

OUTCOME REPORT

2022





Bonsucro Outcome Report 2022
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Cover photo: ©Bonsucro

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ABOUT BONSUCCRO

WHO WE ARE

Bonsucro is the leading global sustainability platform and standard for sugarcane, one of the world’s most important crops. Our global network brings together members from more than 50 countries. They represent all areas of the sugarcane supply chain, from smallholder farmers to consumer goods manufacturers. We welcome members from across all sugarcane products and derivatives – including sugar, alcohol, molasses, biofuels, and bioplastics.

WHAT WE DO

Our purpose is to collectively accelerate the sustainable production and use of sugarcane, focusing on climate action, human rights, and value in the supply chain. Together with our members and wider community, we address critical challenges in the sugarcane sector. Through our sustainability standards, training, resources and events, we drive positive change, helping organisations improve their performance and the social and environmental impact of their businesses.

We also run impact projects, which are developed and carried out in collaboration with our members and wider community. We provide time, expertise, tools, data and funding, including grants from our [Bonsucro Impact Fund](#). Our impact projects reflect our strategic aims to: improve the environmental impact of sugarcane, strengthen human rights and decent work in sugarcane milling and farming, and create value across the supply chain.

WHAT THE BONSUCCRO LABEL MEANS

Bonsucro certification is internationally recognised and respected. To become Bonsucro certified, companies must comply with our strict set of standards and be assessed by third-party certification bodies.

There are two main standards for certification:

1. The Production Standard helps farmers and mills to measure and improve productivity alongside key environmental and social impacts.
2. The Chain of Custody Standard relates to procedures for documenting the sourcing and trading of Bonsucro-certified material along the supply chain and allows companies to make truthful sustainability claims.

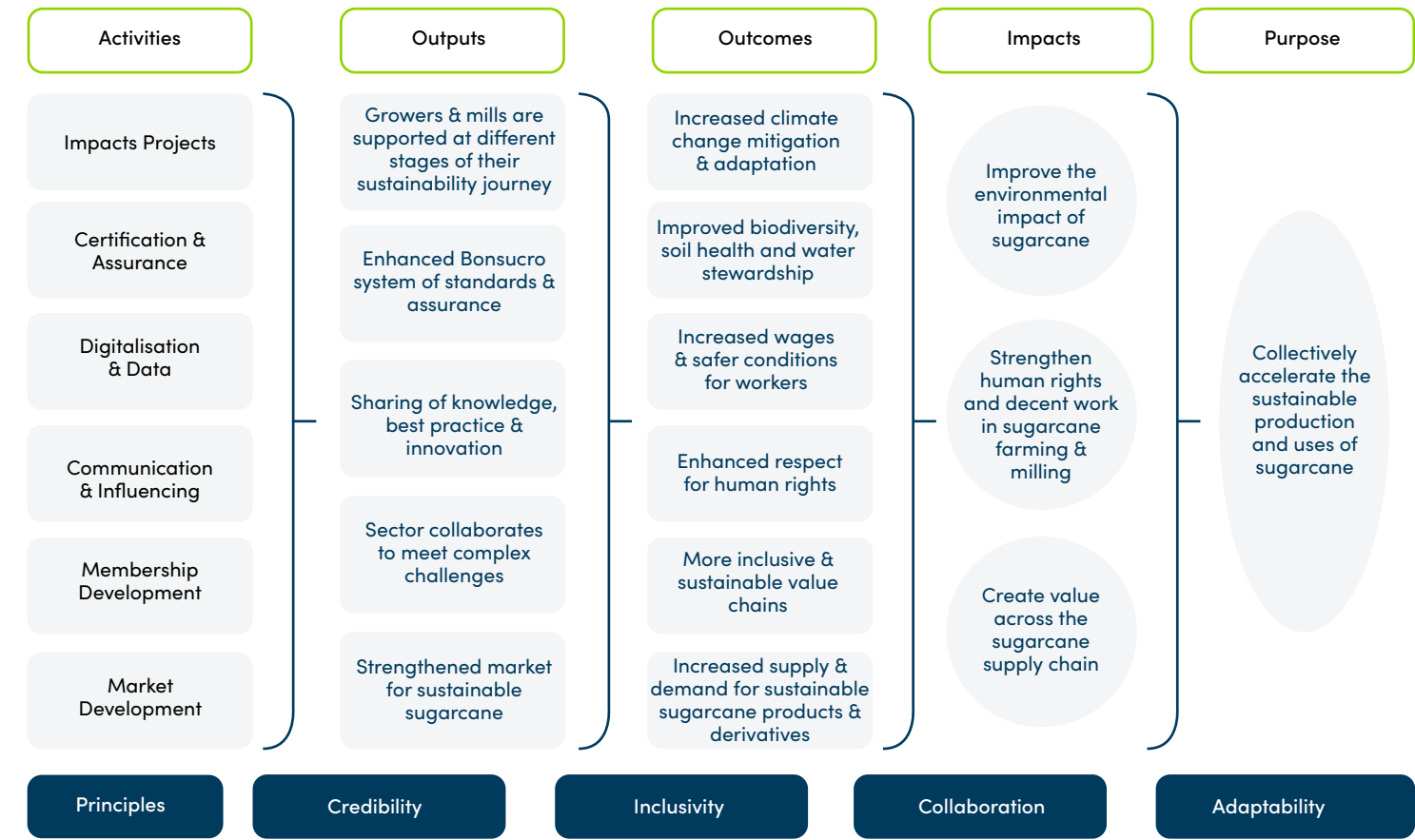
These two standards work together. When you see the Bonsucro label, you know that the sugarcane-derived ingredient in the product you are buying has been produced in a responsible way, that people are being treated fairly, and that long-lasting sustainable supply chains are being created.

Find out [more about our certification](#).

OUR THEORY OF CHANGE

Bonsucro’s Strategic Plan and Theory of Change outline the ways in which our activities and the actions of our members contribute to our impact and purpose. We’ve structured this report around the outcomes identified in the Theory of Change (see figure 1) and our strategic aims.

Figure 1: Theory of change



ABOUT THIS REPORT

This report provides highlights from Bonsucro’s activities in 2022, and the difference they are making. It demonstrates the impact of certification using data from audit reports from certification bodies, insights from the annual reports that our members submit to us each year, and case studies. We have also shared details of our membership and how it has grown and changed.

The statistics provided are a combination of certification data from the 2021-22 sugarcane production season (represented in graphs as the year 2021) and membership data from the 2022 calendar year. Where relevant, we’ve included data from earlier years for context and to demonstrate the longer-term impact of our work. Please find details of the data we’ve used on page 35.

UPDATES TO OUR STANDARDS IN 2022

Please note: The data in this report refers to the Production Standard that was in place at the time – version 4.2.

Following a consultation with our members, we published version 5.1 of our Production Standard in 2022. This version includes more emphasis on protecting biodiversity and human rights.

Our Production Standard has been revised again since this report was compiled. You’ll find the latest version (5.2) [on our website](#).

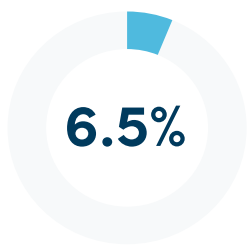
HIGHLIGHTS

 **32 NEW MEMBERS JOINED**

In 2021-22, production volumes of certified molasses increased dramatically by **500,000 TONNES** – up 88% on the previous year.



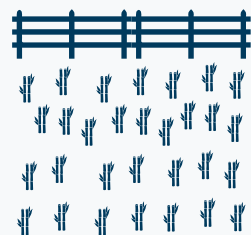
In 2022, almost **2,000** new farmers became certified under the Bonsucro Production Standard for Smallholder Farmers. They represent 1,715 hectares of land.



In 2021-22, Bonsucro certified sugarcane represented approximately **6.5% OF GLOBAL PRODUCTION**



More than **131,000** farm workers received personal protective equipment from their employers



1.9 MILLION HECTARES of land are certified against Bonsucro Standards

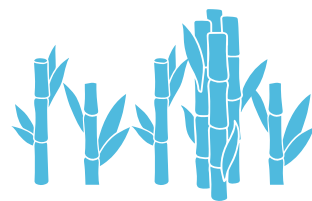


196,200 workers worldwide are covered by the human rights measures detailed in the Bonsucro Production Standard.

Between 2020-21 to 2021-22, production volumes of Bonsucro certified ethanol **INCREASED BY 20%**



There was a **54% RISE** in the trade of certified sugar, representing more than **1 MILLION** extra tonnes sold in 2021-22 compared to the previous year.



9.7 MILLION TONNES of sugar were produced in line with the Bonsucro Production Standards

Bonsucro certified farms reduce water consumption by **AN AVERAGE OF 41%** over five years of certification.

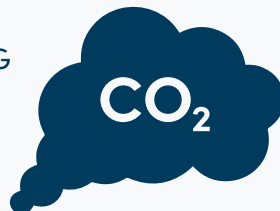


Bonsucro certified farms pay **19% ABOVE** the national minimum wage.



85% of certified producers expanded their area of certified land

On average, Bonsucro certified farms reduce land-management GHG emissions by **17%** within five years

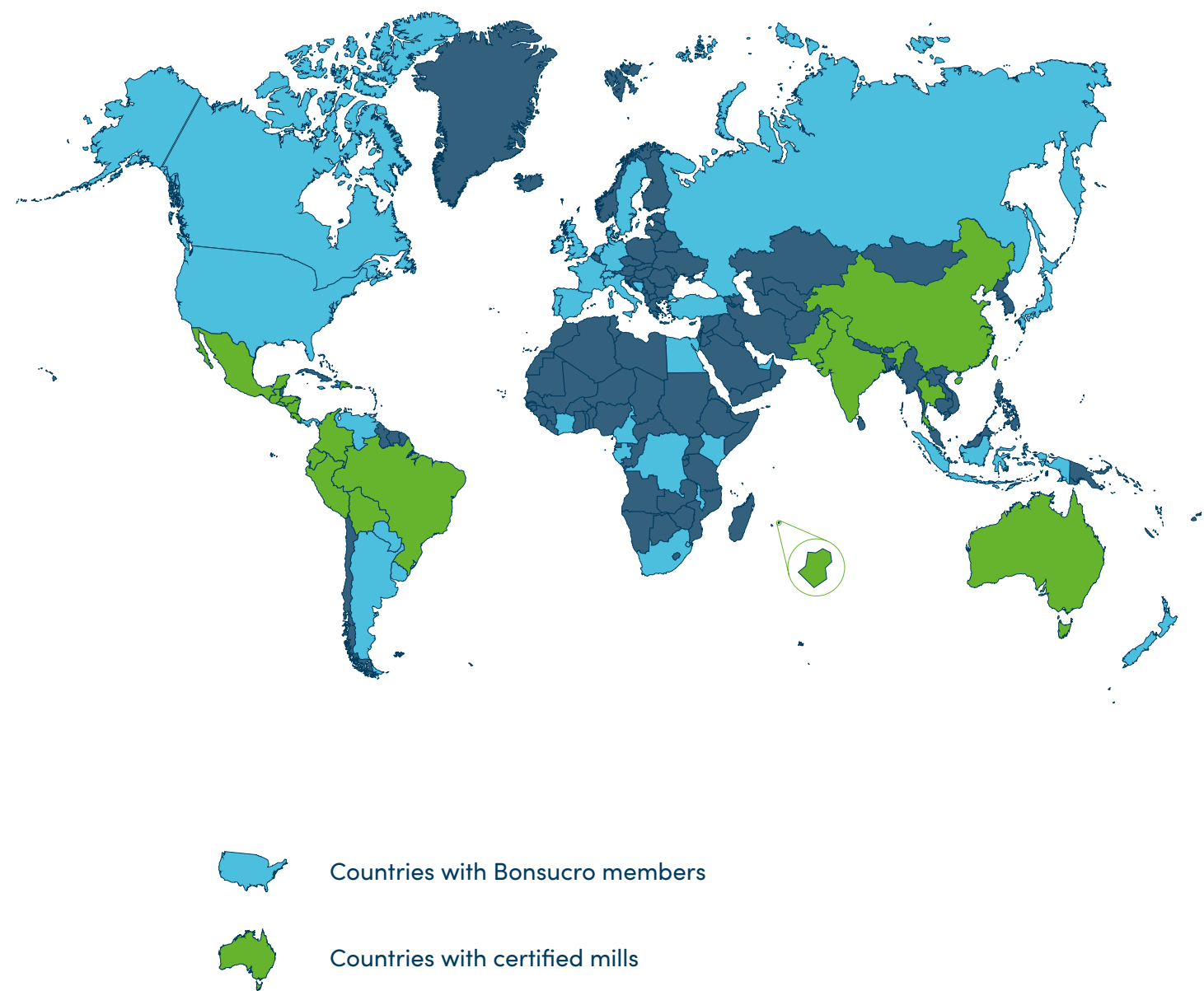


Bonsucro certified farms reduce their fertiliser use by **AN AVERAGE OF 11%** over five years of certification.



