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1. Use of proceeds

Rizoma Agro currently operates two farms in São Paulo state: Fazenda da Toca and Fazenda Takaoka (the company does not own the land, instead leases it). Moreover, it owns a silo infrastructure for grain drying and storage, close to Fazenda Takaoka. The agricultural operation is 100% certified organic and follows regenerative agriculture practices, such as cover crops and crop rotation. Rizoma Agro's agricultural activities include corn, soybeans, edible beans, and oat crops, as well as citrus production under agroforestry systems. The company owns all necessary machinery and equipment, such as tractors and cultivators, for its operation. The following are the Nominated Projects & Assets already associated with the Bond:

Nominated Project & Assets	Description	Estimate value (BRL)
Row crops and agroforestry -working capital	Expenses on inputs, cultivation, primary processing and storage (operating expenditure)	10,173,055
Row crops and agroforestry - machinery and infrastructure	Productivity enhancement and resilience: most investment, about 6,2M BRL will be for crop irrigation, and the remainder will be used for the acquisition of machines and the construction of a laboratory to produce biological inputs (capital expenditure)	7,948,463
Post-harvest infrastructure	Expansion of silo drying and storage capacity (capital expenditure)	4,000,000
Agroforestry expansion and soil correction – biological asset	Expansion of agroforestry planted area and soil correction (capital expenditure)	939,379
Research and development	Acquisition and development of equipment for R&D experiments (capital expenditure)	355,104
Agriculture Management Platform	Acquisition and implementation of technological solution to manage the crop growth cycle (operating expenditure)	265,000
Total		**23,681,000**

Table 1: Nominated Project & Assets use of proceeds

Regarding the Climate Bonds Taxonomy, Rizoma Agro's Nominated Projects & Assets all felt into the "Agriculture (including mixed use productive systems)" area, for both asset types: agricultural production and infrastructure. According to the Taxonomy, the screening indicator for Agriculture was: "Demonstration of significant carbon sequestration, reduction in emissions or compatibility with 'low carbon agriculture' targets". For the Sector Eligibility Criteria, Rizoma Agro can present evidence that follows low emissions agricultural best practices. It is important to notice that all farming operations are regenerative organic, both the non-perennial crops and perennial crops (agroforestry). This can be all demonstrated through some key indicators that are collected every year.

According to the Sector Eligibility Criteria for Agriculture, the Nominated Projects & Assets are covered under the agricultural production systems scope: perennial & non-perennial crop production, as well as agroforestry. Rizoma Agro's agricultural activities include corn, soybeans, edible beans and oat crops, as well as citrus production under agroforestry systems, and the use of proceeds, capital and operating expenditure for these crops and their infrastructure, relate to the whole agricultural production unit (Section 3.1). The sector requirements both for mitigation and for climate adaption and resilience are met by the whole agricultural production unit. Please refer below [Sector Specific Criteria] for more detail.

Rizoma Agro's Nominated Projects & Assets was not nominated for other Certified Climate Bonds, Certified Climate Loans, Certified Climate Debt Instruments, green bonds, green loans, or other labelled instruments (such as social bonds or SDG bonds).

2. Process for evaluation and selection of projects & assets

The company's main climate objectives are to (i) increase biomass and soil carbon stocks, (ii) increase regenerative organic agriculture yield and (iii) reduce operational costs.

Because Rizoma Agro row crop and agroforestry systems sequester carbon, the adopted regenerative organic agriculture practices is proving itself as helping on climate changes mitigation, what can be confirmed year by year through indicators. Farms serve as a carbon sink, while producing food and enhancing other ecosystem services such as biodiversity and water resilience. Row crop systems have been shown to increase soil organic matter over time, the same being true for agroforestry. In the latter, biomass carbon sequestration in tree trunks plays a big role as well, as show below.

Soil carbon indicates more than its own sequestering, it means that there is in the soil active biodiversity, water flows and, as a result, a better system productive capacity. Therefore, higher yields are an indicator of a more resilient system, which has higher contents of soil organic matter (SOM). On its turns, the more productive a piece of land is, the less land it is needed to cultivate crops. This must be done considering each place's limit capacity, which is why Rizoma assesses several soil indicators every year and has a team of field experts.

Ultimately, in the broad picture, higher yields reduce pressure for more land and deforestation, therefore helping preserve forests, another natural carbon sink. This is also why we believe irrigation is an important tool to support yields, especially in São Paulo state, where rain season is varies from year to year. Without irrigation, Rizoma Agro is not able to plant cover crops further into the dry season, a regenerative agriculture practice that helps build soil organic matter and hence sequester carbon. For more information on this, please refer to file "6. Irrigation - v3".

