



GOVERNANCE



SOCIAL



ENVIRONMENT

# CUSTODIANSHIP

PROTECT · ENHANCE · PRESERVE

**CAMELLIA GROUP ESG REPORT 2019**



**CAMELLIA PLC**

Founded in 1888

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# FROM THE CEO

## CUSTODIANSHIP

Welcome to 'Custodianship' our first comprehensive report on our Group governance, social and environmental responsibilities. It is named after one of the fundamental philosophies on which the Group is based: we see ourselves as custodians, holding our businesses in trust for future generations. We understand that we have a responsibility to ensure the stability, security and continuity of all our businesses, so they can be passed on to the next generation as enduring operations.

## OUR PHILOSOPHY

Protecting the environments in which we operate and enhancing the lives of our employees, communities, customers and suppliers have always been at the heart of our priorities.

This key philosophy was set out for the Group by then Chairman Gordon Fox over 50 years ago and has not changed, although it may have become more accepted by the wider business community in the intervening years. Unlike then, we now have a more comprehensive and sophisticated framework against which to align and measure our performance. In particular, the United Nations Sustainable Development Goals (SDGs) provide a structure which we have used in the remainder of this report to demonstrate how our actions reflect the needs of our communities.

## SUSTAINABLE DEVELOPMENT GOALS

Whilst all the SDGs have relevance to us, we see six as being particularly important to our business and it is against these that we set out our progress.



In addition, there are now a wide range of organisations with whom we can partner and work to help us achieve our goals. With approximately 78,000 employees, Camellia may be a large employer, but in economic terms we are small, and I should like to acknowledge the help, support and challenge that we have received from such bodies as the Carbon Trust, the Ethical Tea Partnership and Oxfam.

## A DIVERSE ORGANISATION

Camellia is a diverse organisation both geographically and in the sectors in which we operate. Therefore, whilst it is important that we set our objectives from the centre, implementation of these policies in a way which is of maximum benefit to the communities is something that has to be undertaken locally, taking into account the support and systems that already exist. I should like to thank our people across all our operations for bringing our ethos to life.

**Tom Franks**  
CEO







GOVERNANCE



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# GOVERNANCE

“,,

“PROFIT IS OUR LIFEBLOOD  
BUT NOT OUR SOUL”

From the Board level, we insist on having robust and vigorous governance in place, as one would expect for a company quoted on AIM. However, we do not legislate every rule, policy, procedure and process for each of our operations, rather we empower the local leadership teams to determine and adopt best practices under the umbrella of our Group Principal Policies. This decentralised model enables us to ensure the continuity, development and progressive growth of these individual enterprises in an ethical and responsible way that is relevant to their local jurisdictions and cultures.

## GROUP PRINCIPAL POLICIES

### IN THIS SECTION

#### THE CAMELLIA BOARD

The Role of the Board and the Board Committees  
Our Directors  
Our Board Committees

#### OUR GROUP PRINCIPAL POLICIES

Anti-Bribery and Corruption  
Environmental  
Certification and Traceability  
Employee Welfare  
Tax  
Modern Slavery  
Health and Safety  
Whistleblowing



# THE CAMELLIA BOARD

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## THE ROLE OF THE BOARD AND THE BOARD COMMITTEES

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The Board is responsible for the long-term success of the Group through nominating independent Directors, selecting the Chairman and Chief Executive Officer, monitoring Group strategy and management execution, setting senior management compensation and providing oversight to the Company's financial reporting, internal control systems, business conduct and code of ethics through our Group Principal Policies.

## OUR DIRECTORS

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The Board comprises eight Directors, four of whom are independent non-executive Directors. The remaining Directors are executive Directors, including the executive Chairman. Chris Relleen, the deputy Chairman, has been designated as the senior independent Director.

[READ BIOGRAPHIES](#)

The Board has established audit, remuneration and nomination committees.

[READ OUR TERMS OF REFERENCE](#)

## OUR BOARD COMMITTEES

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### AUDIT COMMITTEE

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The principal responsibilities of the Audit Committee include overseeing our accounting and financial reporting processes and the audits of our financial statements; overseeing our internal accounting controls and audit procedures; reviewing and approving any related party transactions; and reports regularly to the Board. The Audit Committee is chaired by Chris Relleen. All members of our Audit Committee are independent Directors.

### REMUNERATION COMMITTEE

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The principal responsibilities of the Remuneration Committee include reviewing the Group's policy relating to remuneration of the Chairman, executive Directors and the Company Secretary; determining the terms of employment of the Chairman, executive Directors and Company Secretary with a view to ensuring that those individuals are fairly and responsibly rewarded; and approving compensation packages or arrangements following the severance of any executive Director's service contract. The Remuneration Committee is chaired by William Gibson.

### NOMINATION COMMITTEE

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The principal responsibilities of the Nomination Committee include reviewing the balance and composition (including gender and diversity) of the Board; overseeing the Board's succession planning requirements, including the identification and assessment of potential Board candidates; reviewing the leadership needs of, and succession planning for, the Group in relation to both its executive and non-executive Directors and other senior executives. The Nomination Committee is chaired by Malcolm Perkins the Group Chairman.



## OUR GROUP PRINCIPAL POLICIES

There are a range of Governance and Compliance issues that are important not only to our operations individually but to the Group as a whole. Our approach to these is set out in the Group Principal Policies which are implemented across the Group. Each operation is then required to prescribe its own local policies (including procedures and training) based upon the Group Principal Policies.

On an annual basis, each operation will confirm to the Company its compliance with these principal policies. Ultimately, our individual operations have experts who are best placed to identify the relevant needs of each policy and apply the processes and practices that allow them to operate responsibly and ethically over the long term.

Across the Group, social and environmental initiatives rely on a network of local managers. Some of the larger operations have their own environmental and social responsibility committees. In addition to the annual confirmation which each operation provides, we work closely with these representatives throughout the year and with Human Resources, Legal, Financial, Innovation and Communications departments to define our objectives and plans for sustainable development.



### ANTI-BRIBERY AND CORRUPTION

All Group employees, officers and directors, and all those acting for or on the Group's behalf are strictly prohibited from offering, paying, soliciting or accepting bribes or kickbacks, including facilitation payments. Given the serious nature of a breach, an employee's failure to comply with this policy, whether intentionally or by an act of negligence, may lead to disciplinary action being taken that could ultimately result in termination of employment.

Anti-Bribery and Corruption is monitored and applied by the local operations and incidents are reported to the Anti-Bribery Officer.



### ENVIRONMENTAL

We are mindful of the environment in which we operate, recognising that our operations utilise natural resources and generate emissions and waste. We understand and comply with current applicable legislation of the countries in which we operate. Our operations are each required to commit to policies which reduce their environmental footprint, and which include (where appropriate) carbon, recycling and water.





## CERTIFICATION AND TRACEABILITY

As part of our end to end supply chain, our operations are required to meet the requirements for our customers and suppliers in terms of certifications and traceability. The vast majority of our tea gardens are RA certified and all our macadamia, avocado and winery operations are FSSC 22000 certified. Across the Group, operations have obtained multiple other accreditations, these include ISO14001, ISO9001 and ISO45001.



## EMPLOYEE WELFARE

Our employees are at the heart of what we do, and their welfare is paramount. Operations are required to have policies and procedures in place which cover equality, health, personal development, training, diversity and (where appropriate) education, housing and sanitation.

We consciously and continuously work towards encouraging equality in management positions across our operations. The Group complies with local regulations to encourage employees with disabilities to work in our operations and where necessary, makes appropriate adjustments to working practices.



## TAX

The Group's tax principles include: compliance with applicable tax laws, payment of the correct tax amounts, interpretation of tax law, undertaking tax planning based on commercial rationale and transparency with tax authorities.



## MODERN SLAVERY

The Group complies with the requirements of the Modern Slavery Act 2015, to ensure that modern slavery and human trafficking is not taking place either within the Group or in the supply chains of our businesses. A copy of the statement of compliance for the year to 31 December 2018 is available on the Company's website.

### MODERN SLAVERY ACT 2015

The use of child labour is prohibited across the Group. In some countries, it is both the cultural norm and permissible for parents to involve their children in the productive process. We do not subscribe to this approach. Group operations are required to comply with this statement and adopt local policies and procedures to ensure continued compliance. This includes setting out codes of conduct when working alongside customers and suppliers.



## HEALTH AND SAFETY

We take responsibility for our people by promoting good health and providing a safe and healthy workplace to protect all employees, contractors, visitors and public from foreseeable work hazards. All operations are required to comply with local health and safety legislation and regulations and to obtain (where appropriate) certifications from external authorities.



## WHISTLEBLOWING

Our Whistleblowing Policy provides guidelines for people who feel they need to raise certain issues in confidence. It is designed to protect those raising a genuine concern, in line with the Public Interest Disclosure Act 1998 or other jurisdictional legislation. Each operation is required to have a designated local whistleblowing officer. Group employees have access to the local whistleblowing officer, as well as the Group Whistleblowing Officer or the chairman of the Audit Committee.





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# SOCIAL

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“IT'S NOT JUST ABOUT HOW WE EMPLOY THE PERSON, IT'S WHETHER THAT PERSON FEELS THEY ARE GETTING A REWARDING EXISTENCE BY BEING EMPLOYED BY US.”