100% of Bonsucro certified producers have an environmental impact and management plan to areas of high conservation value.

BONSUCRO WORLDWIDE



CENTRAL AMERICA, MEXICO & CARIBBEAN	20 certified mills 47 members 135,651 certified hectares 1.01 million tonnes of certified sugar 28 organisations with Chain of Custody certificate
BRAZIL	81 certified mills 60 members 1.59 million certified hectares 7.28 million tonnes of certified sugar 100 organisations with Chain of Custody certificate
SOUTH AMERICA (excluding Brazil)	9 certified mills 19 members 81,674 certified hectares 728,641 tonnes of certified sugar 13 organisations with Chain of Custody certificate
AFRICA & MIDDLE EAST	2 certified mills 19 members More than 4,000 certified hectares* More than 75,000 tonnes of certified sugar* 7 organisations with Chain of Custody certificate <i>*exact figure not for publication</i>
ASIA	32 certified mills 75 members 68,946 certified hectares 422,229 tonnes of certified sugar 45 organisations with Chain of Custody certificate
PACIFIC	8 certified mills 12 members 23,781 certified hectares 282,918 tonnes of certified sugar 28 organisations with Chain of Custody certificate
EUROPE	46 members 22 organisations with Chain of Custody certificate
NORTH AMERICA	20 members 11 organisations with Chain of Custody certificate

MEMBERSHIP IN 2022

Bonsucro members are a powerful, global network with one goal – collectively accelerating the sustainable production and uses of sugarcane. Our members represent the entire sugarcane sector, from the smallest producers to some of the biggest household names. They each commit to continuous improvement and report on their progress each year.

Many Bonsucro members go on to become certified against our globally recognised standards – find out who holds certification [here](#).

In 2022, we continued to grow our membership and represent more countries than ever before.

- We welcomed **32 new members from 20 countries**. This brought our **total membership to 295** by the end of 2022.
- We saw strong growth in South America, including our **first member in Uruguay**.
- **In India, membership grew by 20%** to 24 members.
- We had **11 new members in Asia**, including two in Pakistan, five in India, and one each in Singapore, China, and Japan.

The breadth of organisations joining our network also continued to grow. New sectors included the spirits and ethanol supply chains, with strong growth in new members engaged in rum production and sugarcane-based energy generation.

HOW WE REFER TO OUR MEMBERS IN THIS REPORT

- Producers – this includes farmers, mills, farmer associations and mill associations.
- Intermediaries – these are traders, companies providing services to the sugarcane industry, and companies that process sugarcane derivatives. For example, rum distilleries and bioplastics manufacturers.
- End-users, also known as buyers – these are companies that sell processed, packaged goods, made with sugarcane derivatives, to consumers.
- You can [find a list of our members here](#).

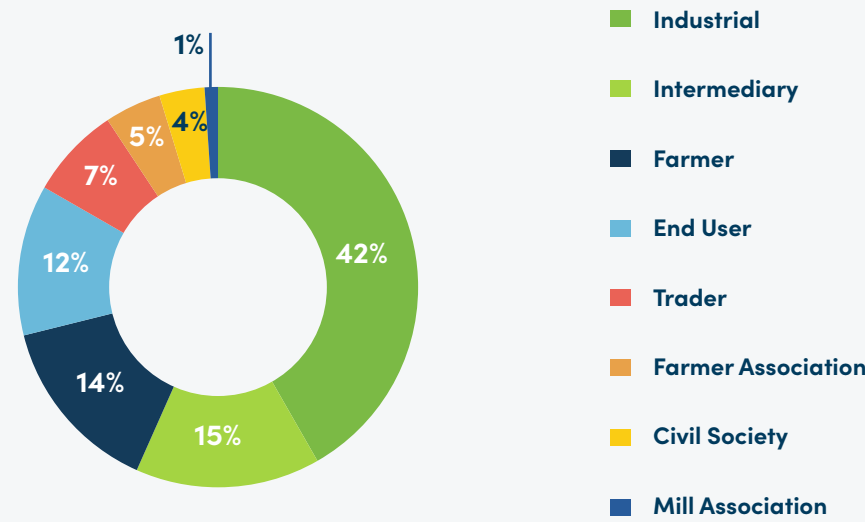


Figure 2: Representation of supply chain actors in Bonsucro membership (31 Dec 2022)

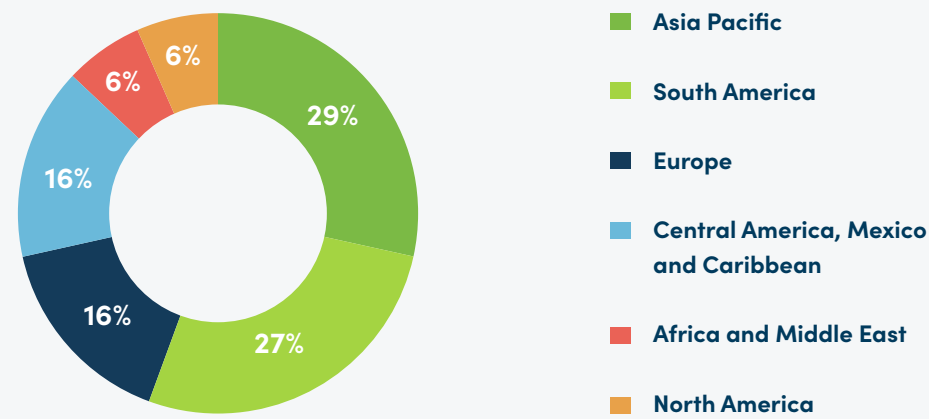


Figure 3: Representation of regions in Bonsucro membership (31 Dec 2022)

BUILDING RELATIONSHIPS IN MEXICO

In Mexico, sugarcane is produced mainly by smallholder farmers. It is our goal to build relationships with more of these farmers to help promote sustainable practices and raise awareness of the impact of Bonsucro certification.

The best way to reach smallholder farmers is through farmers' unions. So, in 2022, our team met with mills and farmers' unions in Veracruz, Jalisco and Chiapas, the areas of Mexico that produce the most sugarcane. By November 2022, both of the national farmers' unions in Mexico had joined Bonsucro, which will allow us to connect with more than 130,000 farmers.

During 2022, we gave presentations and workshops at seven events for smallholder farmers in Mexico. This meant we directly reached 1,000 people with information to improve their performance and the environmental impact of their businesses.



CONVENING OUR MEMBERS: BON SUCRO EVENTS AND TRAINING

Bonsucro events and training sessions help raise awareness of the challenges facing the sugarcane sector – and share knowledge about potential solutions. They are a chance for our members to meet and build relationships and collaborations with like-minded organisations. In 2022, we were pleased to bring people together for in-person events for the first time since the pandemic, something our members told us they wanted to get back to as soon as possible.

In October, 250 people from 25 countries came to Brazil for Bonsucro Global Week, the leading event for sugarcane sustainability. Highlights in 2022 included presentations on how Brazilian sugarcane mills are exporting energy to the grid, water reduction projects, and key market trends in supply chains. You can read about some of the projects shared at Global Week throughout this report.

We also held a two-day conference in Mexico – one of the top 10 sugarcane-producing countries in the world. More than 170 people attended from across Mexico, as well as Guatemala, Nicaragua, Colombia, Costa Rica, El Salvador, and the UK. Delegates shared ideas on how to address sustainability challenges and solutions. This included changing from chemicals to biofertilisers and how to shift the culture within organisations to have a more proactive approach to sustainability.

We ran 36 webinars, providing a vital source of information and inspiration in 2022. Topics included the United Nations Guiding Principles on Business and Human Rights, and putting a 'water, rest, shade and sanitation' protocol in place to keep workers safe in the field. More than 1,300 attendees joined our webinars, which were delivered in English, Spanish, and Portuguese.



IMPROVING THE ENVIRONMENTAL IMPACT OF SUGARCANE

MITIGATING AND ADAPTING TO CLIMATE CHANGE

Climate change continues to have a major impact on sugarcane production. Erratic and extreme weather patterns affect the quality and quantity of crops, leading to fluctuating income and an unpredictable future for the industry. Many producers already adapt their practices to mitigate climate change, while others need more knowledge or resources.

That’s where Bonsucro membership can make a difference. To meet our Production Standard, organisations must have plans in place to monitor and reduce their environmental impact, and stay below set thresholds for their greenhouse gas (GHG) emissions per tonne of product.

Knowledge is key. That’s why we offer training on adapting to climate change, provide data-driven insights and share expertise from throughout our network. We also invest in projects and develop tools to help members keep track of and reduce their emissions.

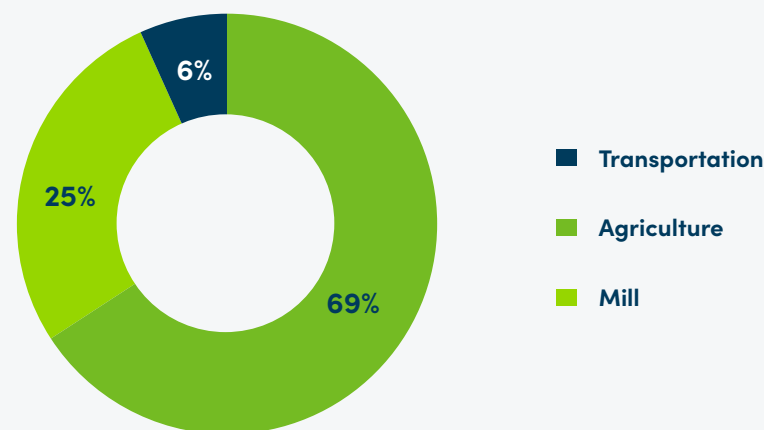


Figure 4: Percentage of greenhouse gas emissions by source at Bonsucro certified farms and mills



HOW IS THE BONSUCCRO PRODUCTION STANDARD MAKING A DIFFERENCE?

Our certification data shows that the majority (69%) of GHG emissions from producing sugar and ethanol happen during the agricultural phase (that is, the growing and farming stages).

- On average, Bonsucro certified farms reduce land-management GHG emissions by 17% within five years (see figure 5).
- Globally, there is a trend that the longer producers are certified, the greater the reductions in emissions. This is achieved by producers reducing the amount of electricity and nitrogen fertiliser they use and reducing cane burning. They are also better at managing the amount of fuel they use to run vehicles, machinery, pumps or generators, such as those used in spraying, irrigation, tilling, and harvesting.
- On average, mill emissions account for 25% of the carbon footprint per tonne of Bonsucro certified sugar. While we see a reduction in GHG emissions per unit of sugar, the reduction is smaller, averaging 3% over five years. A major contributor to mill GHG emissions comes from bagasse (a by-product of the crushing process) being used as renewable fuel.
- [Research suggests](#) that if the Bonsucro Production Standard was adopted by all sugarcane producers around the world, the GHG emissions from the industry could potentially be reduced by half.

