SUSTAINABILITY REPORT

2019

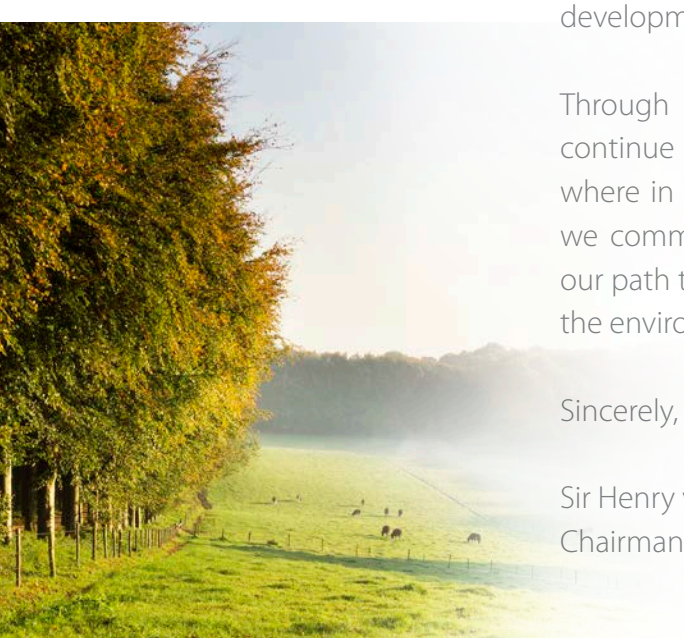
manuka
NATURE'S EXCELLENCE
Juntos desde 2005

More than 15 years ago, together with a group of farmers from New Zealand, we had the privilege of visiting Chile. On that occasion we were impressed with the quality of the soil, climate, rainfall and its people, and thus the passion and conviction to implement the pastoral model in the best possible way began. This is how Manuka was born.

Year after year we have been growing; our production model has embedded, and our people have gained the knowledge required. Most of our pastures are now permanent, soil fertility has lifted and our cow's lifespan reflects their improved wellbeing. All of this has allowed us to produce and deliver the best quality milk.

It is known that milk is a food with high nutritional content, essential to feed a constantly growing population. And today, we work to produce it in a sustainable way that generates social value for our communities, while protecting animal welfare and preserving the environment.

Manuka has implemented the same standards that are applied in New Zealand, so sustainability has always been a fundamental pillar for the company. In this context, we have created a committee that is part of our corporate governance, focused exclusively on the sustainable development of the company.



Through our sustainability committee we have and continue to work on all the areas outlined in this report, where in a voluntary, public, transparent and open way, we communicate our challenges, our current state and our path to make Manuka a 100% friendly company with the environment.

Sincerely,

Sir Henry van der Heyden
Chairman of the Board of Directors

Our milk is produced through the grazing system, which allows cows to be permanently outdoors feeding on grass. To apply this model it is necessary to rotate the grasslands, so that they rest and grow vigorously. This process allows grass to absorb and sequester carbon in the soil, so grazing is one of the ways to help mitigate greenhouse gas emissions, as recognized by the Intergovernmental Panel on Climate Change (IPCC) in its August 2019 report.

Implementing this system has its challenges. It is a very technical, complex and specific procedure, so the most efficient way to apply it is through training.

At Manuka we have assumed this enormous challenge and that is why we are committed to promoting and offering, together with the Technical Training Center of Los Lagos, a technical career specialising in pastoral management. To achieve this goal, last March we opened the Training Center Lechero del Sur, an unprecedented institution in the country, which focuses on education and research of the milk production system based on regenerative grassland.

This career not only helps to spread a production system that allows mitigating greenhouse gases, as indicated by the IPCC, it also gives the agricultural workers of our community a professional education that allows them to grow and develop professionally.

We are convinced that milk is a fundamental nutritional food for the development of the planet in the future, and that the way we produce it is the best model to combat climate change.

Sincerely,

Cristián Swett
CEO

ABOUT THIS REPORT

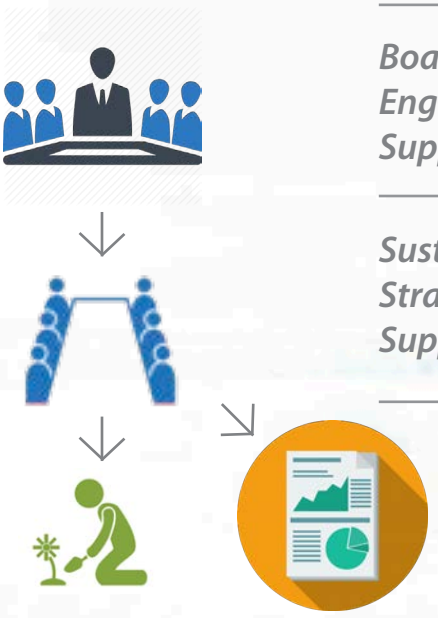
Corporate Governance & Sustainability Committee

Our Corporate Governance processes are designed to support management in areas of the business that are key for Manuka's development, and include Production, Finance and Young Stock.

Caring about the way we produce has always been key for our long term development.

In 2017, we created a sustainability committee. This helps our management team make strategic decisions and puts support in place to provide clear reporting.

The Sustainability Committee is made up of eight members: two external party specialists in sustainability, three internal, two committee members are shareholders and the chairman is one of Manuka´s board of Directors.



Demonstration Farm

As a start, and given the extension of our company's operations, for this first year we have selected our demonstration (demo) farm (Laureles) as illustrative for our sustainability indicators calculations, since our final goal is to have all Manuka's farms as per Laureles functioning model.

Laureles was selected over five years ago by governance and management to be our model farm. This translates into having fully trained and experienced personnel who understand and effectively apply all aspects involved in our grass based dairy production model. In addition, it has the technology, infrastructure investment, elite cattle genetics and grass development we aim for.

ABOUT THIS REPORT

Our Approach

Our first sustainability report summarises our sustainability activities and progress for the year 2018, while also including some of the actions planned for our future. Within the report, we have grouped our working priorities and placed them under three main pillars:

- ***Product Quality & Safety***
- ***Environmental Impact***
- ***Social Value Creation***

We are presenting and following up our goals, activities and progress through several key indicators based in the dairy sustainability framework (methodology developed by six international dairy organizations) and also aligned with the UN sustainability development goals focusing on supporting N°2,N°8, N°12 and N°13.