The Group's businesses are fundamentally connected to the welfare of our communities and the environments in which we operate. We proactively invest to ensure these environments are protected and improved. Our focus is on the long-term stability, security and continuity of our businesses and those communities. We support and integrate the UN Sustainable Development Goals into our sustainability strategy. We invest in, monitor and report on environmental and social sustainability initiatives across all our operations.

## IN THIS SECTION

### COMMITMENT TO OUR EMPLOYEES AND COMMUNITIES

- Improving Livelihoods
- Enhancing Health and Wellbeing
- Providing Education and Training
- Adult Education and Skills Based Training

### Sharp - Sexual Harassment Awareness

### Culture of Diversity in Practice

- Promoting Diversity and Inclusion
- Employment of Disabled People

### Blue Angels

- Housing and Sanitation
- Supporting Local Communities and Smallholders

### Beyond our Boundaries



# COMMITMENT TO OUR EMPLOYEES AND COMMUNITIES



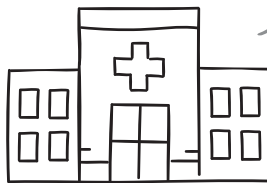
## IMPROVING LIVELIHOODS

As a Group, we have been progressively working towards creating optimal working conditions for employees for many decades. By consistently measuring our progress, we are aware of new challenges as they arise and are conscious of the areas where we have opportunities for improvement. This helps us to be ready with corrective action plans in the short, medium and long term. We are increasingly collaborating with our supply chain to improve social standards at our estates, and their neighbouring communities.

464,883

*employee treatments at our hospitals in 2018*

**49**  
HOSPITALS



819,367

*total patient treatments in 2018*

**50**  
DISPENSARIES



87,013

*employee treatments in 2018*

209,748

*total patient treatments in 2018*

## ENHANCING HEALTH AND WELLBEING

The majority of our tea estates in India and Bangladesh have a hospital and a qualified doctor, and our operations in both these countries also have central Group owned hospitals. Our African operations run dispensaries established on our estates, offering medical services and care to employees, their dependants and people from surrounding areas. These are manned by qualified medical personnel from our operations and services are free to employees and their dependants. We provide medical services including, where appropriate, antiretroviral drugs in those communities where HIV and AIDs are a concern. We provide medical support to schools that are either run locally or by our operations.

### BABY NURSING UNIT CHEMOMI ESTATE, EPK

This year we established the Baby Nursing Unit at Chemomi Estate in Kenya to support breastfeeding mothers working at the estate.

**343** *women benefit from the facility*

*Note: The funding and operation of hospitals, clinics and dispensaries, provided for our employees and their communities, varies by location in accordance with local culture, practice and requirement. Some facilities are owned and operated by us directly, whilst others are fully or partly funded by us whilst being State and/or NGO managed and owned.*



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## PROVIDING EDUCATION AND TRAINING

We believe that the potential for development of each and every person within our community is fundamental and that education should be available for all. Where appropriate, we cover the cost of running schools and crèches in areas where we operate, either by building the schools for our communities or by supporting educational projects of the local governments.

### GREEN SCHOOLS GOODRICKE GROUP, INDIA

Two 'Green Schools', focusing on environmental education, educated over 300 students in 2018 and The Peter Leggatt Scholarship Scheme in India provides over 61 bursaries per year to children aged 11 to 18.

**300** *green school students in 2018*



*Note:* The funding and operation of schools, provided for our employees and their communities, varies by location in accordance with local culture, practice and requirement. Some facilities are owned and operated by us directly, whilst others are fully or partly funded by us whilst being State and/or NGO managed and owned.

*School children*

**GOODRICKE GROUP, INDIA**





GOVERNANCE

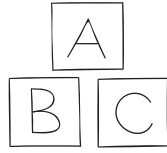


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**365**  
NURSERIES & CRÈCHES



**143**  
PRIMARY SCHOOLS



**141**  
SECONDARY SCHOOLS



6,790  
children in nurseries & crèches in  
2018

27,880  
primary school children  
educated in 2018

3,623  
secondary school children  
educated in 2018



School children

SAVANI ESTATE, EASTERN PRODUCE KENYA





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## ADULT EDUCATION AND SKILLS BASED TRAINING

We provide education to our employees and to the broader community through a range of smallholder education programmes.

### BEYOND OUR BOUNDARIES

Across our operations we offer support for higher education, skills-based training and health education, to encourage and empower each individual to grow towards a successful future.

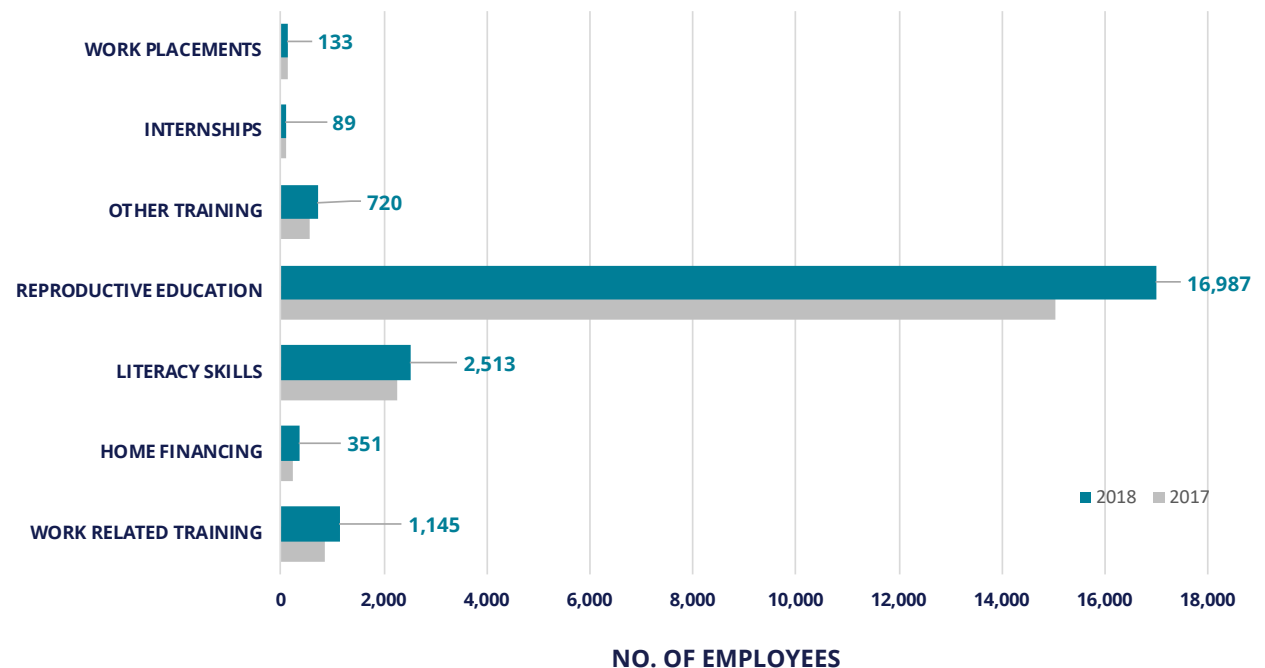
## MURANGA TEACHERS COLLEGE KAKUZI, KENYA



The Muranga Teachers College has been developed on land donated by Kakuzi, Kenya. The training this centre provides has a considerable impact on the standard of education in the community.

**350** *teachers graduate on average annually*

## EMPLOYEE TRAINING



Outgrower Best Practice Group

GOODRICKE GROUP, INDIA

CAMELLIA GROUP ESG REPORT 2019





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## #CustodianshipInAction

# SHARP

### BRINGING SEXUAL HARASSMENT INTO FOCUS

The Sexual Harassment Reporting and Prevention programme, SHARP, initiated by our African operations, focuses on developing a reporting framework across a variety of channels in order to combat these issues.

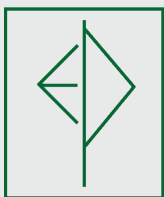
In our Kenyan operations we brought together SHARP Champions to coordinate activities relating to the programme. Each employee has been provided with a wrist band with contacts enabling them to raise concerns and report problems via WhatsApp or text message.

At our operations in Malawi, community groups have been set up in all our estates to encourage communication between employees, and to ensure day to day issues are reported to management.

Policies supporting the SHARP programme outline the importance of communication, while community initiatives help to deflate shame around the subject. We understand that effective training cannot occur in a vacuum but requires a culture that starts at the top.

EMPLOYEE WELFARE POLICY

WHISTLEBLOWING POLICY



*"At EPK we encourage all employees by sharing information that gives confidence to speak up against sexual harassment."*

RUTH, EASTERN PRODUCE KENYA





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#CustodianshipInAction

## CULTURE OF DIVERSITY IN PRACTICE

Our Goodricke School for Special Education provides state of the art care and teaching facilities for children with severe learning disabilities such as autism. Through specialist practitioners and teachers, the school offers a range of therapies, seminars and workshops, designed to support each child individually.

The school has an excellent reputation, with parents from across India registering their children into its facilities every year. Critically, the school not only helps the child but also supports the child's primary carers in helping him/her towards becoming a productive member of the household and society. This can take some time, and in some cases, the term of education may extend to 15 years or over.