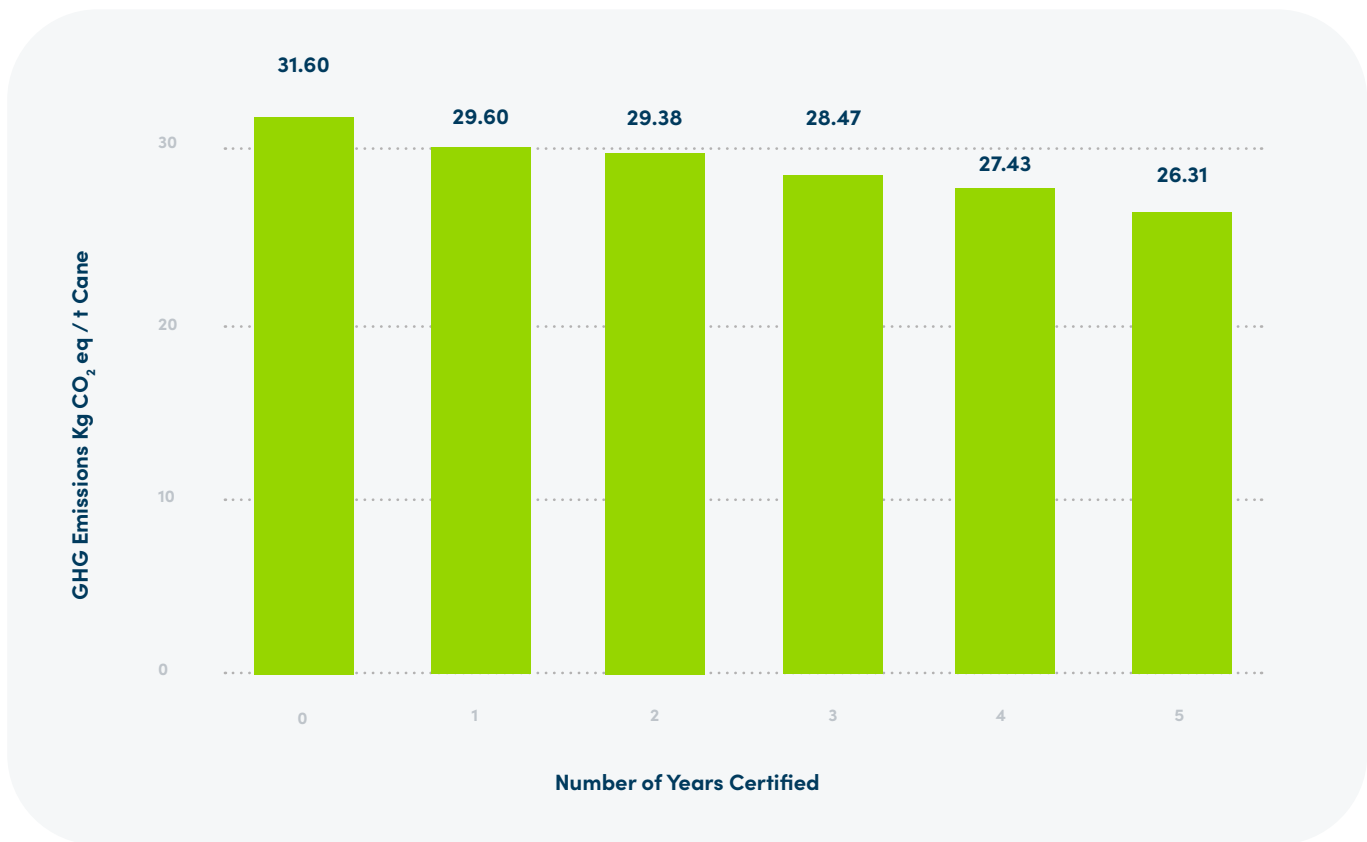


Figure 5: Greenhouse gas emissions by the number of years certified in the agriculture phase

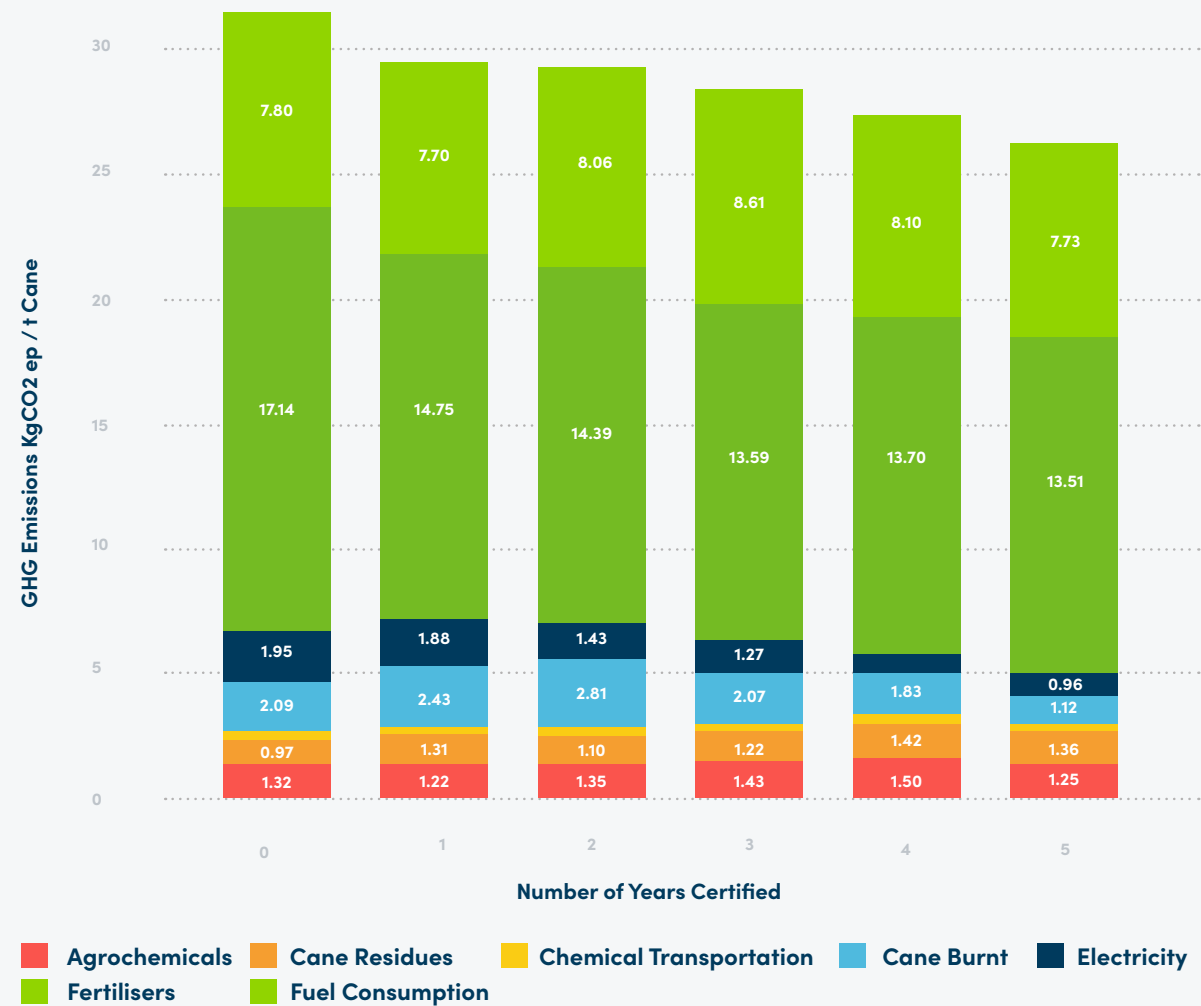


Figure 6: Greenhouse gas emissions per activity in the agriculture phase, by the number of years

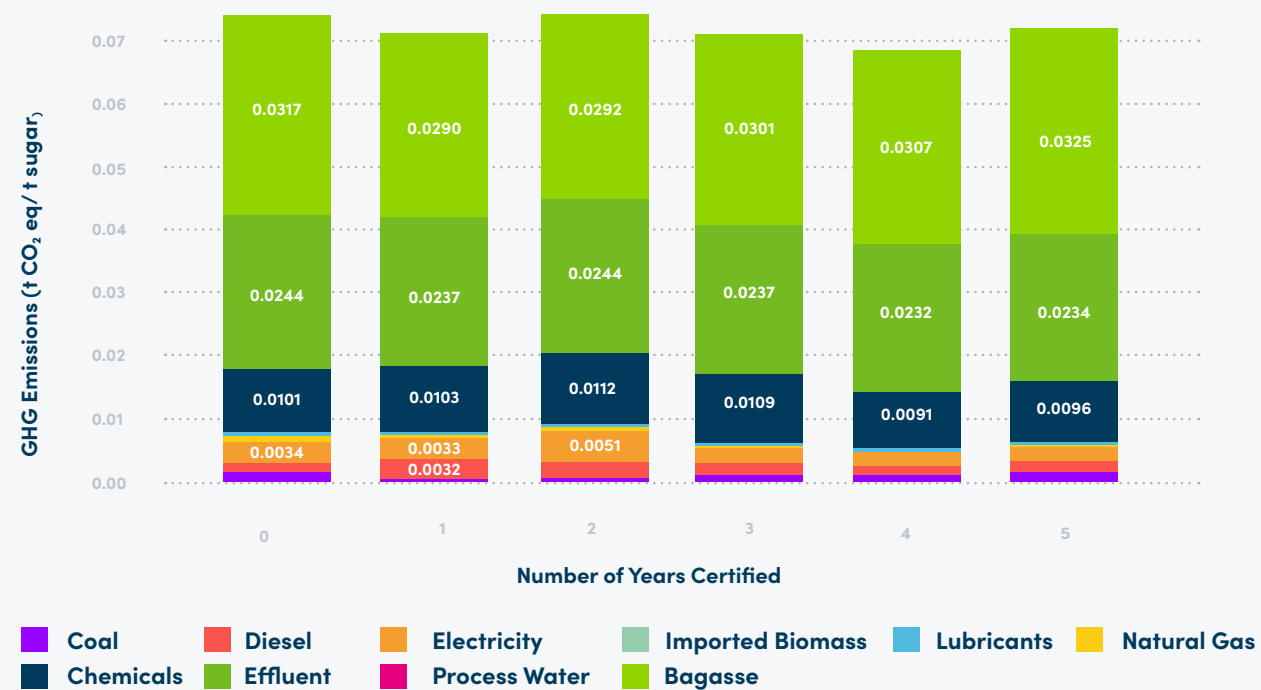


Figure 7: Average greenhouse gas emissions per activity in the mill phase, by the number of years

WHAT HAVE WE DONE TO HELP TACKLE CLIMATE CHANGE IN 2022?

One of the key commitments of our 2021-2026 Strategic Plan is to drive climate action in the sugarcane sector. So we've developed a 'Roadmap' to focus our work, convene the sector, and help our members reduce greenhouse gases by 2030, in line with the United Nations' Paris Agreement. The Roadmap underpins all our work on climate change.

We published a new Production Standard in 2022, which included a strengthened GHG calculation methodology. This is helping reveal where emissions are highest and enabling producers to take action to reduce them.

We began creating digital tools to help our members monitor their greenhouse gas emissions. In 2022, we announced that we would be creating a ClimateCane Tracker – a tool that helps farms, mills, and the companies that source from them to set a target and clear pathway for lowering emissions.



IMPROVING WATER STEWARDSHIP, SOIL HEALTH, AND BIODIVERSITY

IMPROVING WATER STEWARDSHIP

Producing sugarcane relies on vast amounts of water. This brings challenges and risks for the industry and the environment, especially as the world gets hotter and rainfall is more erratic due to climate change. As well as putting a strain on local water sources, sugarcane farms and mills can pollute them, with silt, nutrients, pesticides and effluents, causing damage to ecosystems.

To adapt to climate change, our certified members need to have careful ‘water stewardship’ processes in place. This is about making sure water is used and treated in ways that are socially equitable, environmentally sustainable, and economically beneficial. Water use varies greatly around the world, due to local climate and infrastructure. For example, the average water consumption of certified farms in Colombia can be up to five times higher than those in Brazil. To achieve Bonsucro certification, farmers must create Environmental Impact Management Plans that include objectives on water usage which are based on the local context. As well as tracking how much water they use, they need to minimise contamination from pollutants.