- Market Development
- Rural Economy

- Working conditions
- Product Safety & Quality
- Animal Care

- GHG Emissions
- Soil Nutrients
- Waste
- Water
- Soil
- Biodiversity

GLOBAL CONTEXT

Climate change is affecting all four pillars of food security:
Availability (yield and production)
Access (prices and ability to obtain food)
Utilization (nutrition and cooking), and
Stability (disruptions to availability).

Through a sustainable production model, we can meet the growing global population demand for high-quality animal sourced protein and reduce our environmental impacts.

2 Billion
increase in global population is expected by 2050

The global demand for food is expected to double by 2050

And already 800 million
suffer from hunger worldwide

TWO THIRDS
of extremely poor employed workers worldwide are agricultural workers

ONE FIFTH
of young people
ARE NOT IN
education, employment or training

To limit global warming to **1.5°C, global carbon emissions** need to fall by a staggering **45 per cent by 2030** from 2010 levels

DAIRY INDUSTRY

Milk is one of the most affordable sources of animal protein, and is a nutrient dense food, making the dairy sector well placed to contribute, and to address all four pillars of food security.

MILK CONTAINS 9 ESSENTIAL NUTRIENTS

Commonly missing from the average diet

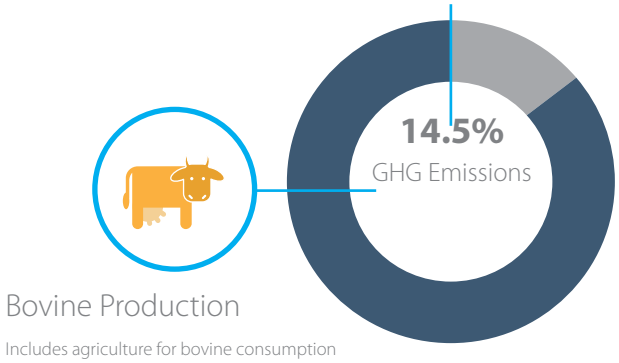
- CALCIUM
- Protein
- POTASSIUM
- Phosphorus
- VITAMIN D

VITAMIN B12
VITAMIN A
RIBOFALVIN (B2)
NIACIN

8 OZ MILK =
8 GM OF PROTEIN

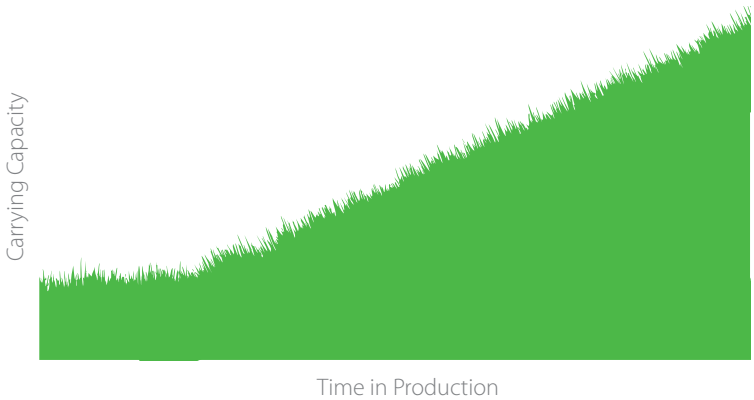
Green House Gas emissions are the most important environmental challenge faced by agriculture.

Up until recently, global reports were only adressing GHG emissions within the industry, but did not include CO2 sequestration, for example, from permanent grass based systems.



However, the last Intergovernmental Panel on Climate Change (IPCC) report stated that sustainable land management can actually prevent land degradation, maintain land productivity and reverse the adverse impacts of climate change, through permanent pasture CO2 absortion and later transformation into Organic Carbon.

Carbon can be stored long term (decades to centuries or more) beneficially in soils in a process called soil carbon sequestration. This is where regenerative farming comes in with permanent pastures that are known to improve the rate at which CO2 is removed from the atmosphere and converted to plant material and/or soil organic matter.



ABOUT MANUKA

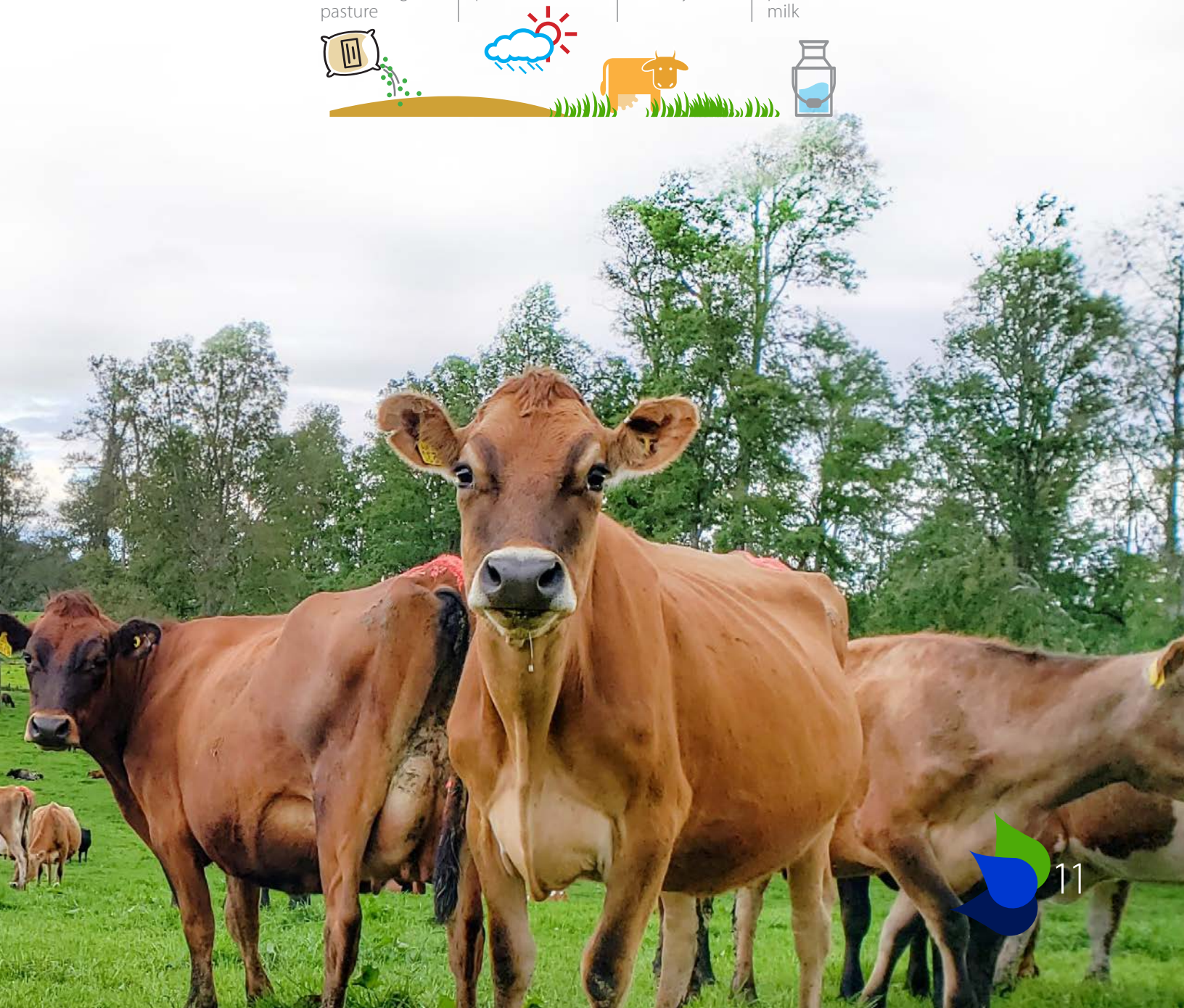
We are the largest Chilean dairy producing company under the permanent pasture model, with 13,458 hectares of permanent grass and 5,130 hectares of native forest, located in the Xth and XV Region.