One example is Prashanto, known as 'Papu', who started learning at the school in the late 1990s. He had characteristic traits of autism - his sensory issues were highly prominent and he had no means of communication. The school helped him to learn to speak and to harness other traits of autism, such as following routine tasks meticulously. Papu successfully graduated from our school at the age of 20 and today he takes an active role in his family.

For Papu, and children like him, it is the long-term help and investment which a school like ours can give that truly makes a difference to their lives, and those of their families.



*"Moulding these tiny hands to learn to play and to give a tight hug, which would otherwise be flapping, is truly heartwarming!"*

**DR. S. NAYAK, GOODRICKE SCHOOL FOR SPECIAL EDUCATION**





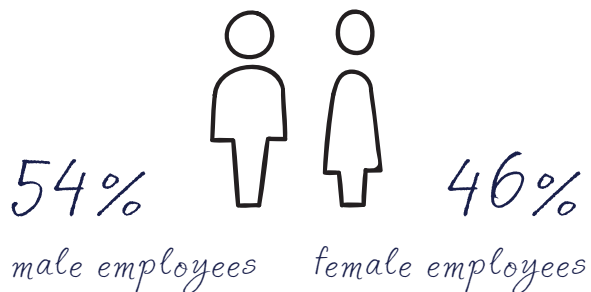


## PROMOTING DIVERSITY AND INCLUSION

We are passionate about equality - every person, irrespective of their origin, skin colour, religion or gender is equal. We continuously work towards encouraging equality in management positions and throughout our operations. By providing schools and supporting education projects we ensure that our community is developing without discrimination.

We employ over **35,000 women** across our operations.

Through a range of health and education initiatives, we actively support women and promote opportunities for their professional development. We are committed to offering equal opportunity to all and focus on promoting diversity and gender parity.



## EMPLOYMENT OF DISABLED PEOPLE

We respect the principles of integration and non-discrimination and look for ways to create opportunities for everyone, irrespective of their ethnicity, gender, sexuality or disability. Our aim is to create a workplace where individual differences are celebrated. Each of the Group's operations is responsible for locally defining and implementing its policy on the recruitment and continued employment of disabled persons.

[READ OUR EMPLOYEE WELFARE POLICY](#)

## WOMEN'S WELFARE COMMITTEES

### EASTERN PRODUCE MALAWI

Community groups form an important part of the Diversity, Inclusion and Women's Welfare policy, with Women's Welfare Committees (WWCs), winning Eastern Produce Malawi a gold sustainability award.

*Gold Social Sustainability Award  
from the Tea Association of the  
USA in 2017*



*Baby Nursing Unit*  
**CHEMOMI, KENYA**





# #CustodianshipInAction



## BLUE ANGELS

### EMPOWERING WOMEN AND GIRLS

Launched in 2018, the Menstrual Hygiene Management Project aims to educate women and girls in India about the benefits of using sanitary pads. The project was piloted at Meenglas and Leesh River tea estates with the support of a female Senior Welfare Officer, Sushma Mukhia Bose. We worked directly with a supplier of sanitary pads to develop a sustainable pad with minimal packaging. There are currently 24 female volunteers from within the community who source and distribute the pads on the estates. These volunteers have come to be known as Blue Angels, for their blue-coloured coats.

Blue Angels is a new addition to our active women's groups in India, known as Mother's Clubs. These self-help groups provide training to empower women and to improve awareness about health and hygiene.

*"Mother's Clubs exist at all of our estates in West Bengal and Assam. These groups of women are creating awareness of health and hygiene and welfare of families living on estates."*

**PRANJAL NEOG, GOODRICKE GROUP**







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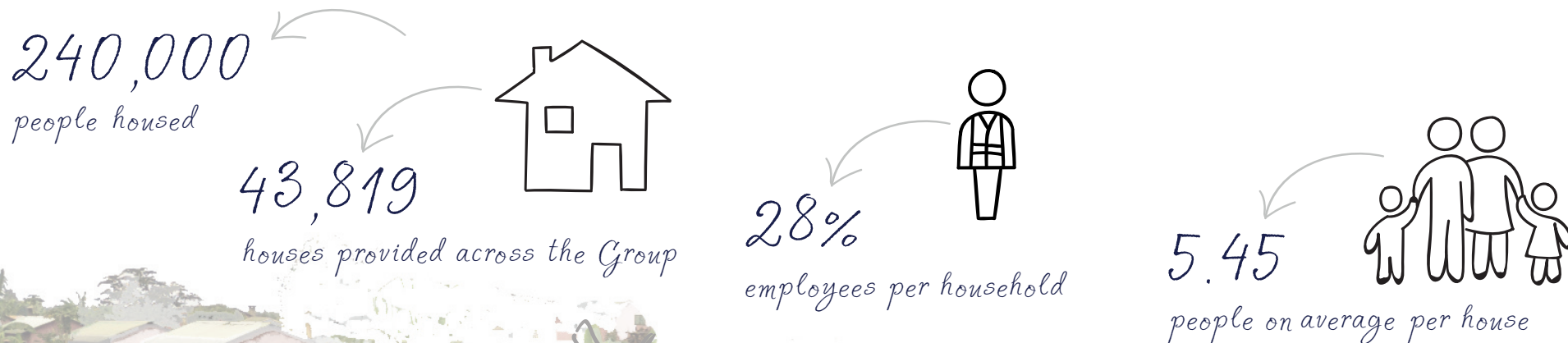


ENVIRONMENT

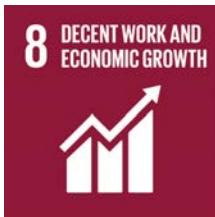


## HOUSING AND SANITATION

We are committed not only to the ultimate welfare of our employees but also to the communities in which they live. Through a broad range of CSR initiatives across the Group, we contribute to improved health and nutrition, hygiene and sanitation of our communities. We assist with the improvement of local infrastructure by supporting road, water, healthcare and education projects. Our continued focus on developing sustainable housing for our working communities is reflected in major housing renewal projects in India, Bangladesh, Kenya and Malawi.



Jericho Village,  
KAKUZI, KENYA



## SUPPORTING LOCAL COMMUNITIES AND SMALLHOLDERS

Smallholders form an important part of our community. 23% of our tea and 29% of avocados were sourced from smallholders in 2018.

The local communities are critical to us, not only do we source some of our production from them but many of our employees also come from within those communities. In return, we contribute to the livelihoods of our communities in a number of ways. In our African and Indian operations, we support smallholders by offering:

- Skills-based training
- Techniques on efficient irrigation
- Health education
- Provision of agricultural materials

We optimise local infrastructure by supporting roads, waterways, healthcare and education projects. Our aim is to source quality products from our smallholders and use our expertise and infrastructure to deliver maximum return to them.

## KENYA SMALLHOLDERS

11,015 tea growers  
54 mKg green leaf  
3,018 avocado growers  
4.6 mKg avocados

## MALAWI SMALLHOLDERS

7,883 tea growers  
9.2 mKg of green leaf



## INDIA SMALLHOLDERS

in excess of 700 tea growers  
36 mKg of green leaf

## OUTGROWERS DEPARTMENT EASTERN PRODUCE KENYA

The outgrowers department at our Nandi Hills operations, EPK, was initiated 25 years ago with just 9 smallholder farmers. Today the programme extends to 10,000 tea farmers, who with their dependants comprise over 40,000 people in our local communities.





#CustodianshipInAction

# BEYOND OUR BOUNDARIES

## EXTENSION SERVICES AND EXCHANGE VISITS

An exchange visit is a unique programme at our operations in Nandi Hills, Kenya, where smallholders from different regions share their knowledge, experience and good practice in agriculture. We help to identify the most suitable areas for our smallholder community to visit and we offer support in organising the visits.

## FARMER FIELD DAYS

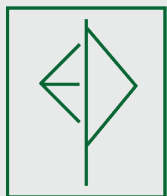
Farmer Field days at Nandi Hills are organised throughout the year to bring together farmers, land owners and other agribusiness stakeholders. By providing training and support at these educational events, we have encouraged adoption of methods of environmental conservation, such as tree planting, conservation of water and informed use of agro-chemicals. Increased participation at Farmer Field days, by both the farmers and exhibitors, over the years has resulted in more smallholders adopting a voluntary approach to environmental conservation, as well as a notable increase in tea yields in the region. This enhanced capacity and strengthened platform for networking has seen the smallholder farmers grow to a level where we consider each other as business partners.

Each  
extension  
officer covers  
2,000 farmers

2,000

Growers  
attending  
exchange visits  
in 2018

429



"Through the EPK Smallholder Programme, we aim to find ways of improving smallholder income by providing training and other forms of support, which are both practical and sustainable."

SIMON ODHIAMBO, EASTERN PRODUCE KENYA







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# ENVIRONMENT

“WE ARE COMMITTED  
TO IDENTIFYING THE  
ENVIRONMENTAL IMPACTS  
OF ALL OUR ACTIVITIES  
AND MANAGING THESE  
RESPONSIBLY”

We share a common purpose of environmental preservation. Our sustainability approach takes the long-term perspective that we have a responsibility to protect our ecosystems for the benefit of our communities, neighbours and future generations.