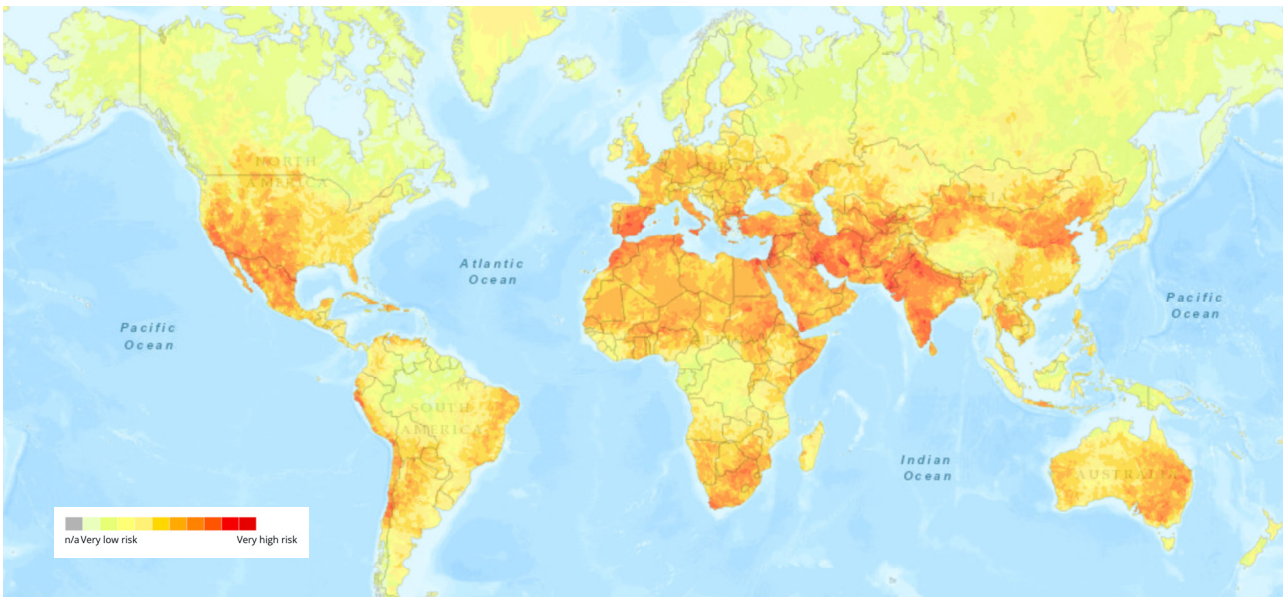


Figure 8: WWF Water scarcity risk map (<https://riskfilter.org/water/explore/map>)

HOW IS THE BONSUCCRO PRODUCTION STANDARD MAKING A DIFFERENCE?

Bonsucro certified members worldwide continue to explore ways to better manage water resources, improve irrigation, remove pollutants and make adaptations to address climate change. This includes using tools and technology to track, plan, and manage the water they use, such as water flow meters, and low-energy, precise and effective irrigation methods.

- Bonsucro certified farms reduce water consumption by an average of 41% over five years of certification.
- Irrigated water efficiency (the cane yield per unit of water per hectare) has also been steadily improving over the last four years, with a 20% improvement on average between 2020 and 2021 (see figure 10).

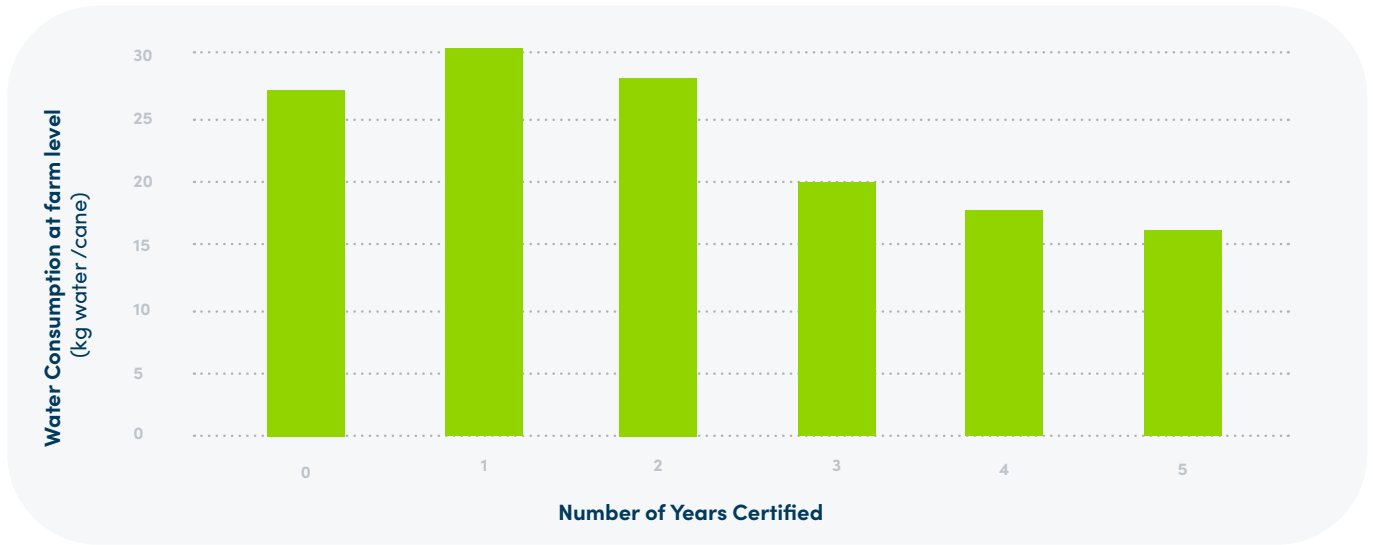


Figure 9: Average water consumption per kilogram of sugarcane produced at farm level

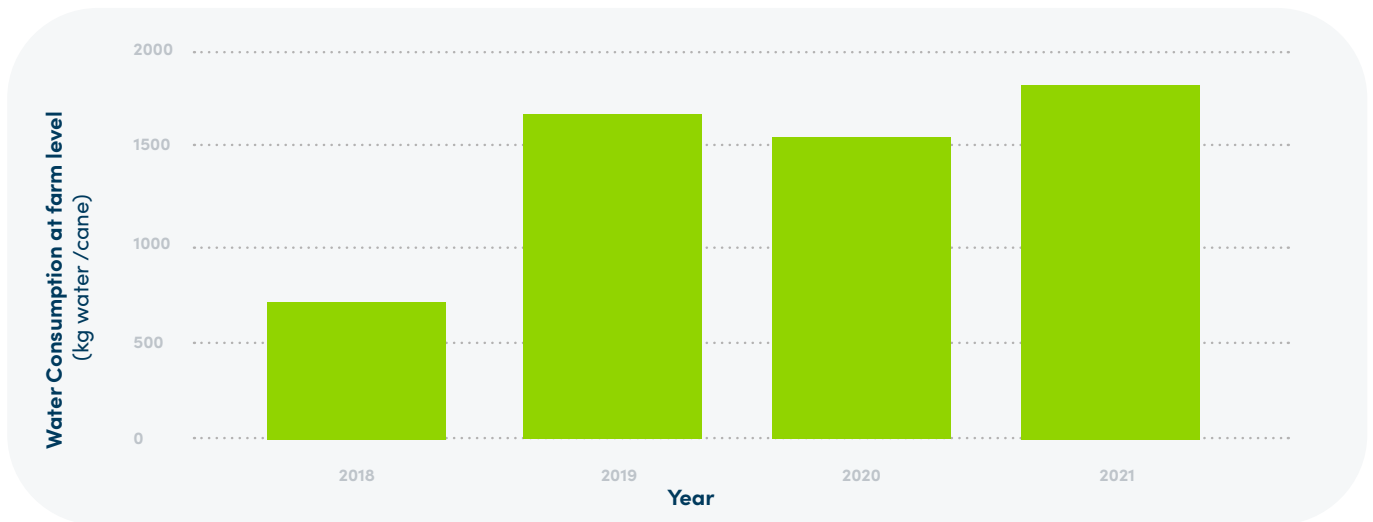


Figure 10: Average irrigated water use efficiency of Bonsucro certified sugarcane per year

WHAT HAVE WE DONE TO HELP IMPROVE WATER STEWARDSHIP IN 2022?

SHARING IDEAS ON IMPROVING WATER EFFICIENCY

India is one of the most water scarce countries in the world. It’s also the second largest producer of sugarcane. At Bonsucro Global Week 2022, DCM Shriram, one of the country’s largest sugarcane operators, shared how it saved more than 735 billion litres of water over six years. A total that’s been independently verified by the Indian Institute of Sugarcane Research in Lucknow, Uttar Pradesh. The team achieved this by taking a holistic approach to water management.

As well as focusing on how to reduce the demand for water when producing sugarcane, ways to increase the supply of water were also explored. To reduce demand, DCM Shriram invested in new irrigation technologies, mulching, and laser land levelling (a water saving technique that involves smoothing the land’s surface to improve water absorption efficiency). To increase supply, the team focused on repairing ponds, recharging wells, and building small, temporary check dams to reduce the speed of the flow of water.

Throughout Bonsucro Global Week 2022, members shared initiatives like these which are helping businesses and the wider communities they work in improve their impact on water resources.

CASE STUDY

IMPROVING SOIL HEALTH

Healthy crops rely on healthy soil. The better the quality of the soil, the more it can help with things like reducing flooding and soil erosion. However, using agrochemicals can lead to disruption of the soil's natural nutrient cycle and polluted water sources. Nitrogen fertiliser, for example, is important for healthy crops but is also a major contributor to GHG emissions.

HOW IS THE BONSUCRO PRODUCTION STANDARD MAKING A DIFFERENCE?

- Bonsucro certified farms reduce their fertiliser use by an average of 11% over five years of certification. This is particularly driven by reductions in the use of nitrogen sources, which also has significant benefits for reducing GHG emissions.
- In most regions, members reduce the amount of fertiliser they use the longer they are certified. Producers in Brazil show significantly lower fertiliser use on average compared to other regions.
- The use of agrochemicals, including pesticides and herbicides, remained relatively stable, year-on-year, across all regions. In the 2021-22 sugarcane season, herbicides accounted for 83% of all agrochemical use, pesticides 10%, and 7% for ripeners and other chemicals.
- In the 2021-22 sugarcane season, 96% of Bonsucro certified farms complied with at least three out of four of our recommended soil management practices. This compares to 91% in 2019-20. The soil management practices are:
 - More than 30% groundcover with sugarcane tops and leaves
 - Less than 20% of the area mechanically tilled
 - Soil pH within recommended levels
 - Applying filter cake and/or vinasse to cane fields.



Figure 11: Average fertiliser application by number of years certified

WHAT HAVE WE DONE TO HELP IMPROVE SOIL HEALTH IN 2022?

REDUCING THE USE OF CHEMICAL FERTILISERS

Towards the end of 2022, our Bonsucro Impact Fund awarded a grant to an important project to improve sustainable practices in sugarcane production. Biofábrica Siglo XXI, an agro-biotechnological company in Mexico, and its partners, will be helping farmers develop their knowledge about their soil and production systems. Biofábrica will share its expertise through practical training on biofertilisers and intercropping to reduce the level of chemical fertiliser farmers use, while increasing productivity and profits. The wider project aims to tackle multiple environmental issues, such as GHG emissions and soil degradation.

PROTECTING BIODIVERSITY

Historically, sugarcane production has been known for causing significant environmental damage. It can disrupt the natural habitats of insects and wildlife, leading to biodiversity loss in many parts of the world. However, conserving healthy ecosystems can help farmers in a number of ways – improving soil health, conserving water and managing pests in a sustainable way.