Our production model works with nature, but requires skill and efficiency to be succesfully implemented. We are experts in our field.

2019	2024
46 Dairies	65 Dairies
150,000 mill litres	263,000 mill litres
38,194 cows	60,194 cows

13,458 Hectares of permanent grass

We develop the earth and grow pasture | We manage pasture | We feed healthy cows | We produce milk



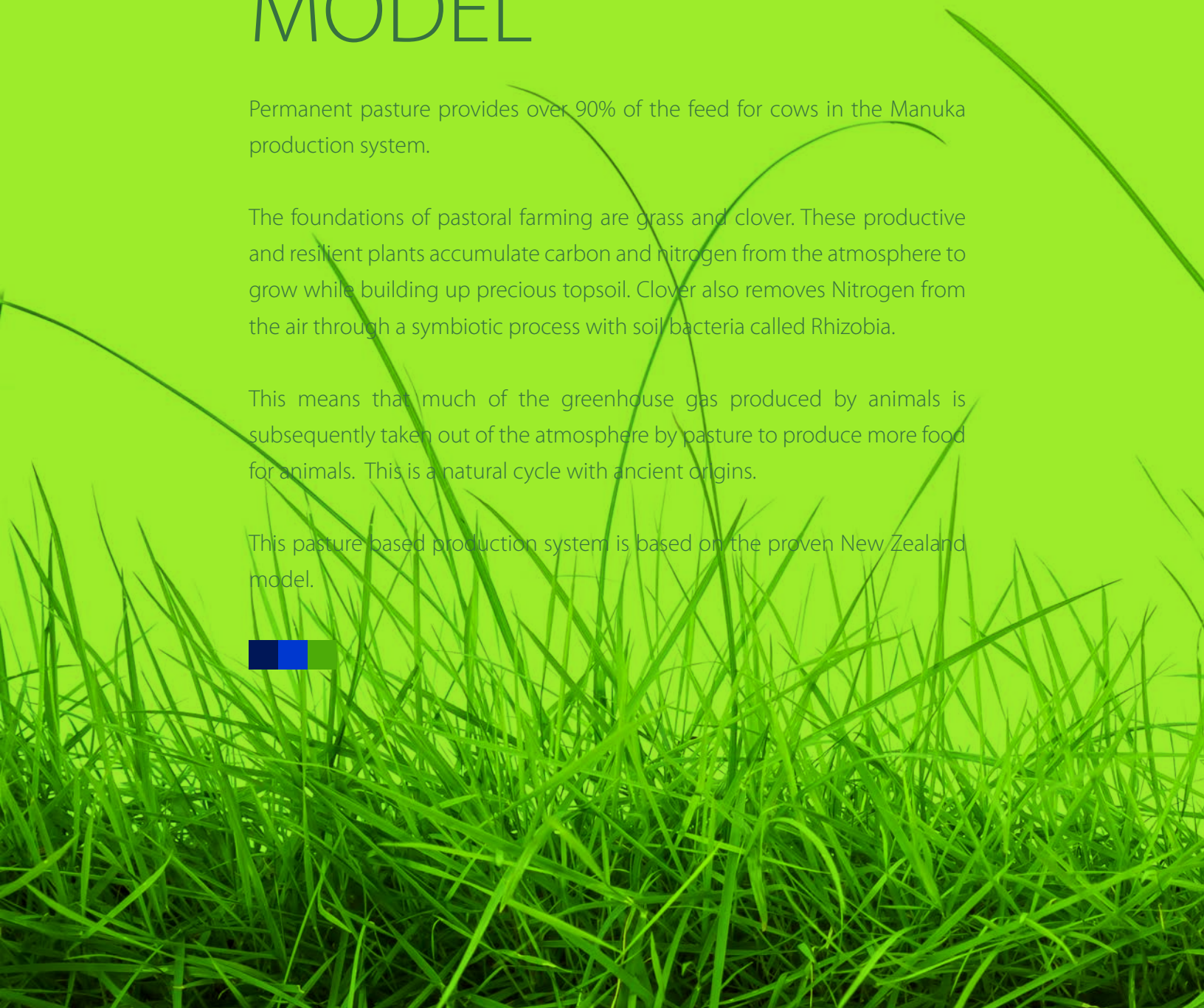
OUR PRODUCTION MODEL

Permanent pasture provides over 90% of the feed for cows in the Manuka production system.

The foundations of pastoral farming are grass and clover. These productive and resilient plants accumulate carbon and nitrogen from the atmosphere to grow while building up precious topsoil. Clover also removes Nitrogen from the air through a symbiotic process with soil bacteria called Rhizobia.

