held in the equity reserve until the forecast transaction occurs.

Other forward exchange contracts are considered by management to be part of economic hedge arrangements but have not been formally designated.

The following movements in the cash flow hedge reserve relate to the foreign exchange risk arising from raw material purchase and machinery financing.

	Cash Flow Hedge
Opening balance 1 January 2020	-
Change in fair value of hedging instrument recognised in other comprehensive income (OCI)	(988)
Closing balance 31 December 2020	**(988)**

Position in 2021:

Transaction	**Maturity date**	**Liability**	**Asset**	**Counterparty**	**Notional (USD)**	**MtM (BRL)**
NDF	Jun, 2022	BRL	USD	Banco do Brasil	2,049	(351)
NDF	Jul, 2022	BRL	USD	Banco CCB	2,207	(36)
NDF	Mar, 2022	BRL	USD	Banco Daycoval	2,284	(681)
NDF	Apr, 2022	BRL	USD	Banco Itaú	6,146	(443)
NDF	Feb, 2022	BRL	EUR	Banco Itaú	9,458	(988)
Total					**22,144**	**(2,499)**

Position in 2020:

Transaction	Maturity date	Liability	Asset	Counterparty	Notional (USD)	MtM (BRL)
NDF	Apr, 2021	BRL	USD	Banco do Brasil	1,310	(231)
NDF	Mar, 2021	BRL	USD	Banco Itaú	1,191	(464)
NDF	Mar, 2021	BRL	USD	Banco CCB	4,953	(501)
SWAP	Jan, 2021	PRÉ	CDI	Banco ABC	1,758	(1)
Total					**9,212**	**(1,197)**

28. Information by segment

The Company has only one representative operational segment. The Company is organized, and has its performance evaluated, as a single business unit for operational, commercial, managerial and administrative purposes.

29. Non-cash transactions

During the year ended December 31, 2021, the Company carried out transactions not involving cash and cash equivalents and, therefore, are not reflected in the Statement of Cash Flows:

	2021	2020
Hedge accounting	(988)	-
Total	**(988)**	**-**

30. Events after the reporting period

Liabilities Obligation

The Company's subsidiary obtained the waiver for non-compliance with the contractual obligations contained in the financial restriction clauses (covenants) of the second issuance on March 17, 2022. A fee will be charged in the total amount of R$ 2,027.

The installments have the following due dates:

	2022	2023	2024	2025	Total
Debentures	11,202	14,300	17,875	21,450	**64,827**

Russia-Ukraine Conflict

In February 2022 the armed conflict of Russia and Ukraine began, which can result in impacts on the Company's operations, considering that we import raw material.

Russia is an important exporter of this raw material, but our main volume imports is not from Russia. But still eminent risk is to reduce raw material supply around the world, which can be reflected in a price increase, with possible exchange rate impacts as well. The Company has already a large volume of guaranteed inventory and has been strongly working to ensure the volume demand for the next future crops. It keeps the profitability for its operation and, consequently, without major impacts on the Company's operations.

New Loans Agreement

During 2022, up to the date of issuance of this report, the subsidiary Superbac Indústria e Comércio de Fertilizantes S.A. received loans in the amount of R$347,740 with the following institutions: Banco Itaú R$57,059, Banco Money Plus R$69,106, Banco Tricury R$20,000, Banco XP R$30,222, Banco do Brasil R$107,407 and others R$ 63,946. These amounts were received to cover the company's working capital.

Business Combination Agreement

On April 25, 2022, the company entered into a Business Combination Agreement with XPAC Acquisition Corp., as detailed in the disclosure filed with the U.S. Securities and Exchange Commission on the same date.

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