By adhering to our Production Standard, and through our training and resources, Bonsucro members worldwide are learning more about the positive and negative effects of sugarcane production on wildlife and their habitats, and what to do about them.

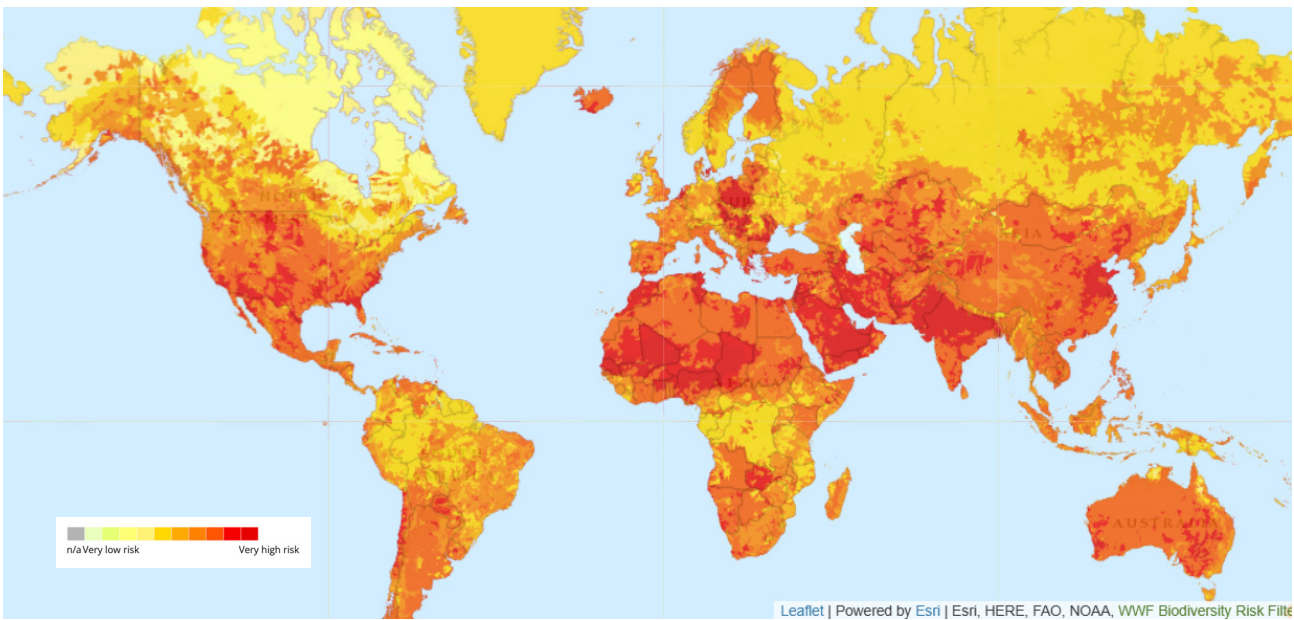


Figure 12: WWF global physical risk to biodiversity map <https://riskfilter.org/biodiversity/explore/map>

HOW IS THE BONSUCRO PRODUCTION STANDARD MAKING A DIFFERENCE?

To become Bonsucro certified, producers need to prove that they know and understand their land. They must demonstrate how their land has been used since 2008 and show they have not converted any land from natural ecosystems to crops or industrial sites. To meet the standard, members must also have an environmental impact and management plan to map, recognise and protect areas of high conservation value and take action to prevent damage and promote biodiversity:

- 100% of Bonsucro certified producers have an environmental impact and management plan in place to map, recognise and protect areas of high conservation value.
- In the 2021-22 sugarcane season, more than 1.9 million hectares of certified land was covered by environmental impact and management plans.

STRENGTHENING HUMAN RIGHTS AND DECENT WORK IN SUGARCANE FARMING AND MILLING

PUSHING FOR SAFER WORKING CONDITIONS AND FAIRER WAGES

BETTER WORKING CONDITIONS

Sugarcane production can be hazardous. Workers in farms and mills face a range of potential dangers, including injuries from machetes, machinery and cane burning, exposure to chemicals and extreme heat. There are also risks of dehydration, exhaustion and respiratory illness. Unsafe working conditions have serious implications for the human rights, health and wellbeing of workers and their communities. Bonsucro is pushing for safer working conditions in the sugarcane sector through our tailored training, which raises awareness of issues and offers solutions to key health and safety challenges.

MORE THAN 128,000 FARM WORKERS AND 68,000 MILL WORKERS BENEFIT FROM BONSUERO CERTIFICATION.

HOW IS THE BONSUERO PRODUCTION STANDARD MAKING A DIFFERENCE?

To be Bonsucro certified, an organisation’s labour standards and health and safety measures must be monitored and enforced in farms and mills. They must assess risks, make safety plans, give safety training, take measures to ensure safe working conditions, and provide workers with personal protective equipment.

- On average, Bonsucro certified producers reduce the rate of accidents by 30% at mills and by 20% on farms over five years of certification.
- Overall, 29% of certified farms reported zero accidents that resulted in time off work in the 2021-22 sugarcane season.

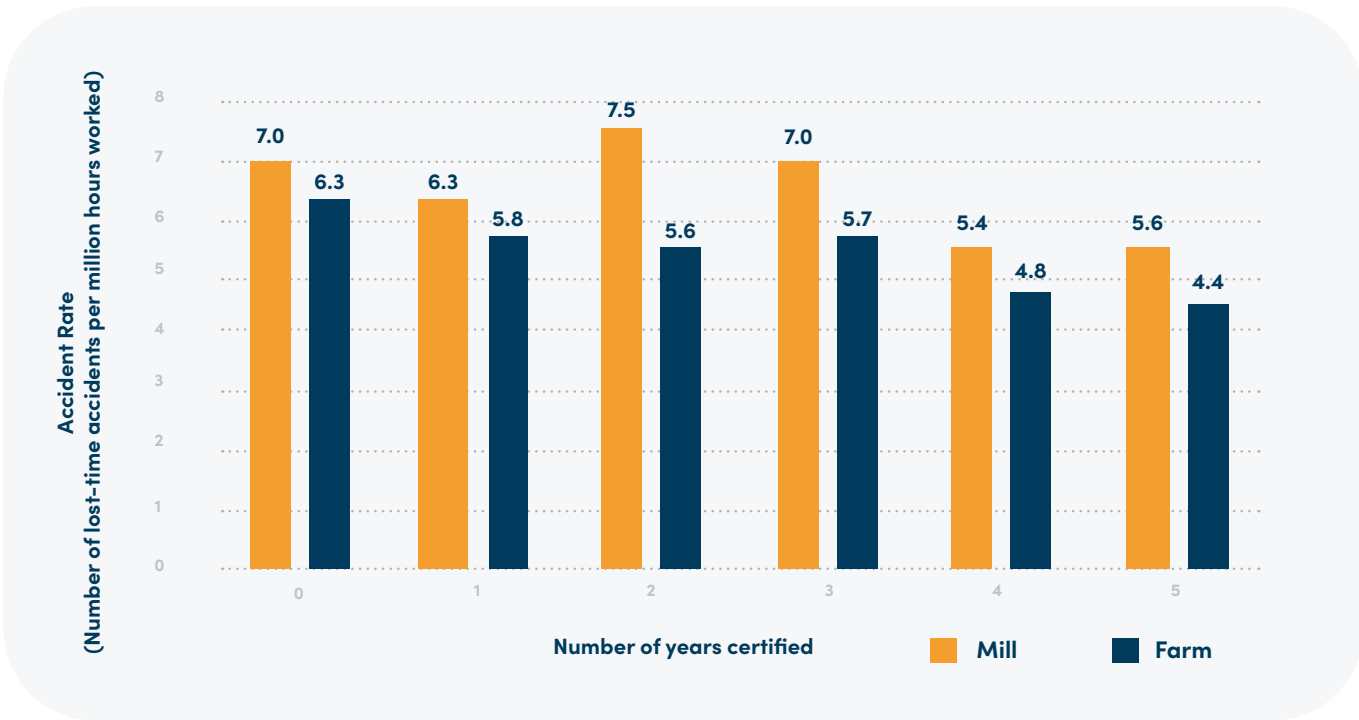


Figure 13: Average accident rates by number of years certified

WHAT HAVE WE DONE TO HELP IMPROVE WORKER SAFETY IN 2022?

RAISING AWARENESS OF HEAT-RELATED DANGERS

Bonsucro is one of the founding partners of the Adelante Initiative, a platform to create safe, productive work practices in the sugarcane industry and beyond. We promote the message that a ‘water, rest, shade, and sanitation’ protocol is important to our members to protect workers from chronic illness and death related to hard work in high heat.

In 2022, we hosted webinars with Bonsucro member, La Isla Network, in English and Spanish to share insights from Adelante Initiative research. More than 100 members of the sugarcane industry from 19 countries took part in the webinars.

Feedback showed that participants increased their knowledge and confidence on this topic by an average of 30% after attending a session. One participant said: “Thank you! Really clear information on a clearly important topic.” Another commented: “The most useful part of the session was understanding the positive impact of rest periods and the updated recommendation for how much water and electrolytes workers need to consume.”

INCREASING WORKERS’ WAGES

Despite long hours and strenuous tasks, many workers in the sugarcane industry are not earning enough to support themselves and their families. In some countries, sugarcane cutters have to work 12 to 15 hours a day to earn the minimum daily wage for agricultural labour – and not all countries have a minimum wage. Often, there is no paid leave or social security benefits, such as pensions or insurance.

Low wages can lead to excessive overtime hours or people having multiple jobs, increasing the chance of accidents and injury at work. For example, longer hours working in fields can make people more prone to serious illnesses like chronic kidney disease caused by heat stress. A lack of income security affects families and communities, too. Without a living wage, people may choose to have their children work instead of going to school.

CASE STUDY



HOW IS THE BONSUCRO PRODUCTION STANDARD MAKING A DIFFERENCE?

- Our Production Standard has always required the lowest-paid workers to earn the national minimum wage. We track wage levels using a ratio of lowest-wage (including benefits) to national minimum wage (including legally-required benefits) and found that on average, Bonsucro certified farms pay 19% above the national minimum wage.
- There is a trend towards better pay linked to longer Bonsucro certification in both farms and mills (see figure 14). The wage ratio increases by 5% over five years of certification on farms and by 4% in mills.
- After five years of certification, lowest-wage mill workers are paid on average 22% more than the minimum wage. This compares to 18% at the point of certification. This upward trend is seen most clearly in Brazil, where the average wage ratio in the fifth year of certification is 10% higher than the average when operators first become certified.
- During the 2021-22 sugarcane season, on average, Bonsucro certified farms paid their lowest-wage workers 13% above minimum wage, with some farms and mills paying more than double the minimum wage required in their country.