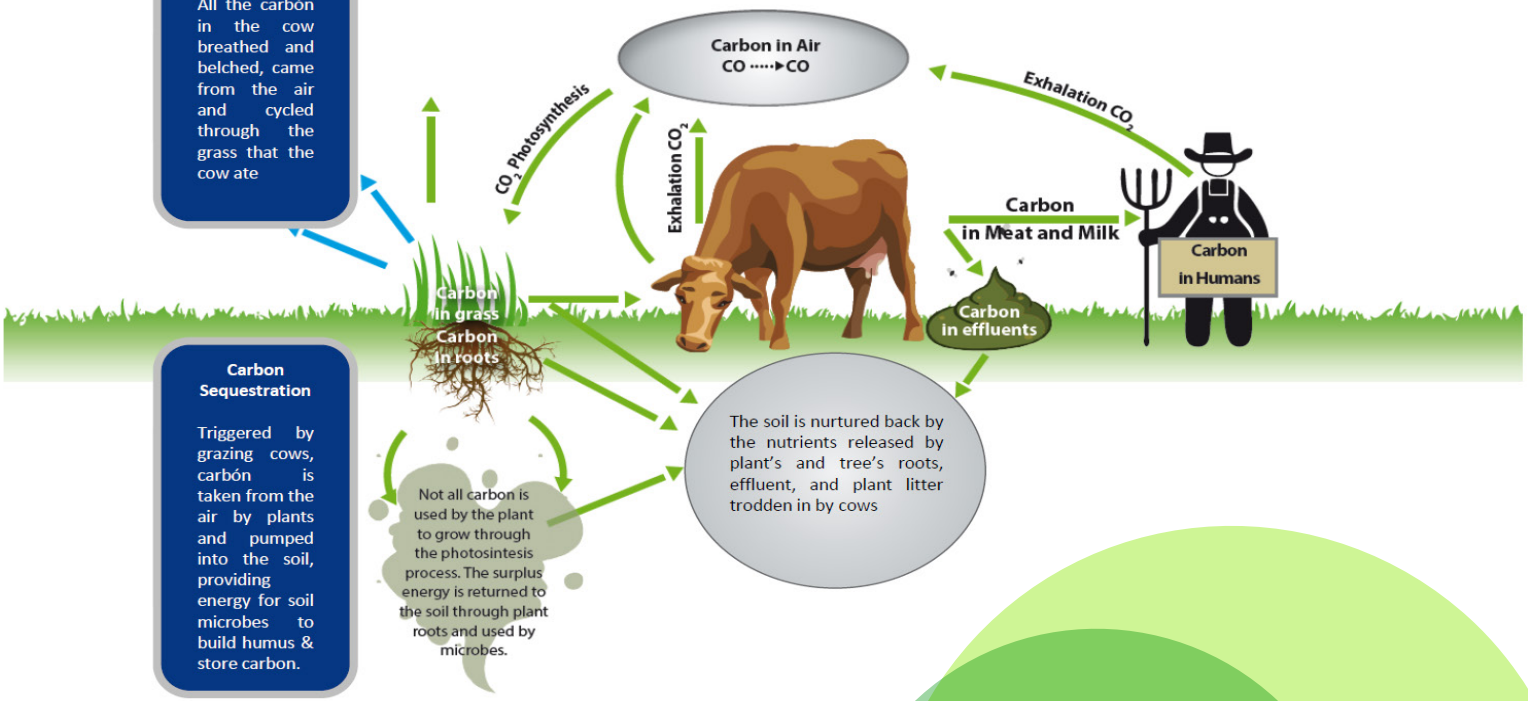
This means that much of the greenhouse gas produced by animals is subsequently taken out of the atmosphere by pasture to produce more food for animals. This is a natural cycle with ancient origins.

This pasture based production system is based on the proven New Zealand model.



The cow's carbón cycle

All the carbón in the cow breathed and belched, came from the air and cycled through the grass that the cow ate



Carbon Sequestration

Triggered by grazing cows, carbón is taken from the air by plants and pumped into the soil, providing energy for soil microbes to build humus & store carbon.

90%

of the feed for our cows is grass from permanent pastures

OUR PRODUCTION MODEL

Strategic Planning for natural and affordable milk production

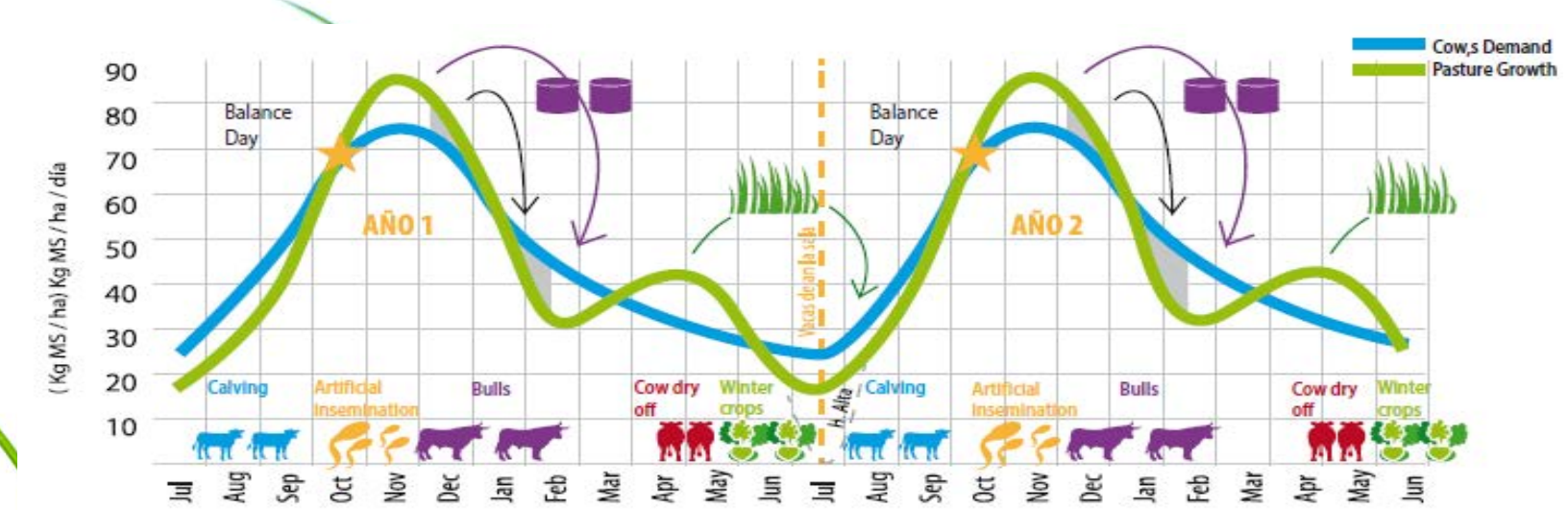
Pasture growth varies throughout the year, as shown on the graph below, and a cows feeding demand also varies through the lactation process. By calving most of our cows in spring, we can match them.