Finally, it is important that the crops cost is competitive to support regenerative organic agriculture maintenance and expansion, leading to more carbon sequestration. At first, organic requirement may increase cultivation costs, but there is technology available, especially in Europe, to solve that problem. Camera guided cultivator, finger weeders and tine weeders are examples of equipment that control weeds effectively without the use of herbicides. Another example is biological pest and diseases control: organic agriculture cannot use conventional agrochemicals such as inorganic insecticides or fungicides. Instead, it can use biological phytosanitary products that are permitted under the organic certification. These products can either be bought from specific suppliers or produced inside the farm. This is called on farm multiplication of microorganism, which is done in a "biofábrica" and can present a significant saving on inputs cost. Rizoma Agro already has an installed infrastructure for on farm multiplication of bioproducts and it need to expand to produce all necessary bioproducts in an increased area. The Nominated Projects & Assets have been assessed to meet the climate-related objectives:

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Nominated Project & Assets	Description
Row crops and agroforestry - working capital	Through empirical experience and season learnings, each year the operation becomes more productive per hectare and cost effective per ton[1]. This means less carbon is emitter per ton of produce, while carbon sequestration per hectare continues to happen.
Row crops and agroforestry - machinery and infrastructure	To maintain yield under a climate change scenario, irrigation becomes extremely important, and it also allows for regenerative practices such as cover crops during dry season – which ultimately leads to carbon sequestration. On the other hand, to keep cultivation costs low, specific cultivators are needed, and to keep phytosanitary costs low, the on-farm multiplication bioproducts infrastructure expansion is required.
Post-harvest infrastructure	Organic grains cannot be processed in conventional silos: therefore, Rizoma Agro needs a separate infrastructure. Additionally, for edible beans primary processing, specific equipment must be acquired. Moreover, to avoid losing grain production in the process and meet client's quality standards, specific equipment is necessary.
Agroforestry expansion – biological asset	This refers to tree implantation and agroforestry system expansion in Fazenda da Toca. Agroforestry is Rizoma Agro's most climate friendly system, it sequesters carbon in the soil and in the trees. The high biodiversity and shadow provide an equilibrium, allowing for high lemon yields. Moreover, the interconnections inside the system provide environmental services, such as pest control, reducing costs.
Research and development	Field tests on composting can conclude on an alternative source of nitrogen, which increases yields, is stable and therefore less volatile. Field tests on organic no till systems can conclude on an alternative system that does not rely on cultivation nor herbicides, which can increase carbon sequestration.
Agritask	Agritask is an Agriculture Management Platform. The use of a consolidated management software is fundamental to make real-time and precise decisions, helping the company guarantee expected yields and keep costs under control. Furthermore, a robust software assures Rizoma Agro's operation not only the transparency that regenerative organic products request, but also a solid data base for further analysis, research, and operational improvements.

More than just proving that regenerative organic systems can be profitable, impact and regeneration are part of Rizoma Agro's DNA. This means that the company's goal is not only to produce food but also to leave the environments we act upon better than we found it. Regenerative organic practices enable both goals and it is necessary to measure that impact and verify whether the expected outcomes have been achieved.

First, farm operations team verify soil fertility and soil organic matter (SOM) as part of routine analysis. Historical results from Fazenda da Toca indicate SOM increase over time, which was the basis for Rizoma Agro's GHG balance assessment by Imaflora, which indicates that the row crop and agroforestry systems sequester more carbon than they emit. Secondly, all Rizoma Agro's agricultural land is organic certified and audited by approved verifiers, which means the company complies with high sustainability standards and practices. Furthermore, Rizoma Agro is a Certified B Corporation. B Corporation certificate of "social and environmental performance" is a private certification of for-profit companies. Finally, there are impact indicators not covered under these certifications but that are important to assess regenerative organic practices impact. Therefore, Rizoma Agro stablished in 2019, with the support of Wageningen University, a protocol to assess our soil's condition under the pillars of biodiversity, carbon, and water. Brazilian research have helped to improve this protocol from the tropical agriculture perspective, including indicators such as pollinators.

Given the above context, it seems just natural for Rizoma to pursue a Green Bond for financing its operations. These resources will be used on a carbon negative operation, whose impact will be enhanced as the operation becomes more productive and cost effective. Per example, (i) investment on irrigation increases crops' yields and enables planting cover crops during the dry season, a practice that increases soil carbon; (ii) research on composting related both to a carbon friendly practice and also to a cost reduction strategy; and (iii) investment on on farm multiplication bioproducts infrastructure allows for the substitution of commercial product for on farm products, reducing input costs and allowing for high crop yields.
Year after year, through the Updated Report publication, eligibility will be constantly assessed and re-confirmed. Nominated Projects & Assets will remain eligible for the green bond during the project's period. The mains reasons are listed below.