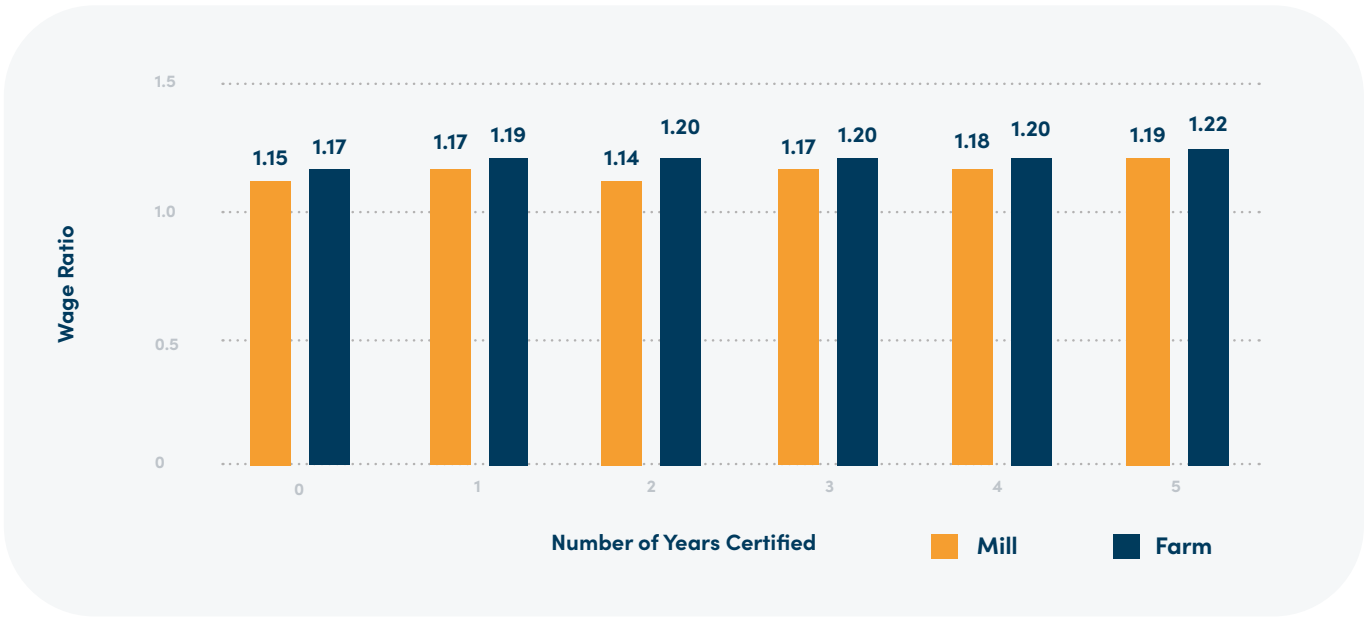


Figure 14: Average ratio of lowest entry wage to minimum wage, by number of years certified (where 1.0 equals minimum wage)

WHAT HAVE WE DONE TO HELP IMPROVE WAGES IN 2022?

We set up a Living Wage Working Group in 2022 which aims to raise awareness and provide advice about fair incomes in the sector. It’s also helping to put the Bonsucro Production Standard requirements on the living wage into practice.

The group is made up of Bonsucro members from throughout the sugarcane supply chain, NGOs and government organisations, and industry experts. In 2022, it met five times and discussed issues including testing tools to track progress on the living wage. It welcomed guest speakers, including experts from IDH – the sustainable trade initiative, Fairtrade International, and the International Social & Environmental Accreditation & Labelling (ISEAL) Alliance. The group has learned about the concept of a living wage, the methodology, and the experiences of other sectors, such as flowers and bananas.



ENHANCED RESPECT FOR HUMAN RIGHTS

There are significant human rights risks in the sugarcane sector. These include the risk of forced and child labour, and violence and harassment. Seasonal workers are at risk of being trafficked from other countries and may be forced to pay off fees associated with their recruitment. In some countries, sugarcane farms and mills employ children at the expense of their education and health.

Violence and harassment against workers and communities has been reported as an issue in the sector. Similarly, there are examples of where indigenous peoples and local communities have been forced from their land to make way for sugarcane plantations.

At Bonsucro, we are driving change to make sure the human rights of everyone involved in the sugarcane industry are respected. We do this through guidance and training, resources and knowledge sharing, as well as the requirements of our membership Code of Conduct and our Production Standard. Alongside our members, we are helping to improve human rights throughout the supply chain.



HOW IS BONSUCCRO MAKING A DIFFERENCE?

Our Production Standard has explicit requirements on respecting workers' rights – both employees and contract workers. In addition, all members, including those that are not certified, are required to comply with the Bonsucro Code of Conduct. Every year, we assess our members to make sure they have human rights policies and commitments in place. We have a grievance process so anyone can raise a concern or issue about one of our members.

- 81% of Bonsucro members had a human rights policy in 2022. Those without one could explain how human rights were covered by other policies and management systems. Some members shared examples of their own codes of conduct which they use internally and with their suppliers.
- 51% of members made commitments to international or sector-specific standards on human rights, for example, the [United Nations Guiding Principles on Business and Human Rights](#), [United Nations Global Compact](#), and [Organisation for Economic Co-operation and Development \(OECD\) Guidelines for Multinational Enterprises on Responsible Business Conduct](#).
- 95% of members had systems to act on human rights risks in their production or supply chain.
- 79% of members had a remediation or grievance mechanism to address adverse environmental and social impacts they caused or were directly linked to.

**196,200 WORKERS
WORLDWIDE ARE COVERED
BY THE HUMAN RIGHTS
MEASURES DETAILED IN THE
BONSUCRO PRODUCTION
STANDARD.**

WHAT HAVE WE DONE TO HELP IMPROVE HUMAN RIGHTS IN 2022?

We tightened up our processes relating to assessing members' human rights commitments. We made changes to our application form, asking members for more details about their human rights policies and grievance processes. This supports our Code of Conduct, which all members commit to and includes human rights due diligence (where we investigate and review an organisation's approach to human rights). We also added questions about human rights to our members' annual reports, which all members have to submit every year.

We continued to make sure complaints about Bonsucro members could be brought to our attention and dealt with effectively. If someone discovers a breach of our Code of Conduct, they can make a complaint through our Grievance Mechanism. We use an independent service provider, the Centre for Effective Dispute Resolution, to carry out this process.

We ran three webinars on the United Nations Guiding Principles of Business and Human Rights (UNGP) for our members. Around 150 people from 13 countries attended. The UNGP provide clear, unambiguous guidance on the roles of governments and businesses in protecting human rights. It also gives context for practical action on how businesses can promote and protect human rights. Feedback from participants included: "The most useful part of the session was understanding the global context in which we find ourselves as an industry and how our efforts add up." And "Excellent presentation, very clear."

SHARING BEST PRACTICE ON CREATING AN INDEPENDENT GRIEVANCE PROCESS

Having an effective grievance process in place can help prevent human rights issues from arising or escalating. However, workers in global supply chains and local communities may come up against barriers to using grievance processes, such as a lack of trust in them or language barriers. Working with a local partner to develop and implement a grievance policy and process can be a practical way to overcome these challenges.

In October 2021, Bonsucro was awarded a grant from the ISEAL Innovations Fund, which is supported by the Swiss State Secretariat for Economic Affairs (SECO), for a [project to share learning and good practice](#) with other voluntary sustainability schemes with their grievance processes. The resources consider how to choose and work with a local partner to develop and implement a grievance policy and process. They include a framework on how to select a suitable third party – which can be trade unions, local civil society organisations, legal counsel mediators, specialist investigators and technology solutions providers. There's also a selection of tips, toolboxes, and case studies from countries such as Vietnam, South Africa, and the USA.

CASE STUDY



CREATE VALUE ACROSS THE SUGARCANE SUPPLY CHAIN

MORE INCLUSIVE AND SUSTAINABLE SUPPLY CHAINS

To drive positive change in the sugarcane industry, we need to make sure environmental, social, and economic risks and responsibilities are shared throughout supply chains. By creating more inclusive and sustainable supply chains, we will improve trust in the industry – and increase demand for sustainable products.

Smallholder farmers* are a crucial foundation of many sugarcane supply chains around the world and are responsible for huge amounts of sugarcane farmland. For example, 6 million smallholder farmers grow sugarcane in India alone. Yet, smallholder farmers often face the biggest barriers when it comes to improving sustainability – including a lack of information resources and finance needed to make changes and manage risks.

One of the key ways Bonsucro is helping to create more inclusive and sustainable supply chains is by making sustainability practices and certification more accessible to smallholder farmers through our Production Standard for Smallholder Farmers.

HOW ARE THE BONUCRO PRODUCTION STANDARD AND THE BONUCRO PRODUCTION STANDARD FOR SMALLHOLDER FARMERS MAKING A DIFFERENCE?

Through Bonsucro certification, smallholder farmers learn to improve their production methods, better manage the water and fertiliser they use, and gain knowledge of human rights issues. The certification process also helps to build stronger relationships between farmers and mills.

- The total number of smallholder farms certified by Bonsucro reached 12,440 in 2022, covering almost 37,000 hectares of land. Around 2,600 of those farms were certified under the full Bonsucro Production Standard, particularly those supplying mills in Thailand. However, the vast majority were certified under the Production Standard for Smallholder Farmers.
- In 2022, almost 2,000 new farmers became certified under the Bonsucro Production Standard for Smallholder Farmers. They represent 1,715 hectares of land.
- In India, 9,347 smallholder farms now have Smallholder Standard certification, supplying 10 certified mills. The country has the largest number of Bonsucro certified smallholders.

**For Bonsucro, smallholder farms are defined as smaller than 25 hectares.*

WHAT HAVE WE DONE TO HELP IMPROVE INCLUSIVE AND SUSTAINABLE SUPPLY CHAINS IN 2022?

SUPPORTING SMALLHOLDER FARMERS TO GROW

We're investing in initiatives to help smallholder farmers through the Bonsucro Impact Fund. These include [a project in Brazil](#) to improve soil health in sugarcane plantations through crop diversity and a lower use of agrochemicals.

Another Bonsucro Impact Fund project involves an 'incentives and rewards platform' to help nudge smallholder farmers in Brazil, Colombia, Uruguay, and Paraguay towards more sustainable practices. As well as tangible incentives, such as technical assistance and soil analysis, they are supported with recommendations for improving sustainable practices and rewarded for their progress.

CASE STUDY

INCREASING SUPPLY AND DEMAND FOR SUSTAINABLE SUGARCANE

Demand for sugarcane that meets sustainability standards continued to increase steadily throughout 2021-22. One of the key reasons for ongoing growth is that consumers and businesses are becoming more aware of the environmental and social impact of producing sugarcane.

Governments and regulators are also taking action to address the sugarcane industry's sustainability challenges. They are implementing policies and regulations to reduce GHG emissions, protect natural resources, promote human rights, and ensure fair trade. For example, the European Union has [set a target](#) for member states to produce 42% of energy from renewable sources by 2030, which includes biofuels derived from sugarcane.

These positive changes are driving the market forward. However, there are some barriers and challenges that are making it harder for the sustainable sugarcane market, including a lack of understanding of the benefits of sustainability among some producers and consumers. Also, the costs of implementing sustainable practice can be high. These include the upfront investments of certification, equipment, infrastructure, and training, which many smallholder farmers and mills, especially in developing countries, may not be able to afford.



CHANGES IN SUPPLY OF BONSUCRO CERTIFIED SUGARCANE AND DERIVATIVES

- Bonsucro is the world's largest voluntary sustainability standard certifier of sugarcane. In 2021-22, Bonsucro certified sugarcane represented approximately 6.5% of global production – that's 120 million Bonsucro certified sugarcane tonnes out of a total of 1,859 million tonnes globally.
- In the 2021-22 season, the amount of Bonsucro certified land used to grow sugarcane increased by 189,964 hectares.
- 15% of the growth in certified hectares came from producers becoming newly certified, and 85% from existing producers expanding the amount of their land that's certified.
- 37% of Bonsucro certified producers increased their certified area in 2021-22.