## IN THIS SECTION

### BUILDING RESILIENCE TO CLIMATE CHANGE

- Our Commitment
- Invest, Monitor, Report
- Energy and Carbon
- Mid to Long-term Targets
- Agricultural Operations
- Carbon Intensity - Tea Operations

### ENCOURAGING ENVIRONMENTAL AWARENESS AND TRANSPARENCY

- Renewable Energy

### PROTECTING BIODIVERSITY AND FORESTS

- Soils
- Environmental Policy
- Environmental Education
- Reforestation
- Our Land Use

### Reusing Water Naturally

### CONSERVING WATER

- Water Management
- Water for our Communities
- Vast Biodiverse Ecosystems

### Stretching the Rains

### Rebuilding Mambedi Dam

### Water for Wine

### REDUCING WASTE

- Opportunities to Recycle or for Resale
- Where does our Waste go?
- Our Macadamia Product Lifecycle





# BUILDING RESILIENCE TO CLIMATE CHANGE



## OUR COMMITMENT

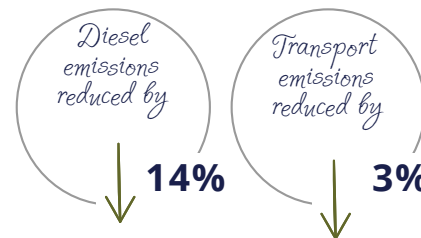
We are committed to our goal of protecting the environment and minimising our environmental footprint. We demonstrate this commitment through a range of resource efficiency initiatives and ambitious reduction targets for greenhouse gas emissions, water and waste usage across our operations. In addition to minimising our environmental impact, we protect natural habitats such as forests and water bodies for local wildlife.

## INVEST, MONITOR, REPORT

We invest in, monitor and report on both environmental and social sustainability initiatives across all our divisions. Our online system for capturing data relating to our global environmental footprint allows us to monitor our energy use, Greenhouse Gas emissions, water and waste. Our ongoing investment in energy efficient technology includes: upgrading lighting and trialling energy efficient motors and variable speed drives, better planning for irrigation and the increasing use of energy efficient transport across the Group.

## ENERGY AND CARBON

We continue to demonstrate our commitment to minimising the environmental impact of our business. Total energy consumed reduced by 7% from 2017 as a result of investments into energy sourced from renewable fuels, energy efficiency projects and investment in new technology and machinery.

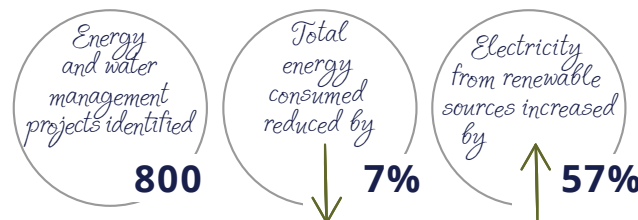


## MID TO LONG-TERM TARGETS

As part of our wider drive towards greater sustainability, we have developed a range of mid to long-term targets to reduce, in some cases substantially, the environmental impact of our operations. Strategic improvements in our usage and sourcing of energy supports our ambition to align with Science Based Targets, appropriate with the level of decarbonisation required to keep the global temperature increase below 2°C compared with pre-industrial temperatures as agreed at the Paris Climate Conference in 2015.

## SCOPE 1 AND 2 GHG EMISSIONS TONNES CO<sub>2</sub>e - ALL OPERATIONS

	2018	2017 *
Total Energy Consumption (TWh)	1.13	1.21
<b>Total Carbon Emissions (tonnes CO<sub>2</sub>e)</b>	<b>217,320</b>	<b>216,165</b>
Scope 1	164,655	164,531
Scope 2	52,665	51,634



\* Numbers adjusted to take into account disposals in 2018.

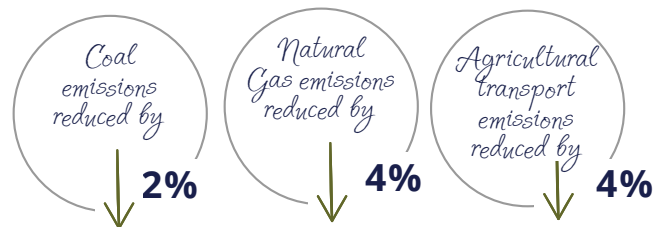




## AGRICULTURAL OPERATIONS

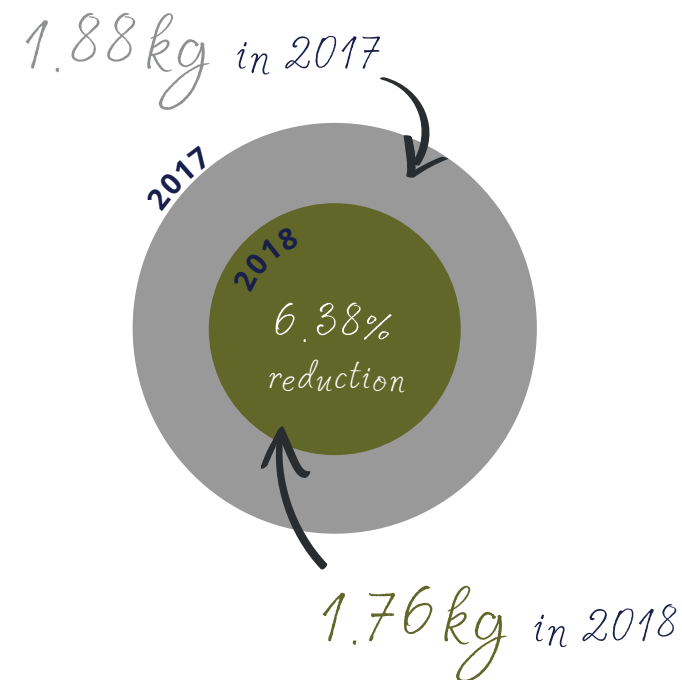
In 2018, our total Scope 1 and 2 GHG emissions increased by 0.5% due to higher yields in agriculture, carbonisation of the grid in a number of countries and land use changes.

Across our agricultural division we have identified over 700 energy and water management projects.



One of the largest uses of energy in the Group is the requirement to process and dry our tea crop. The investment that we have been making to increase energy efficiency in our tea factories has enabled us to reduce the carbon intensity of tea operations from 1.88 to 1.76Kg of CO<sub>2</sub> per Kg of made tea, a reduction of 6.38%.

## CARBON INTENSITY - TEA OPERATIONS (Kg CO<sub>2</sub>e/Kg PRODUCT)



## SOLAR ENERGY

C.C.LAWRIE, BRAZIL

Last year our Brazilian farm, which grows mostly arable crops, installed a solar farm. This farm aims to provide all the energy for the 160 people living there.

**160** people using 100% solar energy in Brazil





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## ENCOURAGING ENVIRONMENTAL AWARENESS AND TRANSPARENCY

### COLLABORATION WITH THE CARBON TRUST

The Carbon Trust has been working with us since 2016 to design and develop a system of environmental data collection across the Group, and to support the development of our environmental strategy. The Carbon Trust is an independent not-for-profit organisation that works with businesses, governments and institutions around the world. It seeks to help – and benefit from – a more sustainable future through carbon reduction, resource efficient strategies, commercialising lower carbon businesses, systems and technologies.



*“Since we started collaborating with Camellia in 2016, we have seen them make steady progress to quantify their environmental impacts and identify opportunities for improvement.”*

**TOM CUMBERLEGE, CARBON TRUST**







GOVERNANCE



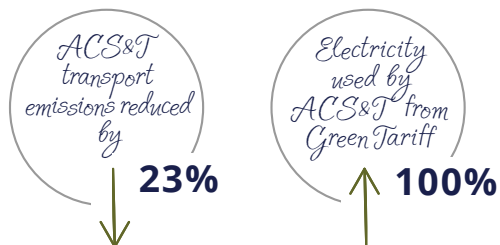
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## RENEWABLE ENERGY

Across our operations worldwide, our energy from renewable sources has increased by 57% since 2017. Over the last two years, our operations in Brazil, India, Kenya and South Africa have expanded their onsite solar energy capacity. We are implementing other solutions to reduce the use of electricity, such as the installation of LED lights. AJT Engineering has converted 60% of all lighting to LED, with plans to continue conversion throughout 2019.



## GREEN ENERGY

ACS&T, UK

Keeping food frozen is an energy intensive task and at ACS&T, our UK frozen food storage and distribution business, we seek wherever possible to adopt ways in which to minimise our carbon footprint. We entered into a climate change agreement with DEFRA in 2005 and receive a reduction in the Climate Change Levy for participating in this scheme, the savings from which are invested in energy reduction projects.

For example, movement sensitive LED lighting saves significant energy by almost eliminating lighting as a heat source from our cold stores.

Recently, ACS&T moved to a green tariff whereby 100% of the annual electricity requirement used to power ACS&T's 14 cold stores and two ambient warehouses is sourced from renewables.







# PROTECTING BIODIVERSITY AND FORESTS

## SOILS

One of the objectives of sustainable agriculture is the long-term improvement of the soils to support agricultural production. In many of our operations, we carry out activities to prevent or control soil erosion, and thus reduce the loss of nutrients and the negative impact on water bodies.