(i) the company will maintain and intensify regenerative organic agriculture practices that foster carbon sequestration, such as cover crops, crops rotation and composting. This falls into the "Agriculture (including mixed use productive systems)" area of the Climate Bonds Taxonomy. Yearly, Rizoma Agro assesses the soil condition for chemistry, compaction, biodiversity, soil water holding capacity, and carbon; lab results are analyzed and interpreted. These indicators serve as feedback for the farm operations planning, which publishes a guideline every year before the season begins.

(ii) in order to continue to be eligible under the Sector Criteria for mitigation, the company did not cleat any woody vegetation over 3 meters in height during 2020 and will not clear any woody vegetation over 3 meters in height after 2020 on the production units in question, which can be proved by a series of satellite imagery such as Google Earth . Furthermore, Rizoma Agro will continue to follow low emission agricultural best practices, such as stated in the farm management plan.

(iii) to continue to be eligible under the Sector Criteria for adaptation and climate resilience, there will be ongoing monitoring and evaluation of the relevance of the risks and resilience measures and related project adjustments as needed. On a yearly basis, Rizoma assesses several soil indicators, such as Water Holding Capacity, Soil Organic Matter, and pollinators abundance. On a weekly basis, pests and diseases are monitored and mapped via georeferenced software, triggering control measures if necessary. Moreover, organic agriculture does not use chemicals that could pollute water bodies; instead, it uses bio-products, that also enable biodiversity to thrive.

3. Use of proceeds - allocating report

0.2. Anexo II — RIZOMA AGRO

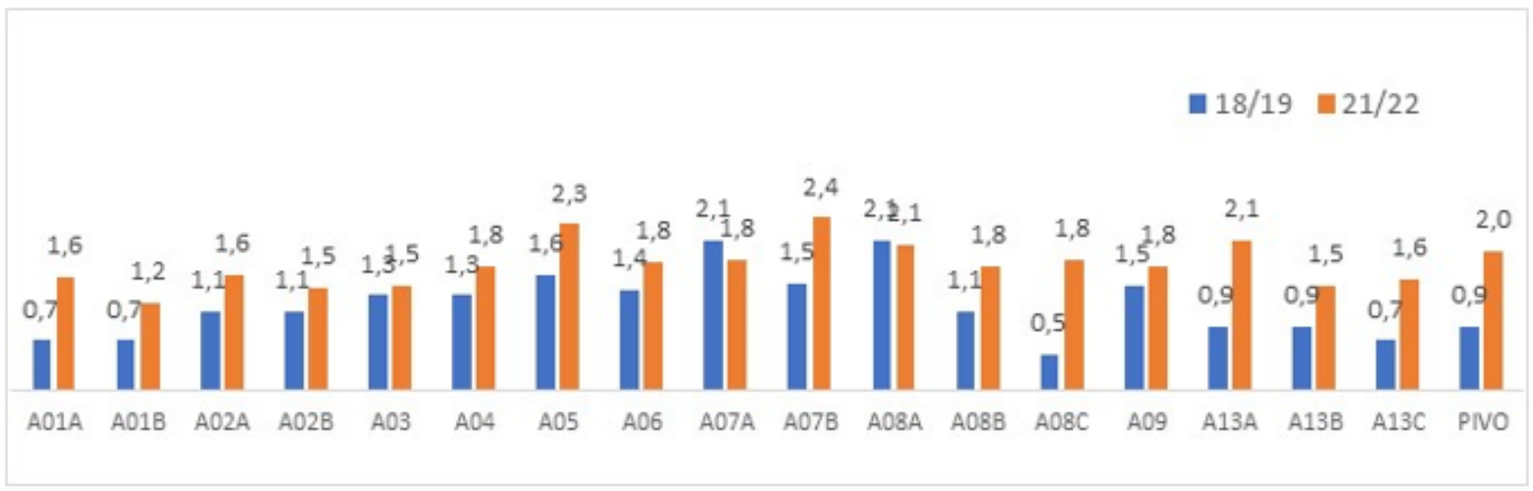
Cronograma Indicativo de Destinação de Recursos — valor