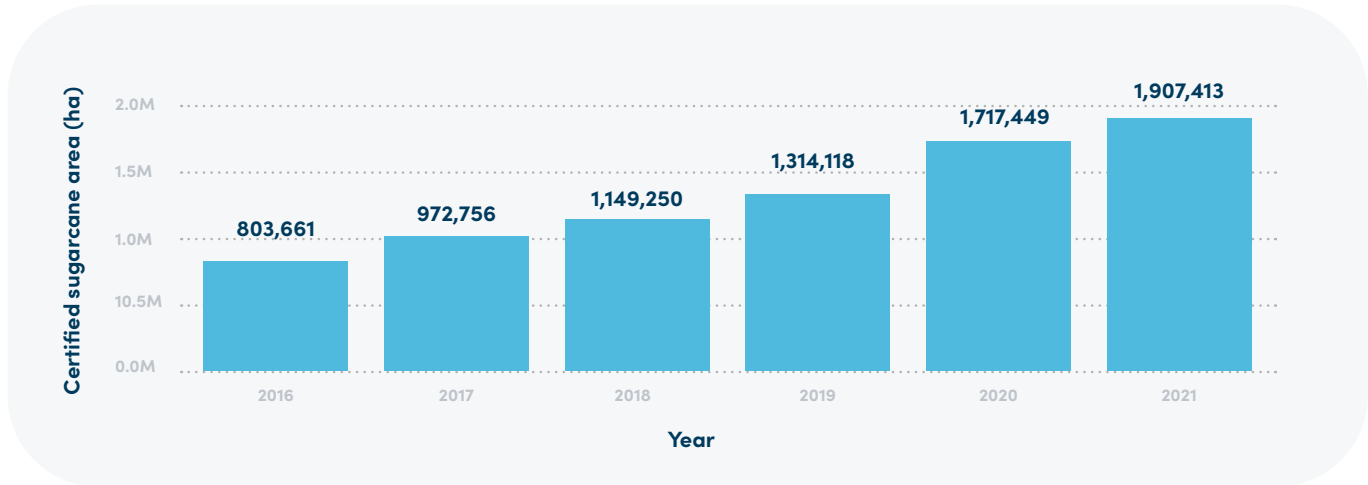


Figure 15: Area of land in hectares that is producing certified sugarcane by year

DERIVATIVES FROM SUGARCANE: SUGAR

- Supply of Bonsucro certified sugar has grown steadily. In the 2021-22 sugarcane season, production volumes grew by 16%, which means 1.38 million tonnes were added to the global supply of Bonsucro certified sugar.
- Supply of Bonsucro certified sugar doubled in between the 2017-18 and 2021-22 harvests. Nearly three-quarters (74%) is currently produced in Brazil, with Colombia, Thailand, Australia, and Nicaragua in the top five producer countries by certified volumes.

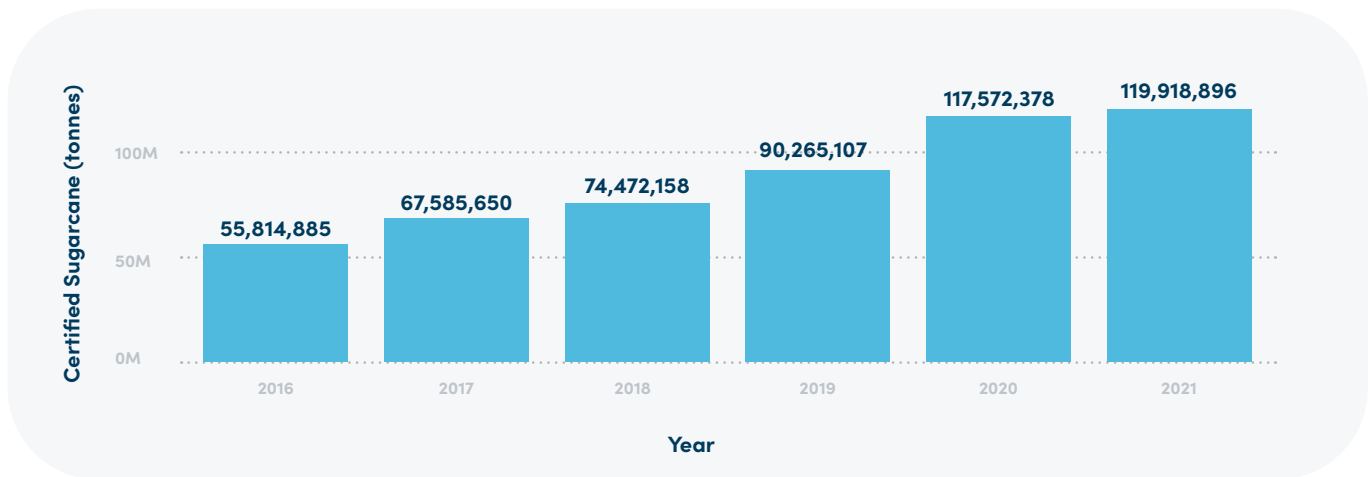


Figure 16: Volume in metric tonnes of certified sugar produced by year

DERIVATIVES FROM SUGARCANE: ETHANOL

- Certified ethanol supply had remained relatively static for three years, but from 2020-21 to 2021-22, production volumes increased by 20% to 3.8 million cubic metres. This is an increase of 636,000 cubic metres compared to the previous year.
- Brazil is the world's largest producer of Bonsucro-certified ethanol, generating more than 3.6 million cubic metres in the 2021-22 season, followed by Colombia (0.58 million cubic metres) and India (0.31 million cubic metres).

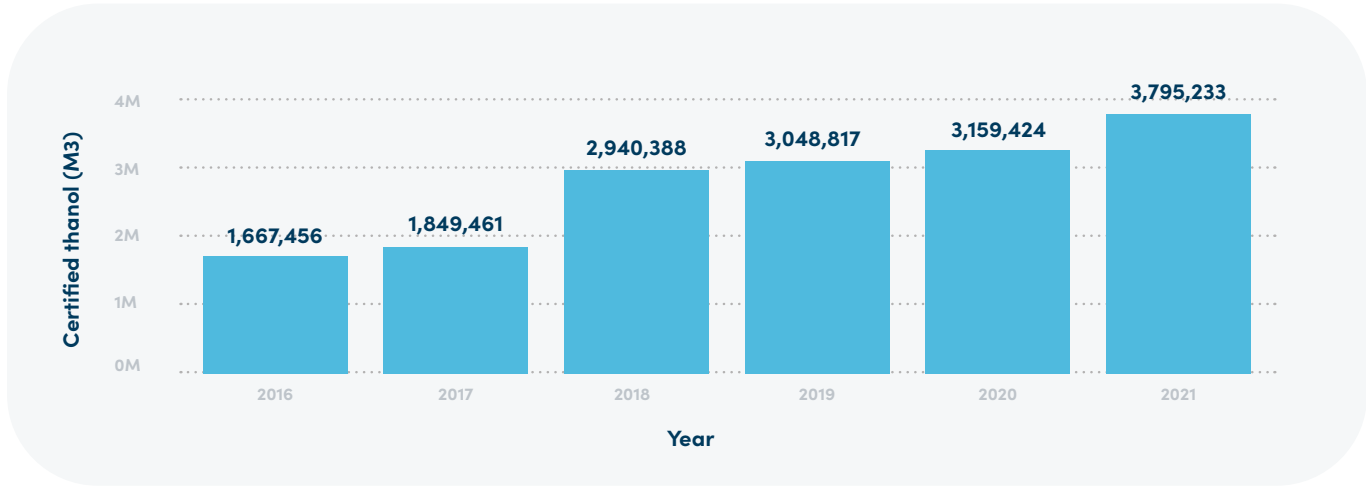


Figure 17: Volume in cubic metres of certified ethanol produced by year

DERIVATIVES FROM SUGARCANE: MOLASSES

- During the 2020-21 and 2021-22 seasons, there was an increase in Bonsucro members from intermediaries in supply chains that use molasses, such as the rum industry.
- In 2021-22 there were 46 producers of Bonsucro certified molasses – that's five times as many as there were in 2017-18.
- In 2021-22, production volumes of certified molasses increased dramatically by 500,000 tonnes – up 88% on the previous year.

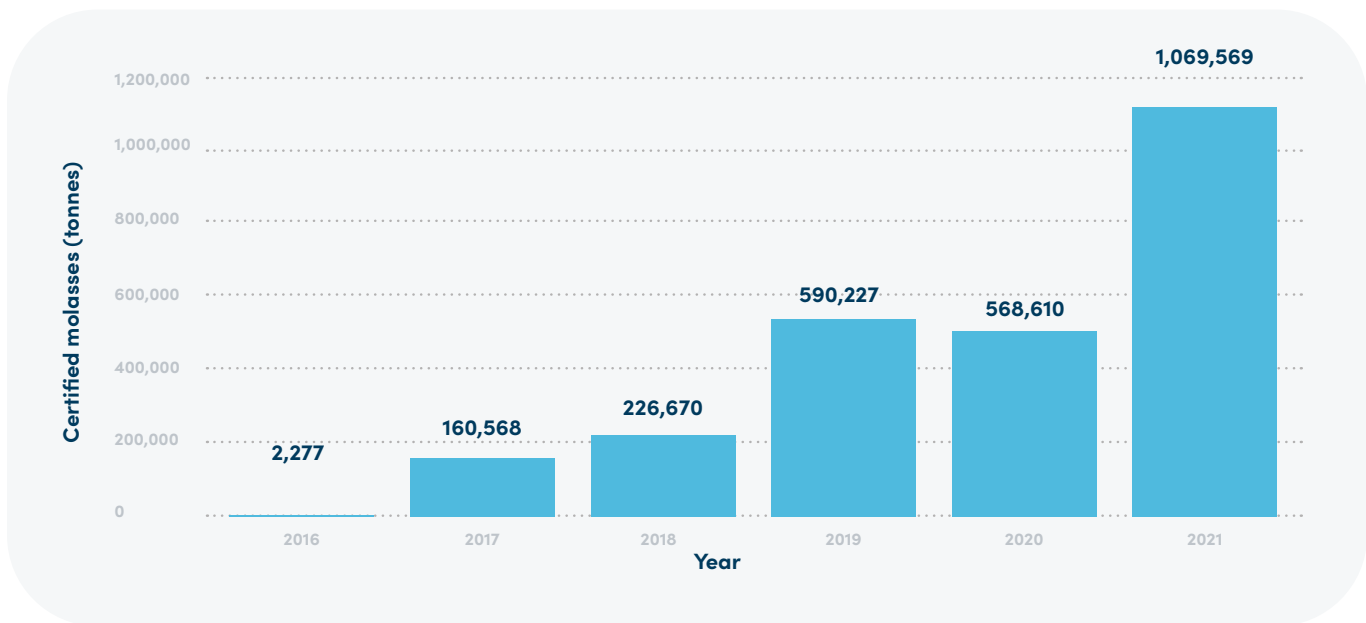


Figure 18: Volume in metric tonnes of certified molasses produced by year

CHANGES IN DEMAND FOR BONSUCRO CERTIFIED SUGARCANE AND DERIVATIVES

- In the 2021-22 season, there was an 8% increase in the market uptake of Bonsucro certified sugar. Market uptake in this case is defined as the volume of certified product sold during the year, as a percentage of the volume of certified product produced during the year. The higher the market uptake of certified products, the more we can incentivise producers to adopt sustainable practices.
- There was an extremely positive increase in the trade of certified sugar, with a 54% rise, representing more than 1 million extra tonnes sold in 2021-22 compared to the previous year.
- Market uptake of ethanol increased in 2021-22, achieving 19% compared to 15% in 2020-21.
- Market uptake of Bonsucro certified molasses in 2021-22 was 9.8%. That's down from 13.8% in 2020, but the overall volume traded in 2021 was bigger. Overall there was a 32% increase in the trade of certified molasses (25,442 tonnes) from 2020-21 to 2021-22.



Figure 19: Volume of trades in metric tonnes of certified sugar by year

SUPPORTING SUSTAINABLE PRODUCTION THROUGH BONSUCRO CREDITS

Bonsucro’s Credit Trading Platform is a tool that connects buyers and producers of sustainable sugarcane. Its automatic price-matching mechanism allows a global network of businesses to buy and sell Bonsucro Credits – which are proof that a unit of sugarcane, raw sugar, ethanol or molasses has been sustainably produced to Bonsucro’s Production Standard.

- More than three times as many credits (raw sugar equivalent*) were traded in 2021-22 compared to 2020-21 – a 220% increase. (This includes one unusually large ethanol trade, equivalent to more than 400,000 raw sugar credits).
- The most commonly traded credits are raw sugar credits, although credits are possible for sugarcane, ethanol, and molasses.
- Organisations that buy the most credits are based in the United States of America and the Netherlands.

* Credits are equal to one tonne of the product they represent. The statistics here refer to raw sugar equivalent credits. We have converted ethanol and sugarcane credits into raw sugar credits to come up with these figures.