Across the Group, we run a series of programmes focused on mitigating and reversing any adverse effect on the soils which are susceptible to erosion. Organic and non-organic fertilisers, soil conditioners, row cropping and the use of soil restorative practices are common to most of our agricultural operations. In our organically certified estates and those following Good Agricultural Practices, we give priority to organic fertilisation using by products generated on the farm.

## ENVIRONMENTAL POLICY

Our management of forests and conservation areas is guided by our environmental policy. We assess the biodiversity of our sites via landscape and wildlife surveys and seek to continuously manage threats that could degrade the integrity of these environments, habitats and species.

[READ OUR ENVIRONMENTAL POLICY](#)

## ENVIRONMENTAL EDUCATION

In many of our operations, we run Farmer Field days, which include providing education for the community on the importance of preserving woodland areas and maintaining trees. We also provide saplings for them to plant. This year, in Kenya and Malawi, we handed out and planted over 5,000 trees.







GOVERNANCE



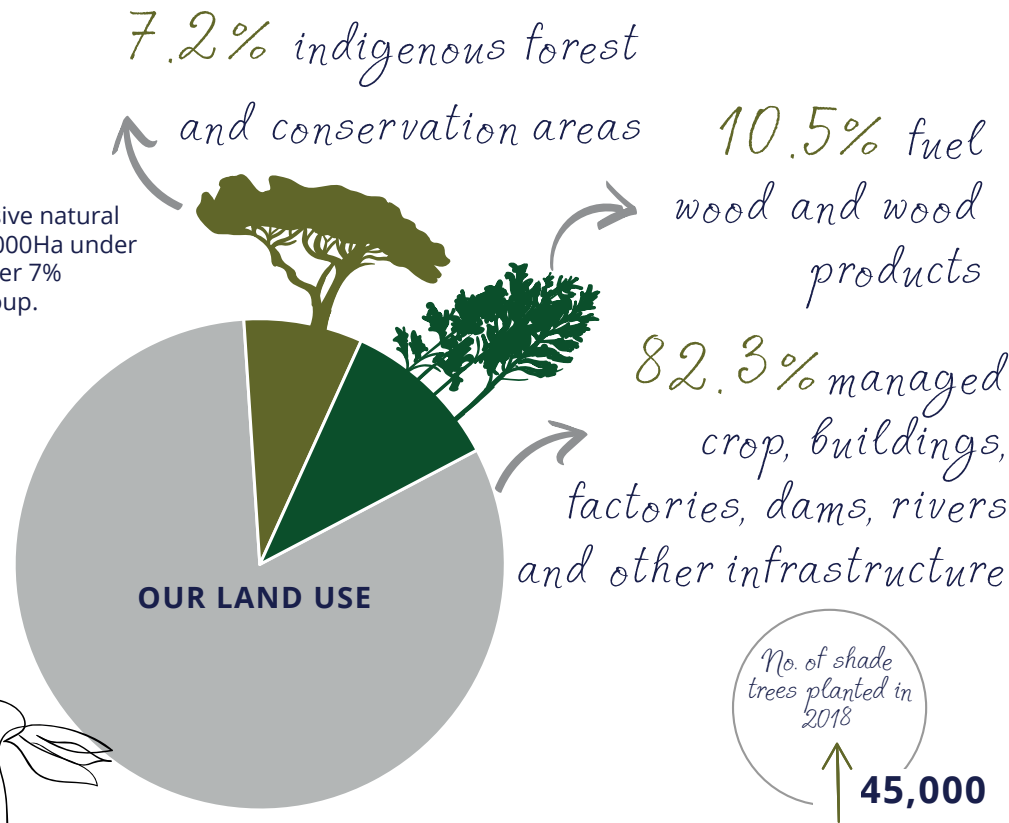
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## REFORESTATION

We protect and manage an extensive natural ecosystem of forests, with over 7,000Ha under conservation. This accounts for over 7% of the total land owned by the Group. Our natural forests have a rich biodiversity of over 472 species of flora and fauna and are home to mammals, birds, butterflies, insects and microorganisms. In some parts of the Group, these natural ecosystems also include conserved wetland areas, lakes and rivers.



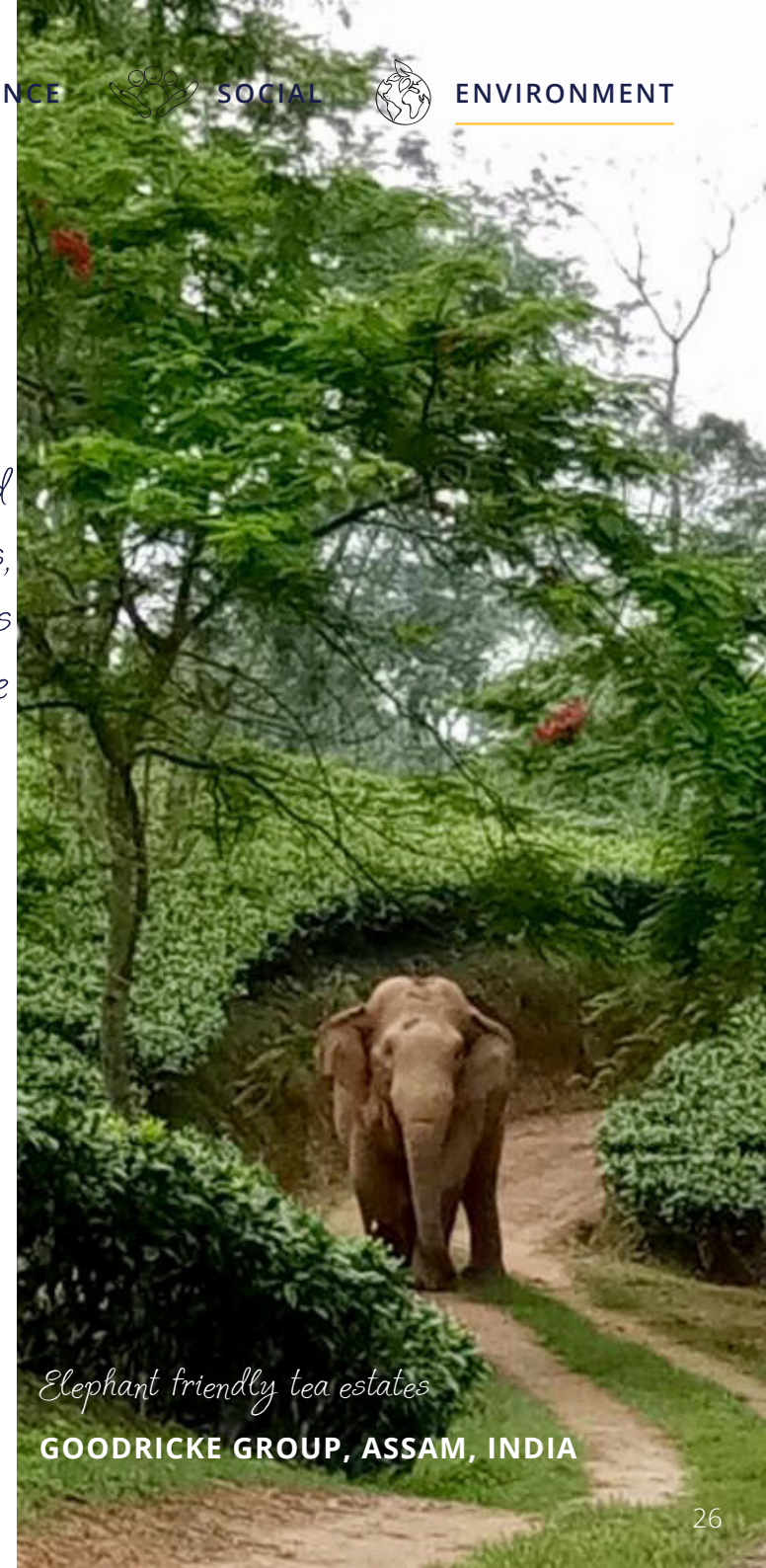
Shade trees

DUNCAN BROTHERS, BANGLADESH

## SHADE TREES

In addition to the forests shown above, we also have 4.5 million shade trees within our managed crop area. Shade trees provide vital shade to our tea but also harbour many varieties of birds. In the last 10 years we have planted approximately 400,000 shade trees in Bangladesh alone. In India, we preserve extensive conservation areas, and on many estates, we maintain forests which are elephant friendly.

**250** In India and Bangladesh 250 shade trees are planted for every hectare of planted tea



Elephant friendly tea estates

GOODRICKE GROUP, ASSAM, INDIA





## #CustodianshipInAction

# REUSING WATER NATURALLY

### THE CIRCULAR MODEL IN PRACTICE

Each one of Eastern Produce Kenya's seven tea factories has a simple but effective waste water treatment system known as Constructed Wetlands. The systems are tailor-made for each site to maximise efficiency. As well as naturally filtering water, they serve as environmental conservation systems, offering a home to many species.