		Total período			Observações
		jul/20 - jun/24	jul/20 - jun/21		
	un	Previsto	Realizado	delta	
Total	**R$**	**23.681.001**	**20.242.627**	**3.438.374**	
Maquinário / Infraestrutura	**R$**	**7.948.463**	**9.290.588**	**(1.342.046)**	
Irrigação Takaoka (fase 1 e 2)	R$	6.171.499	7.774.365	(1.602.866)	Gastos adicionais com CPFL (957 k) e variação nos insumos para obra civil
Conjunto Einbock	R$	769.413	712.001	57.412	Dentro do previsto
Biofábrica - Expansão	R$	358.001	645.010	(287.009)	Inclusão da compra do tanque para produção
Distribuidor de Adubos Org Khun	R$	280.000	-	280.000	Dentro do previsto
Trator John Deere	R$	220.000	38.366	181.634	Conjunto de rodados trator 6150 J
Pulverizador Jacto	R$	110.000	80.000	30.000	Dentro do previsto
Predial	R$	39.550	40.767	(1.217)	Dentro do previsto
Projetos P&D	**R$**	**355.184**	**207.269**	**147.835**	
Projetos P&D: Plantio Direto	R$	37.500	73.500	(36.000)	Revisão do projeto conceitual
Projetos P&D: Compostera	R$	32.854	50.067	(17.213)	Revisão do projeto conceitual
Projetos P&D: Composto	R$	84.750	83.702	1.048	Dentro do previsto
Projetos P&D - 21/22	R$	200.000	-	200.000	Dentro do previsto
Ativo Biológico	**R$**	**939.379**	**670.424**	**268.955**	
SAF - Ano 3 Implantação TA06 e TA09	R$	233.122	345.887	(112.765)	Variação devido ao preço dos insumos
Correção de Solo - Áreas Grãos Takaoka e Toca	R$	706.257	324.538	381.719	Variação devido ao preço dos insumos
Pós - Colheita e Beneficiamento	**R$**	**4.000.000**	**3.906.435**	**93.565**	
Expansão Soja, Milho e Feijão	R$	4.000.000	3.906.435	93.565	Antecipação do projeto devido de otimizar o plantio de feijão (maior margem que aveia)
IT	**R$**	**265.000**	**109.987**	**155.014**	
Sotware Gestão Agrícola	R$	265.000	109.987	155.014	Dentro do previsto
Capital de Giro	**R$**	**10.173.055**	**6.058.004**	**4.115.051**	
Capital de Giro	R$	10.173.055	6.058.004	4.115.051	Variação devido ao preço dos insumos

4. Regeneration key indicators – environmental report: main results achieved season 21/22

In this report some of the fundamental indicators analyzed during the past 3 years are shown per plot (production unit, that not necessarily need to be known but is a great way to see evolution in fields). They are all reported from 2019 (mentioned as 19/20) to 2021 (21/22), showing an historical perspective of how those indicators have gone through years. Rizoma Agro measures up to 10 indicators along production systems, but some of them can create a global perspective of carbon, biodiversity and water with no redundance and giving a whole view of different systems operated at the company.

4.1. Soil organic matter:



Graphic: soil organic matter (%) 0-20 depth

Related to best practices, crop rotations, biomass production and other components, soil organic matter is a relevant indicator for Rizoma Agro. The company considers this one as the most important thing to achieve, especially because SOM is precursor of all other great virtuous natural cycles, such as biodiversity and water storage. Considering an historical perspective, since data started being collected, it is possible to see that soil organic matter have increased significantly through the last 3 seasons – showing that the company is in the right direction to achieve regenerative processes. In tropical conditions, lots of insects/microbes work quickly in decomposition, generating a fast movement of SOM loss. But, even in this condition, it is totally possible to use lands to produce food and regenerate soils.