This means cows efficiently harvest most of their feed directly as freshly grown grass (the most natural but also cheapest feed available), thus increasing competitive production and enhancing resilience to variations in milk price.

At times of very high grass growth, when grass growth surpasses cow's feed demand, we harvest as silage and save to use when needed.

In addition, during winter when grass is growing slower on farm and availability can be in danger due to constant consumption, we use winter crops for feeding cows. This allows grass to recover, makes it easier to manage large herds and also increases fertility in soil used.

Key: Green line = Pasture Growth rates (kgDM/Ha/Day)
Blue line = Cows feed demand

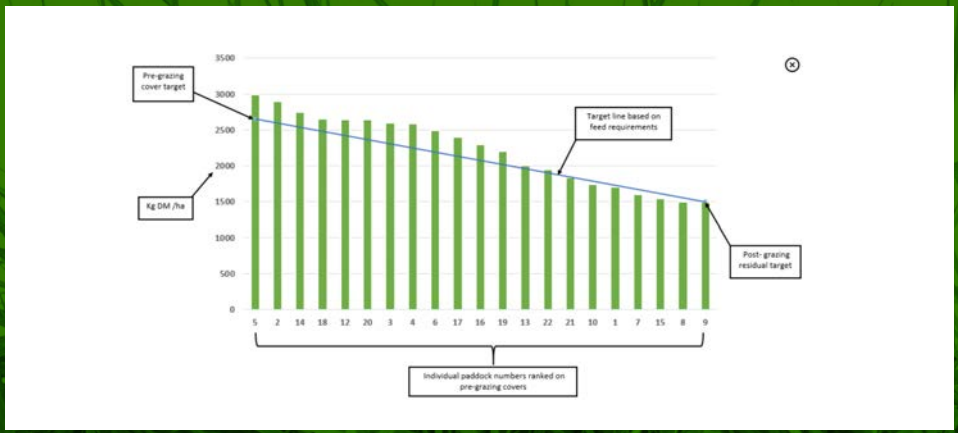


OUR PRODUCTION MODEL

Pasture Management

The permanent pasture model is based on a paddock rotation system that allows for grass to be harvested in all paddocks at its optimal point, when grass quality is at its highest and grazing can actually promote its regrowth and reproduction.

In order to achieve this, we use what is called a “feed wedge”, a key tool that ranks the paddocks based on average pasture cover, on top of which we can add a target line (starting on pre-grazing target and finishing on post-grazing target) to have a simple but effective tool to make pro-active decisions.

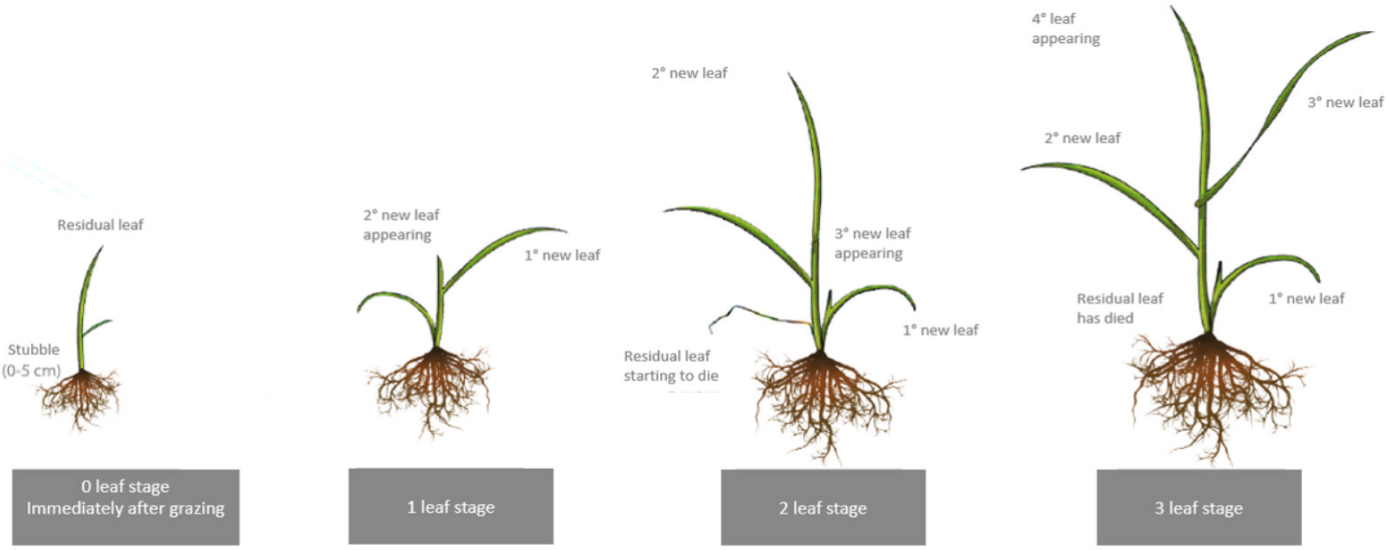


In order to obtain a feed wedge, two important factors are considered:

The Leaf Stage:

The optimal time to graze ryegrass pastures is between the second and third leaf stage, it is a moment when the plant has reached its highest nutrient content.

The ryegrass plant only grows three simultaneous leaves, and therefore if it overgrows, the first leaf will die, thus leading to lower quality (nutrients) but also lower capacity to recover and regrow after grazed.



Grass content includes water and dry matter, and it's the dry matter that holds the key nutrients the animal needs. Therefore, calculations are made in kilos of dry matter available per hectare.

Now, the "Average Pasture Cover" is determined by dividing the 'pasture cover x area' by the 'total area'.

OUR VALUE CREATION

Employees

We aim to provide a good and safe working environment for our 500+ staff, where everyone has equal access to development opportunities.

60 internal promotions where performed this year, based on performance, not on educational titles.

Our workers have a wide range of access to benefits that incluse housing, food, transportation, life insurance, health insurance, among others.

Community

We have built the Centro de Capacitación Lechero del Sur, a training center open for the community were we want to share our knowledge on grass based milk production and the benefits of grazing . We fund and/or participate in several initiatives related to education and local sport. We have also developed a bobby calf donation plan, where we donate around 20% of the calves to family farming.

Investors

We engage with our investors on a regular basis through update meetings, yearly visits and monthly formal reports.

Industry

We participate in dairy associations from the X and XV Regions. In addition, with the creation of Campos Australes, a new cooperative that includes over 41 local dairy farmers, Manuka is adding value for local economy and stakeholders . We contribute around 8% of national milk production.