### HOW DO THE WETLANDS WORK?

Waste-water from the factory is filtered through a number of screens which separate out large organic matter from the water. This organic matter ends up in compost for use in the planting of indigenous trees within the wetland site. The water then flows into the Gravel Bed Hydroponics (GBH) - a powerful and living biological filter. Bacteria breaks down the organic matter in the wastewater, forming an active film that cleans the water. The GBH is also planted with a variety of reeds, sedges and cannas, taking up to 15% of the waste water's nutrients. Both aerobic and anaerobic processes occur here, including exposure to the sun's rays that reduce the pathogens in the wastewater. A series of these beds, linked by channels, gradually improves the quality of the water until it can be allowed to return to the natural watercourses.

Entomologist Dr. Dino Martins, conducted a biodiversity survey of the EPK ecosystem. This revealed a total of **891 species of native plants and animals** within the forests and wetlands of the estates.



376

**WILDFLOWERS AND  
HERBS SPECIES**

47

**DRAGONFLY  
SPECIES**

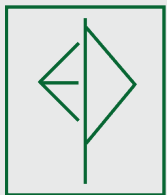
247

**BIRD SPECIES**

125

**BUTTERFLY SPECIES**

96

**TREES, SHRUBS  
AND LIANAS**

*"The more plant varieties, the faster and better the system. The overarching principle is that we have created an ecosystem within an ecosystem."*

**SIMON ODHIAMBO, EASTERN PRODUCE KENYA**





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## CONSERVING WATER



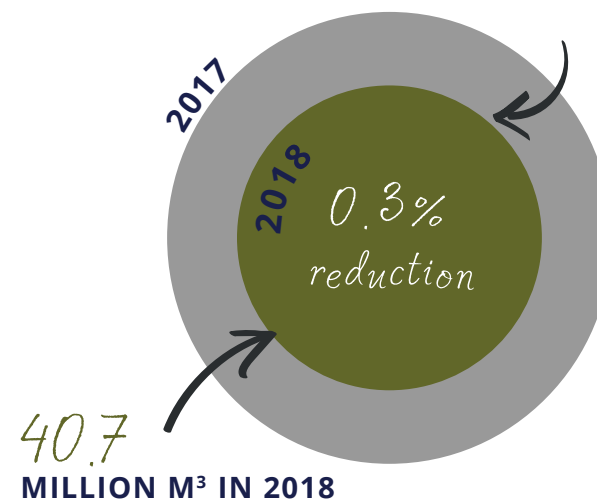
### WATER MANAGEMENT

Development of modern water management solutions is aligned with energy efficiency and improved sanitation projects in many of our operations. Precision Agriculture is increasingly used to determine the water status of both soil and plants for efficient use of water in irrigation. We also implement systemic water management processes by encouraging water recycling, water harvesting through rainwater capture and by building dams. In processing, more efficient uses of water, such as high pressure steam for cleaning, are increasingly used in factories.

TOTAL WATER WITHDRAWAL  
(MILLION M<sup>3</sup>)

41.0

MILLION M<sup>3</sup> IN 2017



### SALAMANDER LAKE

The Salamander Lake is located at Margaret's Hope Tea Estate, in an area known as Gora Bari, 'The abode of Salamanders'. Established in 1947, the area covers over 24,000 m<sup>2</sup> and was recently rehabilitated with indigenous trees as part of a broader reforestation project by the estate, optimising the ecosystem to protect the salamanders.

100 home to approximately 100 salamanders

Water harvesting unit  
KAKUZI PRIMARY SCHOOL, KENYA



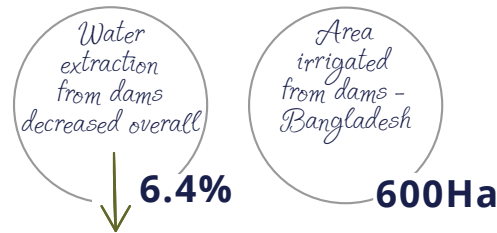


## WATER FOR OUR COMMUNITIES

In all of our agricultural operations we provide water to our employees and their dependants. Rainwater harvesting from roofs provides additional water to housed employees, while potable drinking water is recharged through a range of sources such as boreholes. In many of our operations, we provide water to the neighbouring community by building and maintaining water bodies, as well as the infrastructure required to distribute the water. In addition to this we provide training on efficient water usage to our employees, their dependants and the broader community.

## VAST BIODIVERSE ECOSYSTEMS

Our dams and rivers are home to vast, biodiverse ecosystems and endangered species. Hydrological studies have been conducted in Bangladesh, India, Kenya and South Africa with the aim of continuing to use water efficiently and with respect for the environments in which we operate.



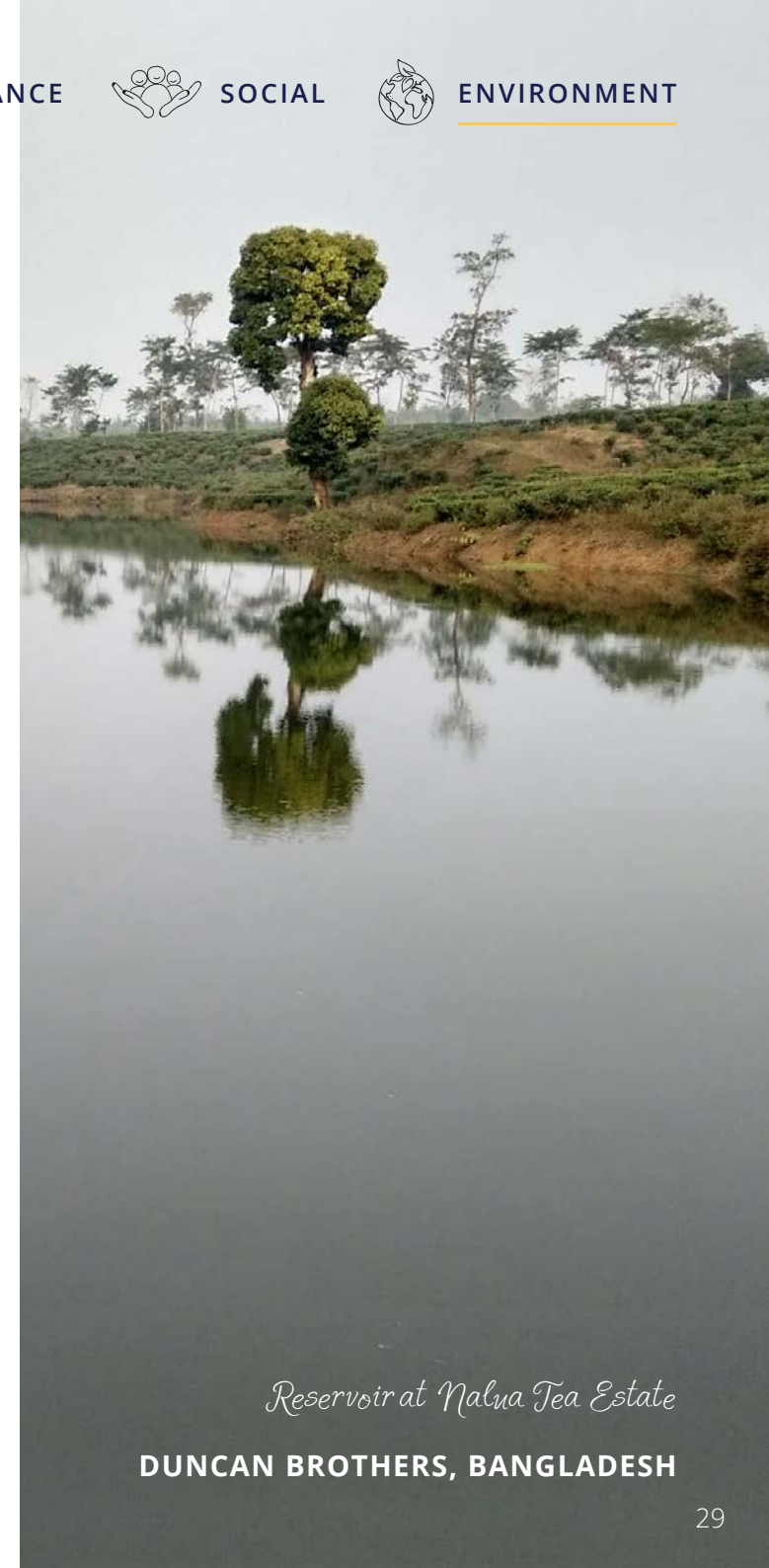
## RESEARCH AND DEVELOPMENT

### DUNCAN BROTHERS, BANGLADESH AND EASTERN PRODUCE KENYA, MALAWI AND SOUTH AFRICA

Bangladesh University of Engineering and Technology (BUET) has conducted a full survey of all Duncan Brother's estates in order to establish potential reservoir sites from which irrigation schemes could be established. These reservoirs are filled through the capture of monsoon rains.

The BUET study was an enormous task and took a number of years to complete. Subsequent to its completion, we have used the information to establish new reservoirs in four of our estates. This is an ongoing project and over the coming decade many more reservoirs will be established on the estates.

Cranfield University was approached by EP Malawi and EP South Africa to conduct a study on the climate change impacts on macadamia production in Malawi and South Africa. This was a desk-based study using weather prediction models to assess the impact of climate change in two very specific locations – Thyolo district in Malawi and Levubu District in South Africa. This overview study was followed up by a Cranfield University student visiting Malawi and conducting an on-site study of the weather in the locality of the Thyolo district and then publishing her findings in an MSc thesis.