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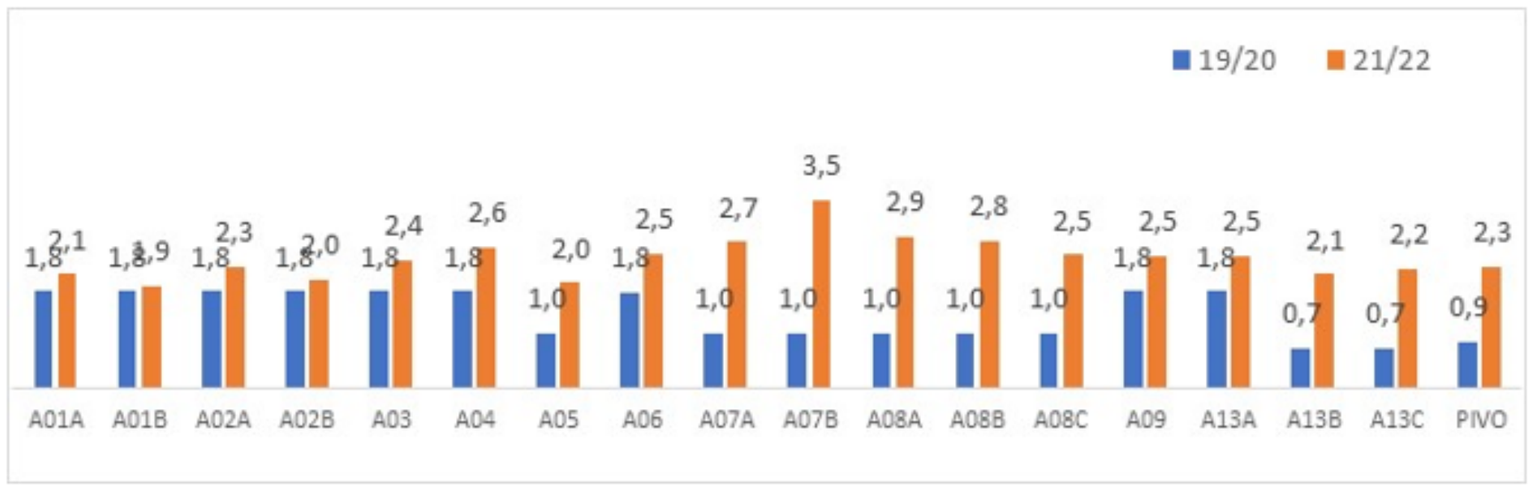
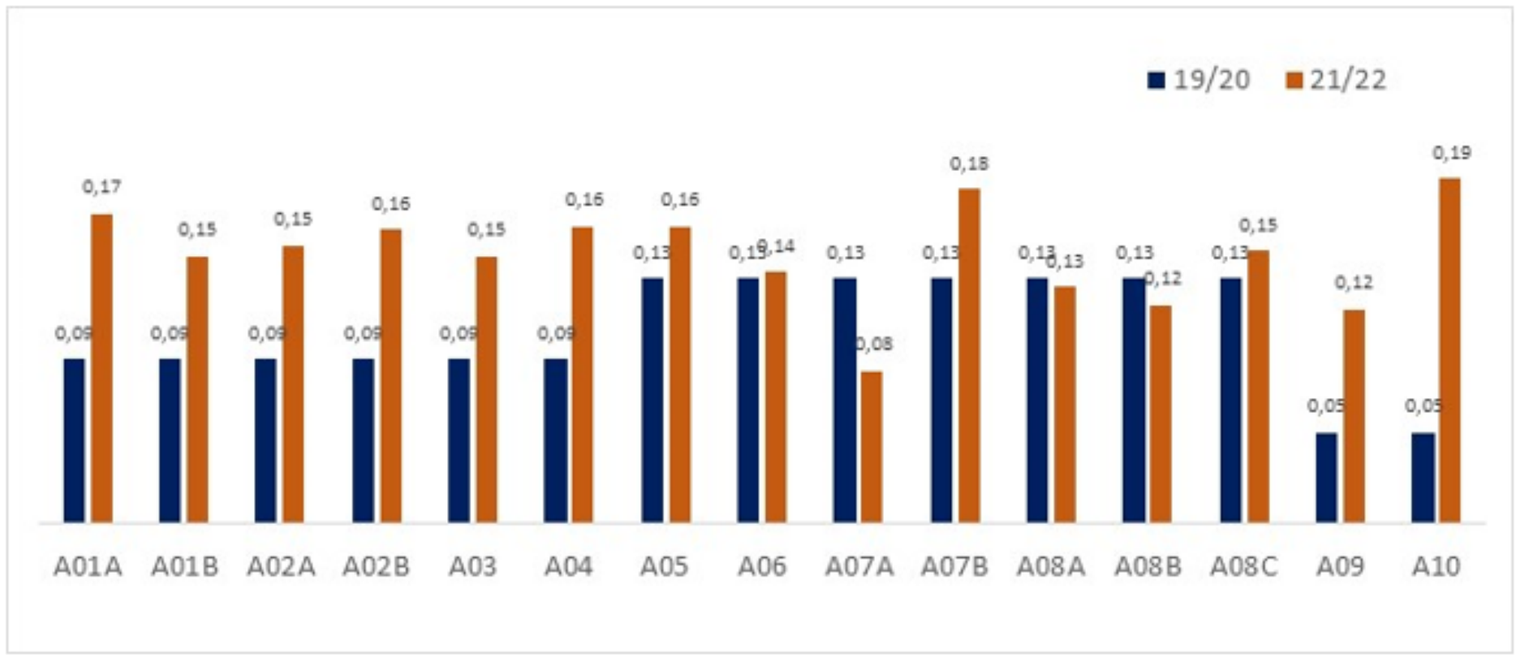
4.2. Total organic carbon (TOC)



Graphic: total organic carbon (%) 0-20cm depth

Different from the usual SOM measurement, TOC is a great indicator that shows exactly how much carbon is in soils. As well as in SOM, this data can evidence that the tendency line is still firm – every operation at Rizoma Agro storage carbon in soils and is increasing year by year. This is not a common measurement especially because of its costs, once SOM can be analyzed in the same sample that farmers normally do for chemical aspects but is more reliable in terms of academic results obtained so far.