Consumers and customers

Our milk quality is one of the highest in the national market, which reflects our high production standards.

91% of our farms are PABCO certificated, our grass is harvested at its optimal level ensuring a highly nutritious food.

In addition, we receive regular audits by authorities and milk processing plants.

Suppliers and contractors

We utilize the services of a number of providers and contractors, of which 63% are local. In this way we indirectly support many other local families. Most of our contractors are small or medium sized local companies.


Timberland

NUTRITION & FOOD SAFETY

NATURE´S EXCELLENCE

Milk is known to be a nutrient dense food, and is one of the most affordable alternatives. It provides protein, vitamins B2 and B12 and the minerals calcium, phosphorus and potassium.

Manuka is committed to taking its efficiency levels to the highest standards in order to provide an affordable and safe product that can play a valuable role in addressing deficiencies in diets and improve health & wellbeing of the people in Chile.

HIGHLIGHTS 2018

8.46% Milk solids per Litre
91% of our farms are PABCO certified
Average SCC 229.000 cells/ml*
Average CFU 12.000 units/ml*

*Somatic Cell Count (SCC) & Colony Forming Units (CFU) are both milk quality indicators related to udder health and hygiene quality.

Milk Quality

One of the key aspects to ensure raw milk and by-products have high standards of production is milk quality indicators: herd health and good management procedures are some of the essentials.

Mastitis, an infection of the udder, is one of the most common herd health concerns. It causes an increase in somatic cells in the milk.

Good production practices can also help to ensure milk quality, minimising the risk of bacteria formation due to poor milking methods, inadequate cleaning of milk equipment, poor cooling, or others.

All our dairy farms have very specific protocols involving all processes including milking, cow handling, drafting, among many others.

Nutrition

Milk naturally contains one of the richest combinations of nutrients you can find in a single food source, with calcium, vitamins B2 and B12, iodine, a high content of protein and a broad range of other vitamins.

In addition, some elements can increase its nutritious potential:
A grass based diet improves the quality of cow's milk, and makes it richer in omega-3 fats, vitamin E, beta-carotene, and CLA (a beneficial fatty acid named conjugated linoleic acid)

Different genetics in cows can increase the average of MS per liter (protein, fat and other nutrients). The Chilean national average is 7.49% vs. Manuka's 8.46%.

PABCO Certification

PABCO is a certification made by a government entity called Cattle and Agriculture Service (SAG) in Chile.

It is extremely strict and includes over 25 ítems of evaluation and allows certified farms to export to the European Union, which has one of the highest standards in the world regarding food safety.

Some of the requirements include high standards in sanitary status, infrastructure, traceability, animal wellbeing, among many others.

Processing plants also add a bonus payment for this certification, as it allows them to export to any market. This extra payment can mean up to an 8% increase in overall litre price.

91% ***of our farms have PABCO certification***

8.46% ***Milk Solids per lit vs. national average 7.49%***

Manuka Sustainability KPI	Company Result S2018/19	Demo Farm Results S2018/19	Target
Product Safety			
% Farm whith Pabco certification	91%	100%	100%
Colony Forming Units (UFC)	12.000	12.000	10.000
Somatic Cell Count (SCC)	229.000	193.000	120.000

Animal Welfare

The World Organisation for Animal Health considers an animal to be in a good state of welfare if it is healthy, comfortable, well-nourished and able to express innate behaviour and is not suffering from pain, fear or distress.

Our pasture based production model inherently promotes animal health within our cattle, as they spend almost their entire lives grazing, and grass is the most natural feed cows can have (their digestive system evolved to digest it).

But we want to go further and also have a preventive approach towards animal health, this is why we have preventive programs in 100% of our farms, which includes the use of vitamins, minerals, vaccination and deworming.

In addition, to ensure the correct use and aplication of our protocols we have at least one internal audit per farm, thus ensuring that our manual of procedures is being used correctly and effectively so that our farms comply with the same high standard of handling, extracting and storing procedure.

Regarding external audits, we received approximately 25 in 2018, mainly from the sanitary national authority and the Agriculture and Cattle national service (SAG) of which all came to positive outcomes and only minor observations.

Training is also a vital part for maintaining high animal welfare standards, this is why we include a wide range of technical topics that include animal health, animal welfare, pasture management, milk quality and dairy farm administration.

Infrastructure also becomes very important for animal welfare, especially lameness and mastitis control, and we comply with high standard roads and cowsheds.

To supervise the health of our animals, we have a Veterinary Department that includes nine professionals, two of whom are specialised in udder health and lameness.

Lameness

Lameness is also an important animal welfare issue, and links to how cows are treated during the milking process.

We have footbaths in all our dairy farms, and where necessary, have mats at the exit of the cow shed to prevent transition points deteriorating, causing lameness.

Manuka Sustainability KPI	Company Result S2018/19	Demo Farm Results S2018/19	Target
Animal Care			
% mastitis	2.1%	1.4%	Below 5%
% lameness	1.6%	1.2%	Below 3%

A PRODUCTION MODEL THAT WORKS WITH **NATURE**

Manuka is engaged with taking action within its reach to help combat climate change.

Our production model is based on permanent pasture, that has benefits to fight climate change through the removal of CO2 from the atmosphere while building up precious topsoil.

Our next steps towards sustainability involve controlling the use of energy and evolving to renewable energy options, minimising waste and maximising recycling, and finally we aim to engage with suppliers that share a sustainable culture.

HIGHLIGHTS 2018

13,458 Hectares of permanent grass

5,130 Hectares of native forest

49% of our wastage is recycled.

Permanent Grassland

Permanent pastures refers to natural or seeded grassland that remains unplowed for many years.

Our production model is pasture based and therefore we take all measures to lengthen it's lifespan as much as possible.

Therefore the management of our grass is key for Manuka.

We manage our grass from the very beginning of a new dairy project.

Most of our farms have around 200 to 280 hectares of surface and our paddock sizes are also standardised. This helps with optimal planning of pasture management for each dairy farm.

Within the farm, all pasture is measured weekly, to calculate the average pasture cover per paddock. With this information we can prepare or modify our feed wedge.

We also have an annual soil analysis in order to determine the availability of nutrients, and thus plan fertilizing accordingly.

We work to avoid soil degradation. Production performance directly depends on soil health and fertility.

Native Forest

Preserving nature's environment and biodiversity is also important to us, we own and protect around 5,130 hectares of native forest. We are aware of its value and contribution to the ecosystem, and this drives us to always have respectful management of these lands, with full compliance of national laws.