*Reservoir at Nalua Tea Estate*

**DUNCAN BROTHERS, BANGLADESH**



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## STRETCHING THE RAINS

### WATER CONSERVATION, KAKUZI, KENYA

With no river traversing Kakuzi, we have sought alternative ways of harnessing the natural rainwater by developing a series of reservoirs across the estate. Through careful use of micro-sprinklers and other water management techniques this resource not only irrigates our avocado and macadamia orchards, it also provides for our neighbouring communities.

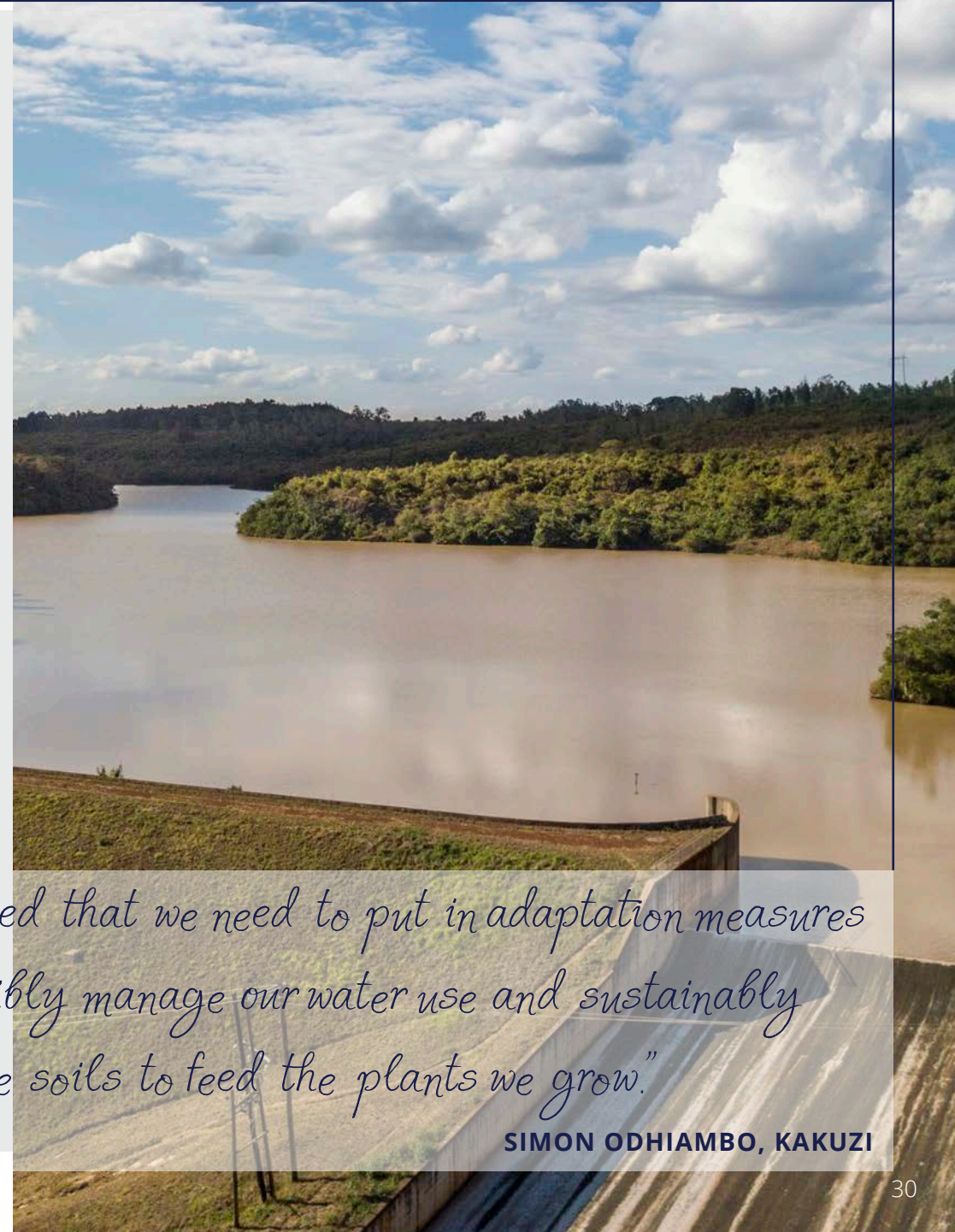
These reservoirs also provide a home to crocodiles, hippopotamuses, fish, frogs, snakes, water plants and a myriad of other aquatic life. Birds frequent the water bodies and African honey bees love the dams too. What started as an effort to harness water has resulted in a sustainable benefit to the biodiversity of the landscape.

Our  
'Stretching the  
Rains' project won the  
GLOBAL G.A.P. award  
for sustainable  
water use



*"At Kakuzi, we have agreed that we need to put in adaptation measures to climate change, responsibly manage our water use and sustainably feed our soils to enable the soils to feed the plants we grow."*

**SIMON ODHIAMBO, KAKUZI**







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## REBUILDING MAMBEDI DAM

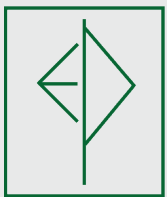
### WATER MANAGEMENT AT EASTERN PRODUCE SOUTH AFRICA

Mambedi Lower Dam is located on the Mambedi River, a tributary to the Luvuvhu River, on the northern boundary of our macadamia estate in Limpopo Province. The dam has a catchment area of 46 km<sup>2</sup> and a volume of 5 million m<sup>3</sup>. Originally completed in June 1985, the dam failed in February 2000 following a period of extreme rainfall. As the need for water in the area increases we decided in 2017 to undertake repairs to the dam and spillway. Construction started on 4 July 2017 and is still in progress.



*“Rehabilitating this wonderful water resource is essential for the future growth of our new macadamia orchard developments. Given the uncertainty of the impacts of climate change, it is critical that we have a sustainable source of water. Bringing the Mambedi dam back on line will provide this assurance.”*

**GRAHAM MCLEAN, CAMELLIA**







## #CustodianshipInAction

# WATER FOR WINE

South Africa, and the Cape in particular, experienced severe drought in 2018. Our winery operations have been working with drought conditions on and off for decades, and thanks to a number of initiatives the vines largely escaped the worst effects of hydric stress. Some of the key measures that we have introduced include:

**RESERVOIR MANAGEMENT** We have built numerous reservoirs to ensure that we capture available rainwater and have a ten year project to remove alien vegetation and bring back indigenous varieties of plants to the estate. This supports biodiversity and helps replenish underground water tables, controls rainwater run-off and promotes healthy dam levels.

**IRRIGATION** Drip irrigation is used throughout the estate and Regulated Deficit Irrigation is used on mature vines to preserve water and encourage wine quality. This system of irrigation requires precision, and in 2018, we invested in a Leaf Pressure Bomb which measures water pressure of vine plant tissue to determine irrigation requirements of each vine. For new plantings, drought resistant rootstocks are used.

**VINEYARD** 100% of the vineyard is now planted with cover crops between the vine rows, helping to maintain water in the top soil, supplying micronutrients and nitrogen, and protecting the soil from erosion.

**TECHNOLOGY** In 2018, following investment in filtration technology, 100% of water from the cellar and tasting room can be reused.



LINTON PARK

*"Conscious use of water is part of everyday life at the vineyard. Protecting the delicate ecosystem of the vineyard and surrounding areas is our primary focus at Linton Park Wines."*

ANNA CHILTON, CAMELLIA







## REDUCING WASTE

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

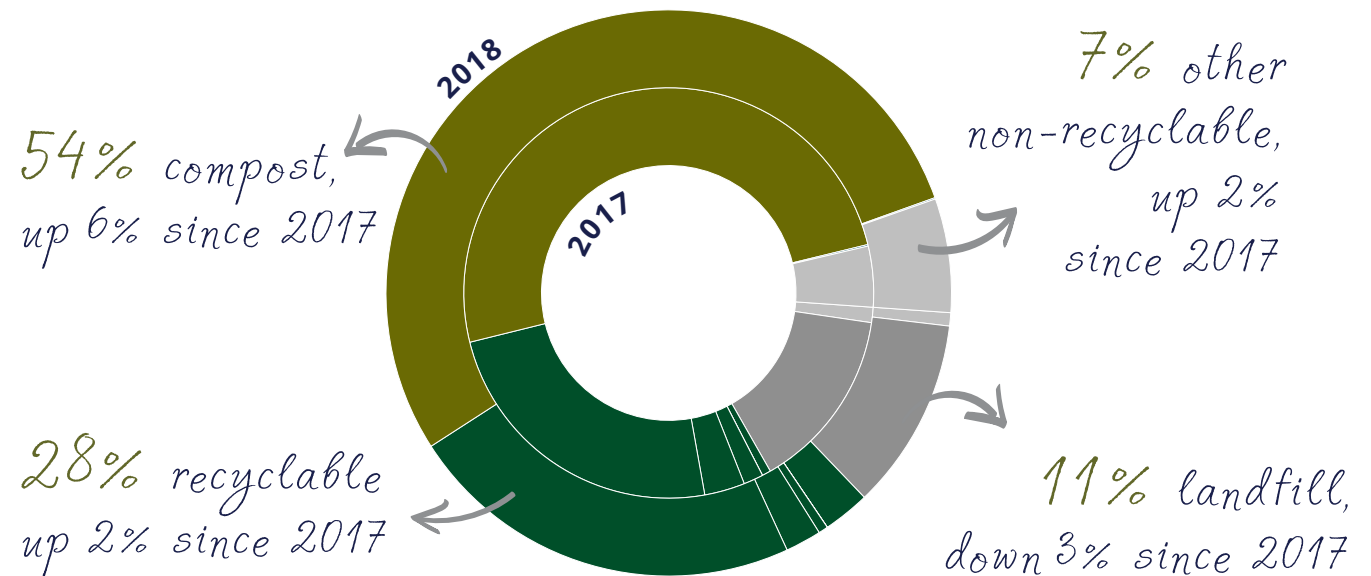


We are increasingly minimising our waste and maximising the opportunities for transformation of a former waste stream into a new, valuable resource. Through process efficiencies in our operations we are encouraging waste recycling, and diverting waste streams to incineration for energy recapture.