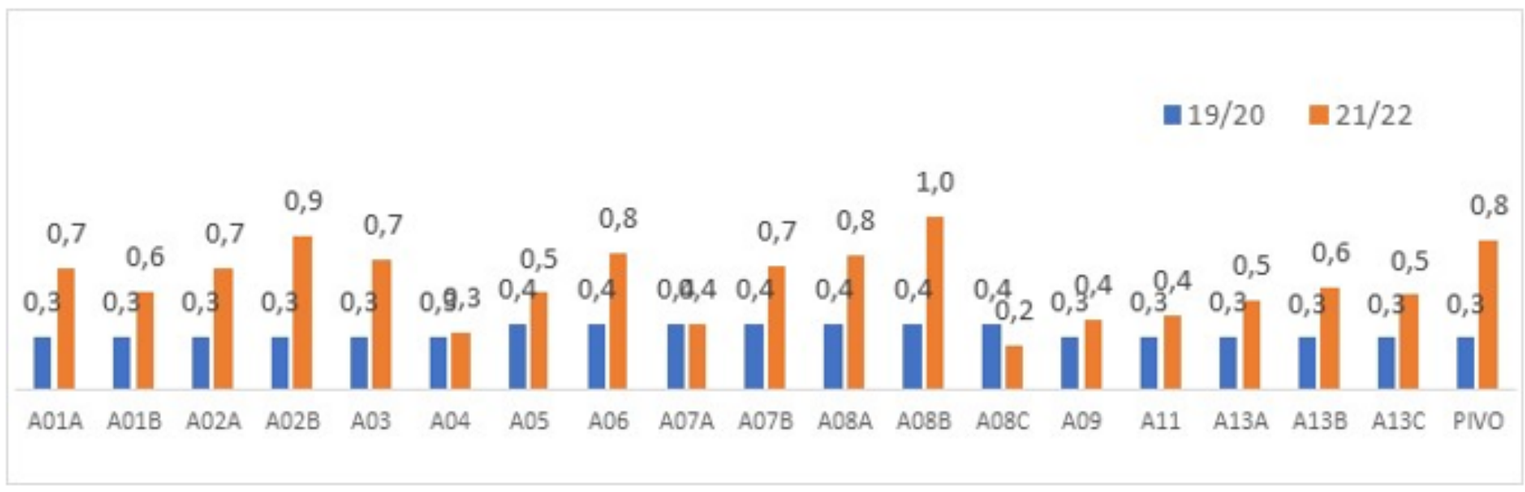
4.3. Water holding capacity



Graphic: water holding capacity (cm^3/cm^3) 0-20cm depth

Water holding capacity increased from 19/20 season to 21/22 season. Especially related to soil organic matter increase, this indicator shows how much water can be stored in soils (characteristics normally attributed to clay content + organic matter, but the only component that can be changed due to management is SOM). Great results have been achieved at Fazenda Takaoka during these 2 year-period. The main point to look at in this subject is that water is a limited resource and, despite of some regions, Brazil is facing dry seasons, lack of rain... and climate change results may imply directly in water bodies too. When using less water to grow crops or making plants more resilient to dry periods due to higher capability of storing water, Rizoma Agro proves that is a regenerative agriculture spot.

4.4. Microbial biomass carbon



Graphic: microbial biomass carbon (mg C/g soil) 0-20cm depth

There are several ways to look at biodiversity in agricultural systems. A great perspective, really related to carbon content increase, is about how much from the carbon stored in soil comes from microbes. This indicator shows that Rizoma Agro is increasing microbial biomass carbon, what is a direct quantitative measure of great microbial evolution. Lots of beneficial microorganisms, that work on SOM decomposition, nutrient cycling/availability and decompaction, for example, are higher and this relates to plant growth, resilience and productivities.

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5. Irrigation legal terms, management and improvements season 21/22

5.1. Legal terms

Rizoma Agro's operation increased irrigated areas in this last year at Fazenda Takaoka (grains irrigation, from 44 hectares to 520 hectares). This expansion, already described in Use of Proceeds, had to be legalized in terms of grants – provided attached to this document. Grants, in Brazil, can be measured considering daily or total basis, and Rizoma Agro operates following those limits strictly. Also attached to this document, there is a report provided by Irriger (a company that operates and manage the whole irrigation system with the company, helping on decisions and giving technical information). This report shows how much water was used, gathered by season and daily, considering rains, plants evapotranspiration and soil water retention, helping the company's manager to achieve the best crop results using water efficiently. So, comparing the updated grant (already contemplating irrigation expansion) and daily usage of water, it is possible to conclude that, in legal terms, Rizoma Agro is using less water than the allowed daily/amount limit.