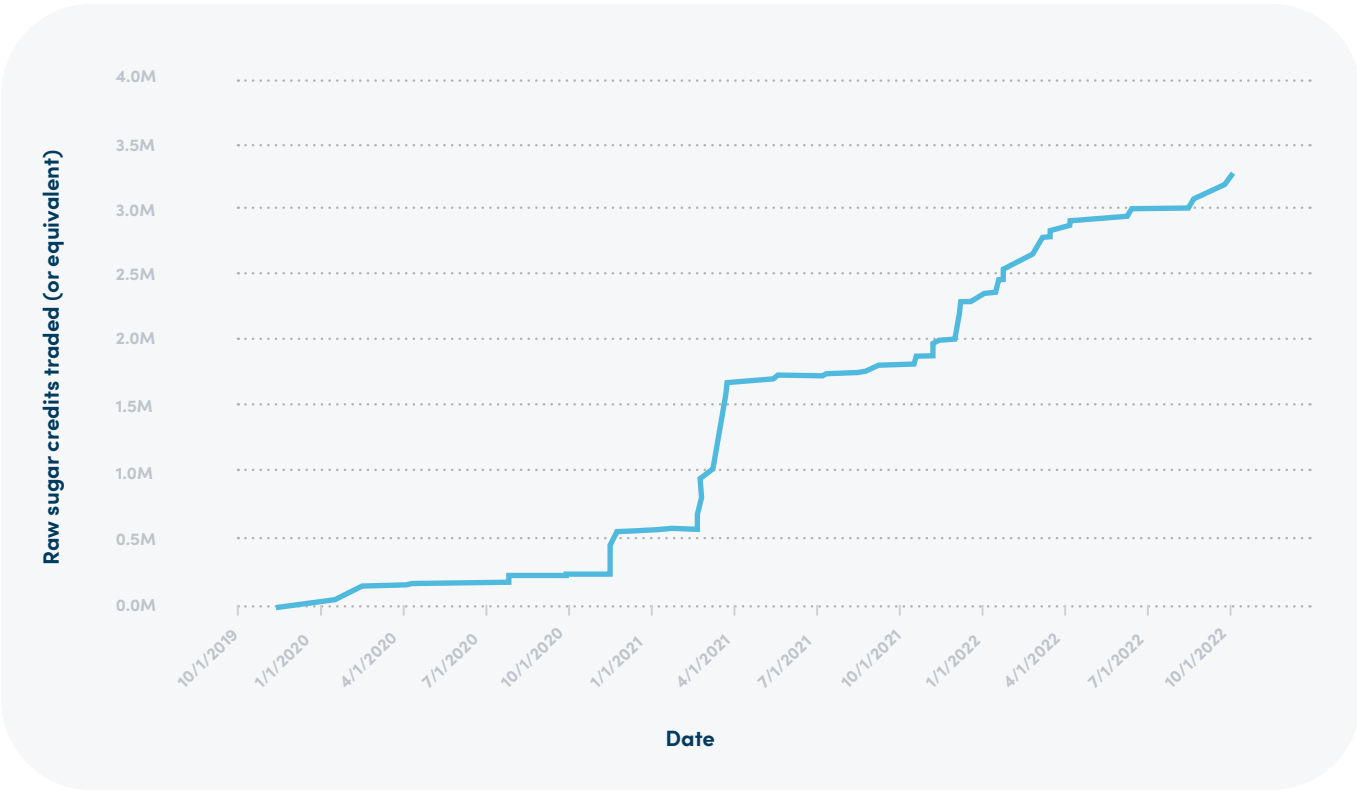


Figure 20: Cumulative credit trades over time

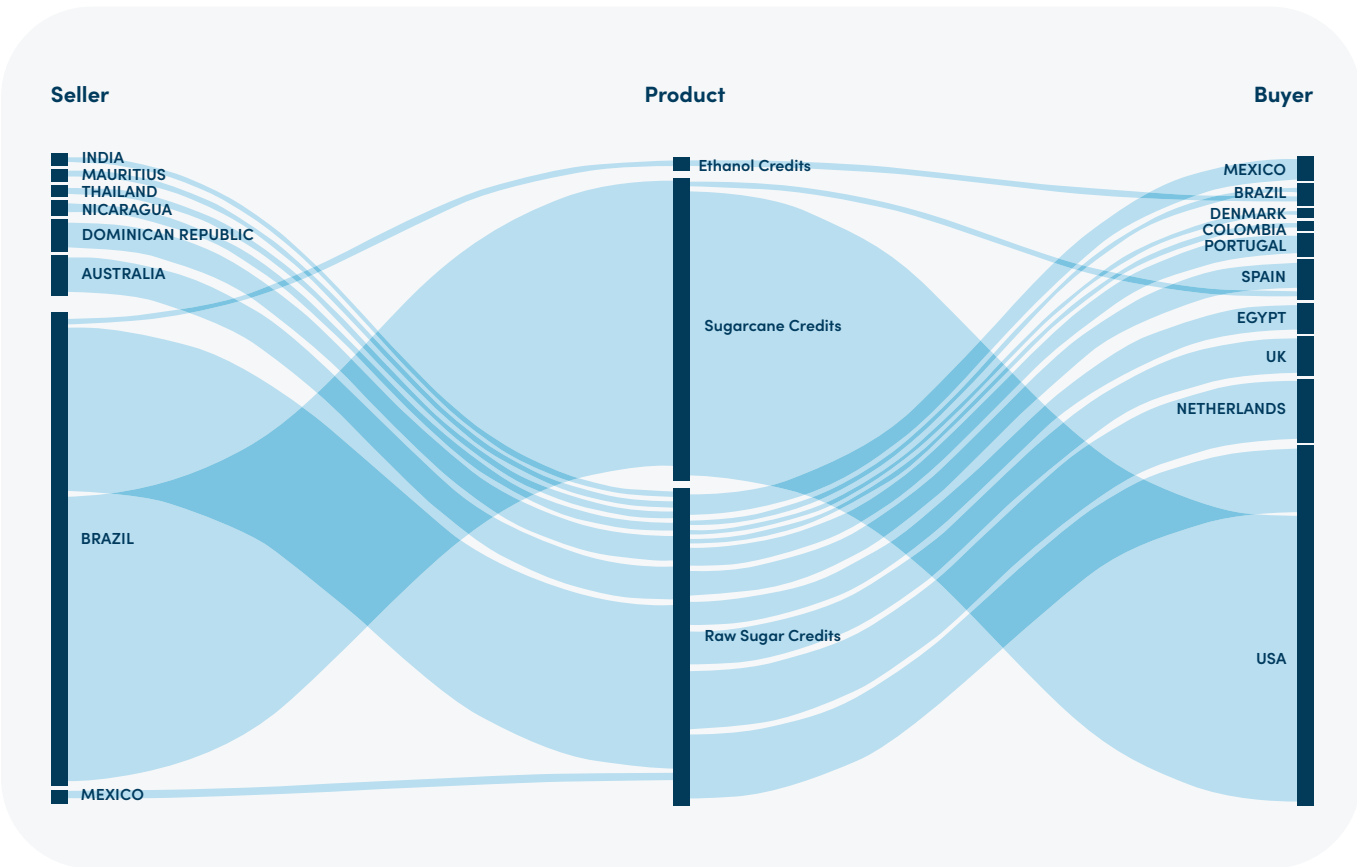


Figure 21: Trade of certified credits by country and product between January and December 2022.

FUNDING TO ADDRESS CRITICAL SUSTAINABILITY CHALLENGES

We recognised the need to offer more resources and financial support to help our members accelerate sustainable change across the sector. So, in March 2022, we launched the Bonsucro Impact Fund. It's powered by our Bonsucro Credit Trading platform. Around 50% of all transaction fees on the platform go into the Bonsucro Impact Fund.

Our members can now apply for grants for projects that test new solutions to the sector's critical sustainability challenges. This includes projects that:

- Show innovation in their approach to sustainability with smallholder farmers
- Build new approaches to reduce greenhouse gas emissions
- Improve water stewardship
- Address human rights issues
- Provide decent work.

They need to be projects that can be scaled up or applied to other regions that produce sugarcane.

We opened the first two calls for proposals in March 2022. These were: 'Innovating sustainability in smallholder sugarcane farming' and 'Climate action and water stewardship'.

By October 2022, we had awarded grants to five projects that cover six countries. This included WWF-Pakistan and partners, who received a grant for their project 'Promoting Sustainable Sugarcane Production Among Smallholder Farmers of Pakistan'.

Asad Imran, Director, Food & Markets at WWF-Pakistan said:

"We are proud to be one of the recipients of the Bonsucro Impact Fund. WWF-Pakistan is looking forward to enhancing farmers' socio-economic and environmental resilience, and helping to reduce their reliance on non-renewable energy sources, while protecting natural resources."

LOOKING FORWARD

One of the hallmarks of a credible sustainability platform like Bonsucro is the extent to which it collects and shares data on the outcomes it achieves. It's important to understand how a system is contributing to change and the impact of that change. However, the other main purpose behind tracking outcomes, is the role it plays in identifying areas where improvement and innovation is needed.

At Bonsucro, we use our outcome data and insights from all our areas of work to help us focus our commitments and resources going forward. **Historically**, for example, our certification data has shown us that over years of certification, **there is not as much change in agrochemical application as we would have anticipated**. This demonstrated that we needed to deepen our impact on the use of agrochemicals. So, we responded by updating our Standard to tighten that requirement. The data also showed us that we needed to improve our biodiversity indicators so that we can better gauge our impact. We have addressed this in the new version of the Production Standard by making the indicator on soil testing clearer and have ensured that it links into the environmental management plans that producers need to make.

All our future work will continue to be linked to our three strategic aims to: improve the environmental impact of sugarcane, strengthen human rights and decent work in sugarcane milling and farming, and create value across the supply chain.

As demonstrated in this report, Bonsucro's suite of standards, membership requirements, Impact Fund, and convening work are all levers that we are already using to achieve these aims. Recognising what works and where we need to do better, we will continue to blend tried and tested approaches with innovation. Most importantly, we will continue to use our position as a global platform to drive sustainability in the sugarcane sector for the benefit of everyone.

AN EXPLANATION OF THE DATA USED IN THIS REPORT

Data type	Explanatory notes
Bonsucro activity information	The Bonsucro activities described in this report occurred within the calendar year January to December 2022.
Membership information	For member information, 2022 refers to the calendar year January to December 2022. Individual membership figures are correct as at the end of the year (31 December 2022).
Certification data including certified hectares, certified volumes, and impact data (for example, water use efficiency, accident rates.)	<p>Each year, producers report 12 months of data. For the purpose of analysis, this data is collated according to the year at the start of the reporting period. Exact reporting periods align with producers' audit cycles.</p> <p>Due to the reporting timeframe and audit cycle for data verification, trade and calculator data is reported a year in arrears. The latest complete year of data available is for the 2021-22 season. In graphs and narrative descriptions, this is sometimes shortened to 2021. The 2020-21 season is referred to as 2020, and so on. Each submission of certification data, and therefore each 'season', includes one harvest per producer.</p> <p>All certification data used in this report has been submitted by licensed certification bodies via the audit reports and Bonsucro Calculator throughout their certification journey.</p> <p>The data has been verified by third party auditors and curated by Bonsucro. Unless otherwise stated, all figures and results presented in this report are based on audit data submitted up to 3 October 2023. The full dataset includes certification information from 2014 to 2022.</p>
'Number of years certified' or 'certification year'	<p>Where appropriate and relevant to the analysis, data has been presented by either calendar year, or by number of years certified:</p> <ul style="list-style-type: none">• Year 0 represents the data submitted when a producer is first certified.• Year 1 represents data submitted by a producer one year after certification, and so on. <p>Average figures for each certification year are likely to change in successive annual summaries. This is due to year-round audit reporting which adds to the dataset each month. Each year as businesses become certified for the first time (year 0) or achieve another year of certification, the amount of data for that year category grows. Certification years above year 5 are excluded from this report due to small sample sizes.</p>
Agriculture phase emissions	Agriculture phase emissions can encompass all GHG emissions that occur in the growing and harvesting of sugarcane. This includes long-term emissions from land-use change, and immediate emissions linked to land management practices.



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