### OPPORTUNITIES TO RECYCLE OR FOR RESALE

We have identified a range of possible recycle and resale opportunities for waste streams in many of our operations. For instance, in Bangladesh, a project was launched this year to educate our tea growing communities to collect and recycle plastic waste. Most of our agricultural operations are reusing biological waste for compost, which is the largest contributor to our total waste, accounting for 54%. Improved reporting in some operations, such as ACS&T, AJT Engineering and Eastern Produce Kenya is resulting in more accurate waste data.

### WHERE DOES OUR WASTE GO?



Trial of biodegradable planters

AVOCADO NURSERY, KAKUZI, KENYA





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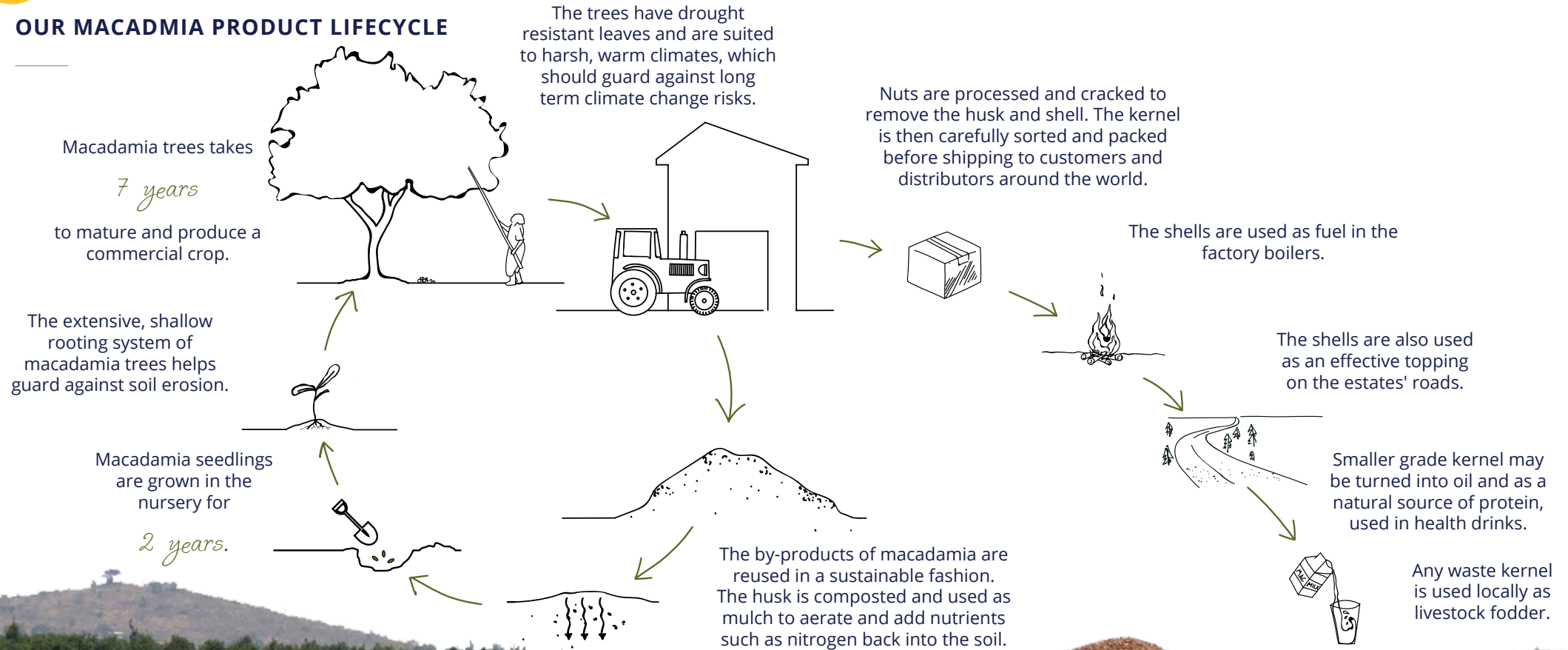


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## OUR MACADAMIA PRODUCT LIFECYCLE



Macadamia shell

MAMBEDI ESTATE, EASTERN PRODUCE SOUTH AFRICA







# OUR CERTIFICATIONS

[CERTIFICATION PORTAL](#)

Our success depends on our customers, their appreciation of how we do business and the quality of our products. Certification bodies, such as Rainforest Alliance, FairTrade, BRC and ISO as well as NGOs and governments all validate our products, services and how we work. Certifications play a vital role across our operations, assuring quality and supporting high standards of production and reporting. In many of our operations we go above and beyond the certification standards. Additionally, we engage with our customers to support a wide range of social and environmental initiatives both within our operations and for our neighbouring communities.

## SAFETY FIRST

Each of our operations maintains an occupational health and safety programme. These are governed, assessed and maintained locally, and include policies relating to Health and Safety, Health and Safety training, First Aid, Fire Safety implementation, and workplace risk assessments. A senior member of the management team has overall responsibility for Health and Safety.

We have undertaken a range of initiatives in Health and Safety across the Group, including Health and Safety awareness and training in 100% of our operations. Where relevant, we provide training in personal protective equipment, best practice for operating machinery, the use of safety signage and risk assessments. Many of our operations are FSSC and ISO certified.

[READ OUR HEALTH AND SAFETY POLICY](#)

## RAINFOREST ALLIANCE

The Rainforest Alliance is built on four pillars of sustainable farming: conserving bio-diversity, ensuring sustainable livelihoods, natural resource conservation and effective planning and farm management systems. It sets standards for sustainability to conserve wildlife, wetlands & promote the well-being of workers and their communities.

Our tea estates in Nandi Hills have adopted socio-environmental management systems and processes covering ecosystem conservation, wildlife protection and good working conditions for workers, as stipulated in the Rainforest Alliance standard. 100% of our Darjeeling estates have been Rainforest Alliance certified as have all our estates in Kenya, Malawi and Bangladesh.



## FAIRTRADE

Fairtrade is an institutional arrangement designed to help producers in developing countries achieve better trading conditions. Members of the Fairtrade movement advocate the payment of higher prices to exporters, as well as improved social and environmental standards.

Fairtrade Certification emphasises equality in the marketplace, forming a partnership between the consumer and the producer. Some of Goodricke's tea estates are certified Fairtrade.



## ORGANIC

The USDA has established the standards, processes and enforcement procedures that govern the right to sell, label and represent products as organic. Some of our tea estates are certified Organic.





## **FSSC 22000 AND HACCP**

The Food Safety Management System (FSMS) Certification Scheme is one of the most comprehensive frameworks defining requirements for integrated processes to control & minimise food safety hazards. The FSSC and HACCP processes are applied in many of our operations, with certification achieved in Malawi, Kenya, South Africa and India among others. At our avocado packhouse in Kakuzi, for instance, we have established Food Safety Management systems to handle avocados from the field through to dispatch to ensure the highest standards of production and to ensure products can be traced from farm to warehouse.



## **NADCAP**

An industry-managed approach to conformity assessment that brings together technical experts from both industry and government to establish requirements for accreditation, accredit suppliers and define operational programme requirements. Our operations, Amfin and Atfin are certified with NADCAP.



## **BRC**

BRC Global Standard for Food Safety is designed as a “total quality management” programme, and includes both food safety requirements and quality requirements which ACS&T must meet in order to be certified.



## **ISO 14001**

All of our European operations are certified with ISO standard(s) and many of our agricultural operations around the world have achieved one or several ISO certifications. The ISO 14001 International standard specifies requirements for an effective environmental management system, providing a framework for environmental performance requirements.

## **AMFIN BSI AUDIT**

Amfin's current strategy is to maintain the integrity and the effectiveness of the Occupational Health and Safety (OHS) management while driving continual improvement, achieving zero lost time accident and improving near miss reporting.

Our OHS management system is embedded in the organisation and provides confidence in the intended outcomes of the management system in relation to BS OHSAS 18001:2007.







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# FOLLOW OUR JOURNEY

[WWW.CAMELLIA.PLC.UK](http://WWW.CAMELLIA.PLC.UK)

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