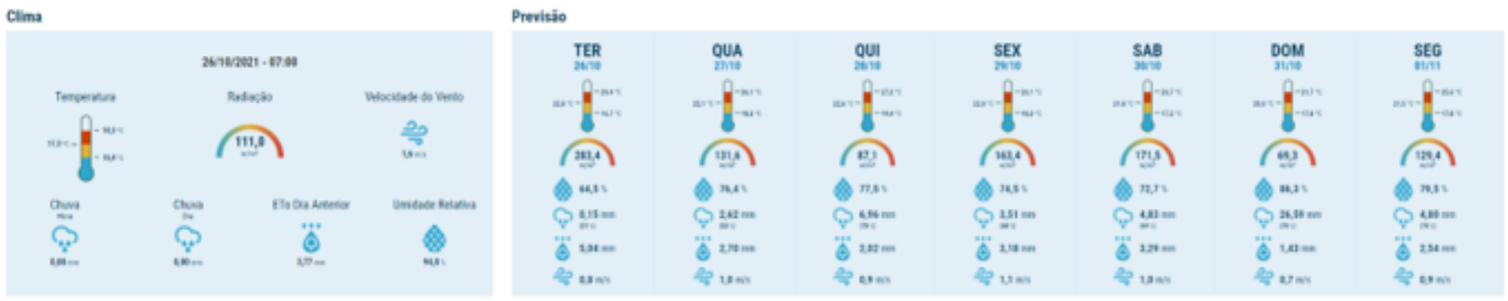
5.2. Daily management

It is important to mention that Rizoma Agro is operating its irrigation with the highest technology available. New pivots are now being used, and the whole follow up is done through a mobile tool (Valley system/Irriger).

First of all, rains, temperature and humidity are all updated in this online system. With that information and calculating some theoretical components of evapotranspiration (using tensiometers and checking with formulas), the exact amount of water for each crop, in its particular stage of growth, can be seen in a daily basis with cellphones and all irrigation systems can be activated inside this management site.

This tool allows Rizoma Agro to achieve the maximum result for each crop, considering water aspect, by using as less as possible water and keeping crops demand attended.

The whole operational team involved with irrigation is well-trained and supported by third-part consultants. So, in case of doubts or difficulties, Irriger team is always supporting and providing information.



Example of graphics showing current climate and future previsions

IRRIGER

Takaoka.Rizoma.Iaras.SP

Previsão de Irrigação

3 / 3

P07.SOJA.BRS.284.SET.2021

Data	ITN (mm)	Tempo (h)	Velocidade (%)	Chuva (mm) - (%)	ETo (mm)	Graus Dias - °F (Dia) - (Acum.)
24/10	0,00	-	-	0,00 0	1,48	18,56 439,33
25/10	0,00	-	-	0,00 0	3,42	19,50 458,83
26/10	0,00	-	-	0,00 0	3,42	22,00 480,83
27/10	2,34	-	-	0,00 0	3,42	20,50 501,33
28/10	4,67	12:15	69	0,00 0	3,42	19,50 520,83

P08.SOJA.BRS.284.SET.2021

Data	ITN (mm)	Tempo (h)	Velocidade (%)	Chuva (mm) - (%)	ETo (mm)	Graus Dias - °F (Dia) - (Acum.)
24/10	0,00	-	-	0,00 0	1,48	18,56 563,09
25/10	0,00	-	-	0,00 0	3,42	19,50 582,59
26/10	0,00	-	-	0,00 0	3,42	22,00 604,59
27/10	2,70	-	-	0,00 0	3,42	20,50 625,09
28/10	5,40	10:36	98	0,00 0	3,42	19,50 644,59

P09.SOJA.BRS.284.SET.2021

Data	ITN (mm)	Tempo (h)	Velocidade (%)	Chuva (mm) - (%)	ETo (mm)	Graus Dias - °F (Dia) - (Acum.)
24/10	0,00	-	-	0,00 0	1,48	18,56 595,52
25/10	0,00	-	-	0,00 0	3,42	19,50 615,02
26/10	0,00	-	-	0,00 0	3,42	22,00 637,02
27/10	2,78	-	-	0,00 0	3,42	20,50 657,52
28/10	5,56	06:05	92	0,00 0	3,42	19,50 677,02