Energy Saving Initiatives

We have several energy saving initiatives, these include:

- Controlling and managing winter demand, training staff and controlling results. Plus, milking is avoided during peak hours.

- One of the biggest energy usages comes from milk cooling tanks. We have replaced the compressors with more efficient ones.

- Transfering to LED illumination system (56% up to date).

- Installing solar water heaters (10% of total dairy farms).

- Plate Coolers. Milk is refrigerated to maintain its quality and reduce the growth of bacteria. A cost and energy efficient measure we use is pre-cooling, using well water through a heat exchanger – before it enters the milk tank for cooling by refrigeration.

Manuka Sustainability KPI	Company Result S2018/19	Demo Farm Results S2018/19	Target
Green House Gases Emissions			
Measure the Carbon Footprint (kg C0	In Process	1.2	1.2
Energy Consumption (Kwh/ton of mil	582	533	-10%
Soil Nutrients			
Pasture Production: ton DM/ha.	13.3	15,2	17
Efficiency Levels in kg DM/kg MS	14.8	13.5	14.5
Waste			
Waste to landfill m3/100 ton Milk So	0.4	0.3	0.11
% of Residue Recycle	49%	49%	85%
Biodiversity			
% permanent grassland over total managed surface (over 5 years)	95%	94.7%	90%

GHG EMISSIONS

In order to move forward on developing practices that allow us to reduce our carbon footprint, we requested a measurement* of two of our dairy farms, Laureles (Demo Farm) and Arrayanes.

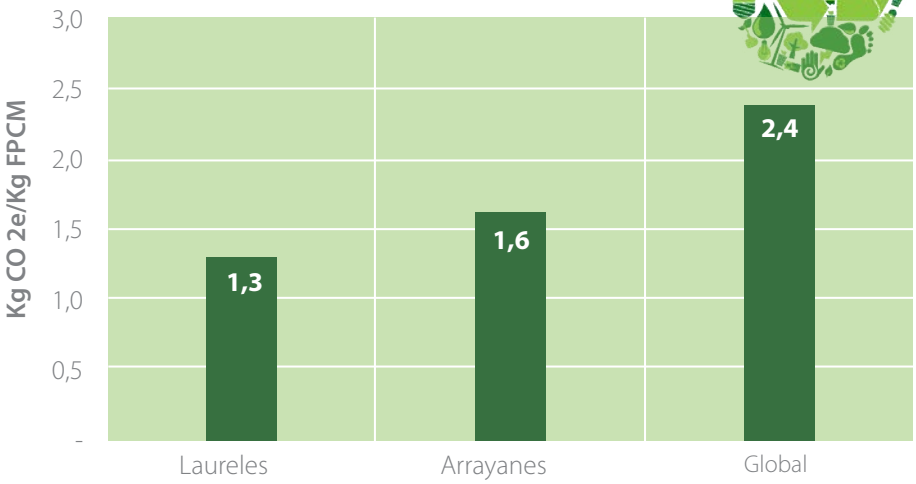
It is important to remember that this report only calculates emissions, and does not consider CO2 sequestration.

Results were 11,676 tons of carbon dioxide equivalent emissions in 2017, the main source being: The process of fermentation and effluent management (71%) and manufacture and use of fertilizers (24%).

Results show that Manuka is below world average emissions in both measured farms.

The GHG emissions from pastoral dairy production in two of our farms measured were around 40% lower than the worldwide average

Carbon Footprint



*Measurement made by Proyectae https://www.proyectae.cl

WATER FOOTPRINT

The water footprint of a product is defined as the total volume of fresh water that is used directly or indirectly for making it.

One of our highlights is that we can say we do not have an irrigation system, so our grass grows from rain.

On the other hand, our main blue water use is for cows drinking.

To further reduce water usage, we are currently implementing the re-use of water for shed washing processes.

In order to keep moving forward with responsible production and to develop practices that can reduce our water consumption, we requested a measurement of two of our dairy farms, San Pedro and San Luis.

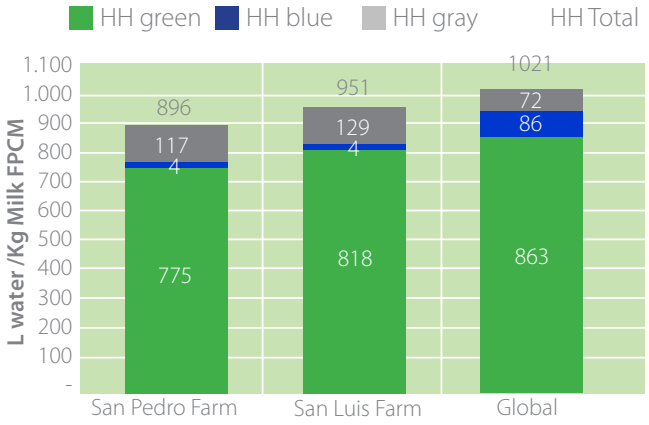
Regarding our WFM:

Green Water
Since our grass grows on rain water, our use of green water is the highest.

Blue Water
Our use of blue water is mainly for cows consumption, followed by the cleaning process of the dairy shed and the milk cooler tank.

Grey Water
Our use of gray water is mainly linked to the dilution of effluents to re-use on paddocks as organic fertilizer.

Water footprint

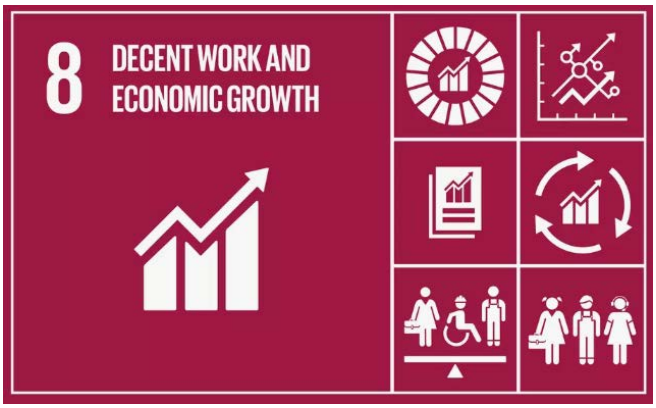


COMMUNITY FOCUS FOR **VALUE CREATION**

Agriculture is the largest employer in the world, and provides around 40% of livelihood for the worldwide population. It is also one of the largest sources of income for poor rural households.