Example of table showing a summed-up farm demand of water

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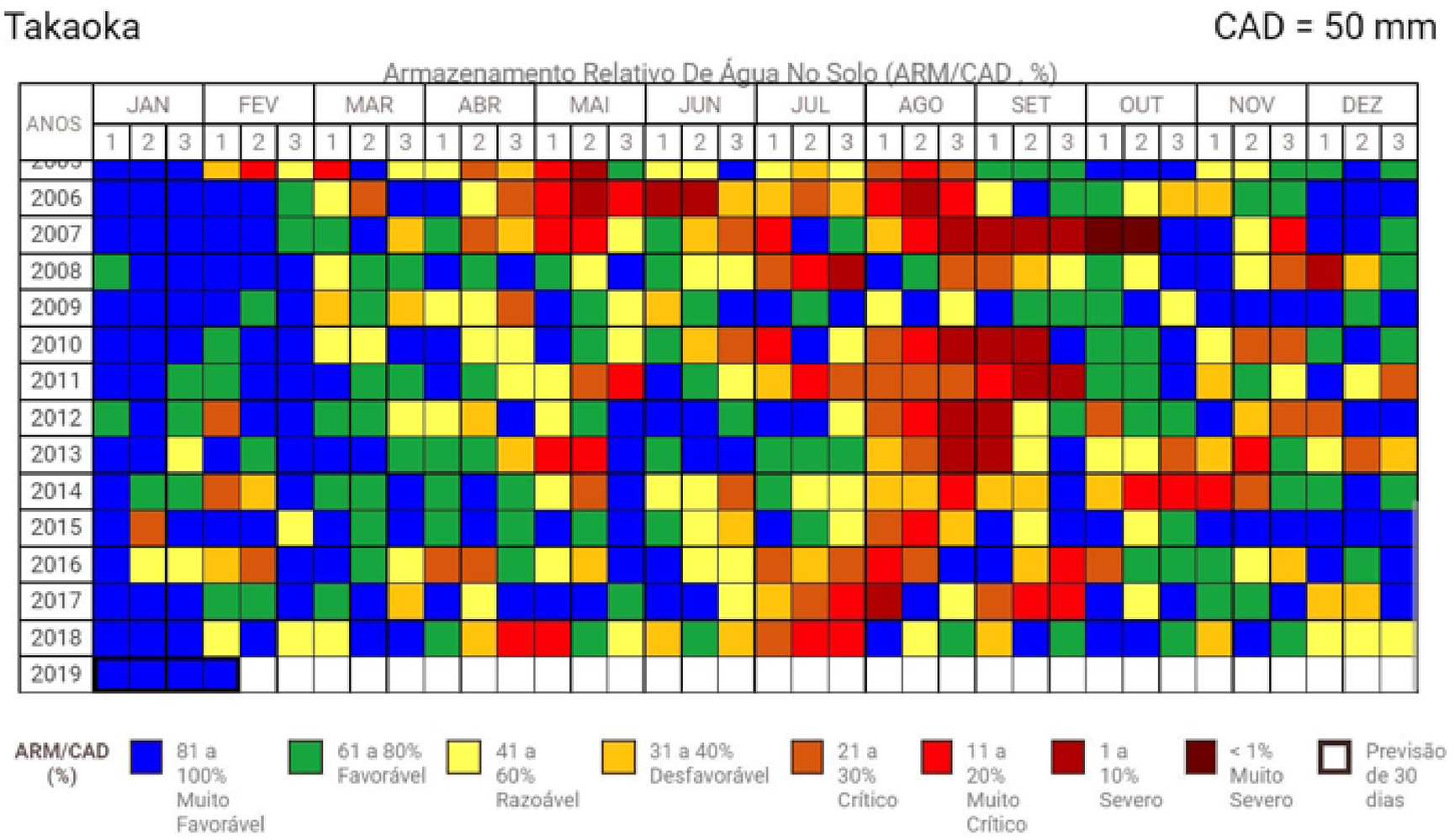
5.3. Improvements (productivity, more crops/year, usage of water and inputs)

The first huge impact due to irrigation in crop areas is about productivity. Lots of regions in Brazil have to deal with seasonal rains, causing a dry season that normally can't be productive. Another perspective that has to be analyzed is about the amount of water and moment of this plants' demand. Even during summer season, when rains are abundant, some critical periods are dry and crops can't perform their best. Once irrigation starts, two main things happen: it is possible to grow during winter (complementing needed water from April to August) and summer crops are properly provided with water, performing higher productivities (from 140sc/ha to 190sc/ha in 19/20 season, exemplifying Rizoma Agro's own experience with irrigation).



The table above shows dry season and erraticism during rainy season.

A great perspective to look at irrigation expansion is also considering that the company is now allowed to grow two or three crops a year, using land better and producing more feed/food in the same area, avoiding the big agricultural move of deforestation, and using more efficiently pivots, inputs, tractors, etc. Exemplifying, Rizoma Agro works with two main crop rotations: corn/bean/cover crop and soybean/corn/bean/cover crop. Both rotations increase nitrogen fixed through legume roots (such as soybeans, beans, and cover crops), allow soil coverage during almost 100% of the year (decreasing chances of erosive processes, increasing soil organic matter, microbiology and microbiology, for example).

Last, but not least, there is a functionality that Rizoma Agro is achieving year by year: water holding capacity increase. Due to soil organic matter elevation, that crop rotations and good practices within organic agriculture are allowing, the capacity of using better water resource is being achieved.

This can encourage other farmers to start/keep doing regenerative practices in the future once water resource is starting to be a critical subject.

https://www.nrdc.org/experts/lara-bryant/organic-matter-can-improve-your-soils-water-holding-capacity

>>> above, this is a didactic link that explain how soil organic matter helps on water holding capacity. The whole report uses academic research, but the best one to prove this increase can be reached out here, below >>>

https://www.jswconline.org/content/49/2/189

So, considering this whole context of benefits attributed to irrigation, Rizoma Agro is operating better than before, allowing great productivities and regenerating more while growing crops.