Manuka's headquarters are located in a rural area and therefore provides for the livelihood of the nearby community, not only the workers but also 250 families.

One of Manuka's core beliefs is meritocracy, we reward good performance, independent of educational achievement



HIGHLIGHTS 2018

60 Internal Promotions
250 Families live in our facilities
Over 80% Staff have been technically trained

TRAINING CENTER

One of our main interests is to generate value through knowledge and contribute to the teaching of children, youth and adults in southern Chile.

We have promoted several projects, the most important one being the "Centro de Capacitación Lechero del Sur" (CCLS) a training centre specialising in milk production based on the New Zealand grazing system with which we seek to create value and new opportunities in the dairy industry, in addition to being a contribution to the company's employees and other workers in the field.

The CCLS can train over 100 people annually in various areas related to pasture management, milk quality, animal health, agribusiness and human resources, among other specialties. It works with the State Formation Center of Los Lagos Region, to give its students a professional technical degree endorsed by the Ministry of Education, and aims to become an educational reference in the southern part of the country.

CAMPOS AUSTRALES

In 2017 SAGO and Manuka started the "Campos Australes" cooperative initiative, in order to increase the internal purchase of raw milk and to help support the economic stability of local producers.

At present, it has been formally constituted and has 41 shareholders and 350,000 potential litres of production.

BOBBY CALF DONATIONS

More than five thousand male calves have been donated in the last four years through the bobby calf donation program, which seeks to support small producers in the regions of Los Lagos and Los Ríos.

The initiative, which started in 2015, has benefited hundreds of families in southern Chile from small towns such as Purranque, San Juan de la Costa, Paillaco, La Unión and Curaco de Vélez among others.

INTERNAL PROMOTIONS

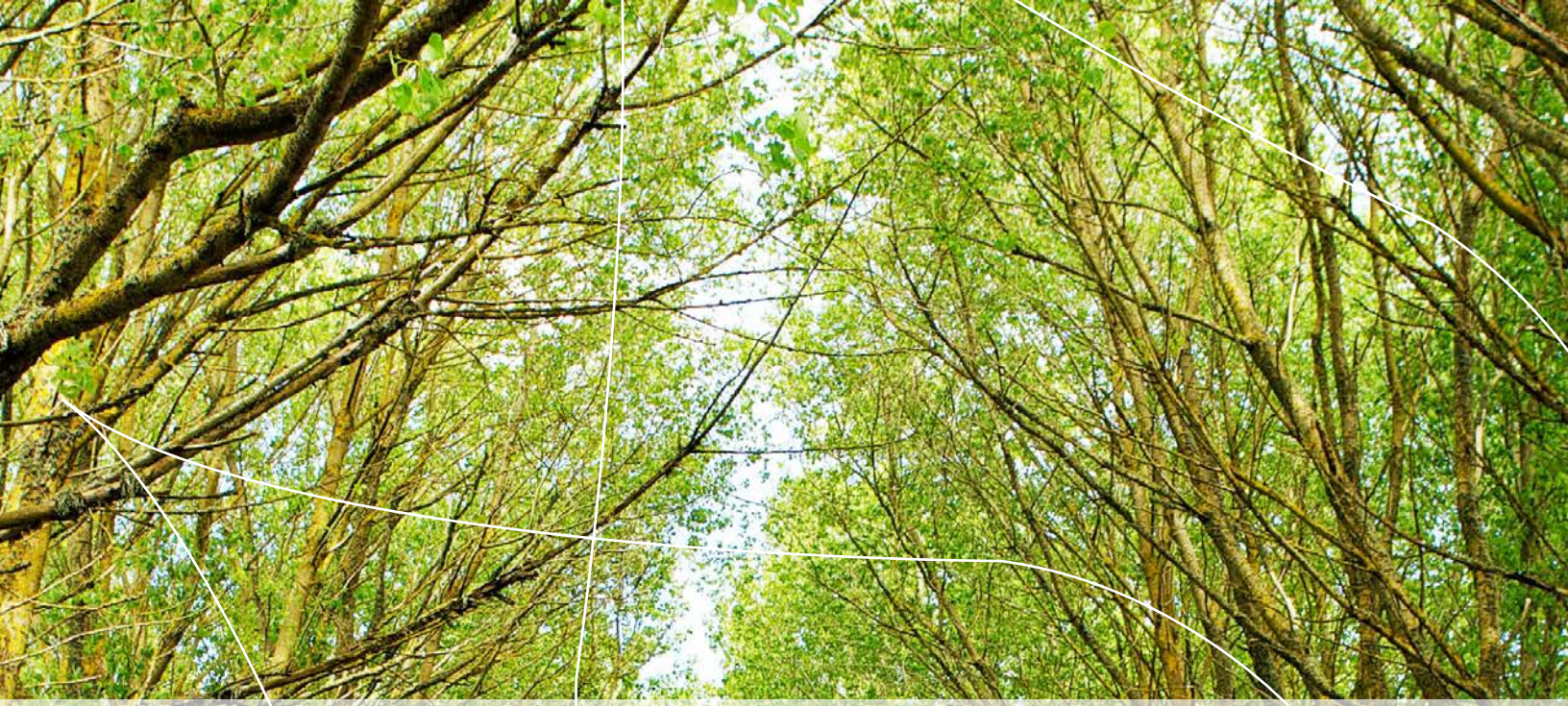
One of Manuka's core beliefs is meritocracy, we reward good performance.

Giving opportunities to people based on performance is key for us, this is why we train our people and generate promotions based on results.

83% ***Of our staff have technical training***

Market development / working conditions

Manuka Sustainability KPI	Company Result S2018/19	Demo Farm Results S2018/19	Target
Market Development			
Do you influence the dairy Sector	Yes	Yes	Participate in Dairy Asociations + New Cooperative Sustainability Report + B Corp Certification + Pacto Global Adherence
Do you work to improve the sustainable image of the dairy sector	Yes	Yes	
Rural Economies			
Local providers (from your Region)	65%	65%	75%
Working Conditions			
Workers rotation rate.	3.1%	3.1%	3%
Number of worker promoted per year	8.9%	8.9%	5%
Employee benefits provided (health insurance)	29%		100%
% of total staff trained (8 hours minimum)	67%	67%	80%
Number of accidents per year	61	0	48
Number of lost work days per year due to accidents or injuries	998	0	500
Equal opportunities assessed (women:men)	16% : 84%	0% : 100%	20% : 80%



manuka

NATURE'S EXCELLENCE

Juntos desde 2005