

SUSTAINABILITY KENYA REPORT 2016



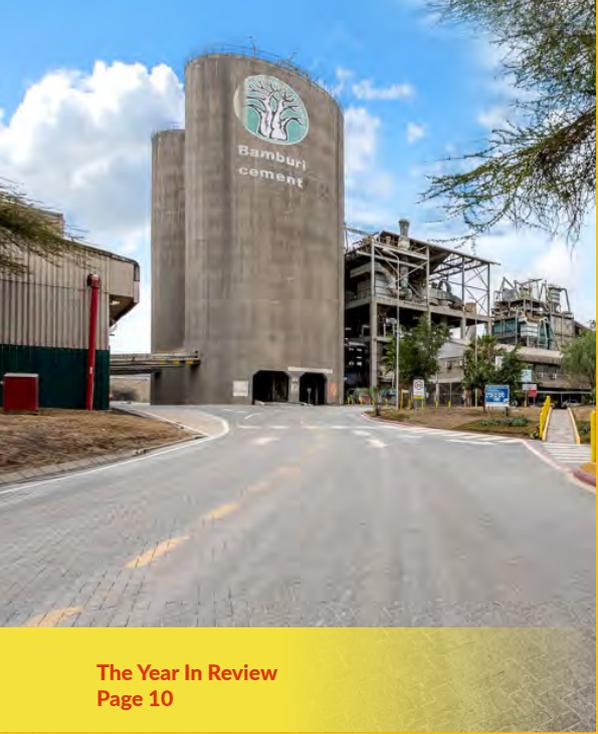
Bamburi
cement

Part of you. From the start



FUEL OIL

Mombasa Plant



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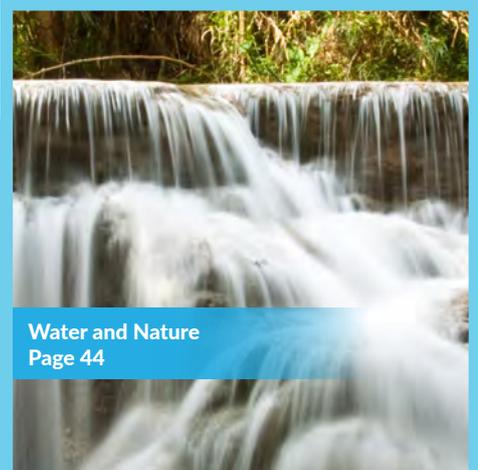
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REPORT BOUNDARY

Our Sustainability Report 2016 follows reporting guidelines set out and defined by Global Reporting Initiative (GRI) G3 which we present our important information.

The year under coverage in this report is 2016 financial year (1 January 2016 to 31 December 2016).

It is advisable to be reviewed together with our Integrated report and financial statements 2016 in order to get a full picture of our performance.

OUR VISION

To delight our customers with innovative construction solutions while being committed to sustainability.

ABOUT US

THE BAMBURI CEMENT GROUP

Bamburi Cement Limited (BCL)

A subsidiary of LafargeHolcim, the world leader in the building materials industry. Two Plants located in Mombasa and Athi River respectively.

Bamburi Special Products Limited (BSP)

Wholly owned subsidiary of Bamburi Cement Ltd and the largest supplier of Ready Mix Concrete and Precast blocks.

Lafarge Eco Systems Limited (LES)

Wholly owned subsidiary of Bamburi Cement Ltd, focusing on sustainability of land use and quarry rehabilitation. Provides market leadership in environmental responsibility as well as a point of engagement for neighbouring communities and other stakeholders.



OUR VALUES

Health & Safety is the overarching value of our CRISP VALUES

- We believe in visible leadership and personal accountability for Health and Safety at all levels and throughout the organization
- Living by the Health & Safety rules is a condition of employment



WE FOCUS ON CUSTOMERS

- We know who our customers, end-users and influencers are - and listen to understand what's important to them – what drives their business and what they value most
- We are clear on what creates value for our customers – and then innovate, differentiate and deliver on our promises with a creative mindset and curiosity
- We work cooperatively with others across the organization to meet the customer's needs



WE DELIVER RESULTS

- We are committed to achieving goals with zero harm to people while focused on rigorous execution of our plans
- We seek to innovate and to challenge the status quo to continuously improve and drive lasting value for shareholders
- We deliver today in a way that generates strong cash returns and even greater results tomorrow



WE ACT WITH INTEGRITY

- We create an environment where honesty, trust and accountability flourish and where compliance and doing the right thing is a lasting commitment
- We have the courage to take the right decisions based on our ethical principles and to uphold them, even when under pressure
- We apply the Code of Conduct, local laws and ethics in all situations



WE ENSURE SUSTAINABILITY

- We demonstrate leadership in environmental stewardship and we will role-model responsibility to future generations
- We proactively engage with various stakeholders to create shared value with society
- We drive sustainable solutions through the entire value chain

We care for and Respect our People, with Openness and Inclusion

- We always respect our people and empower them to reach their full potential
- We build leadership capability that inspires and enables teams and individuals to succeed
- We recognize and reward high performance and address underperformers in the right way
- We display a mindset that is local and global – always seeking to collaborate and share ideas, resources and best practices
- We actively seek out diversity, embracing different ideas, experiences and perspectives

BUSINESS HIGHLIGHTS

Key Financial Highlights

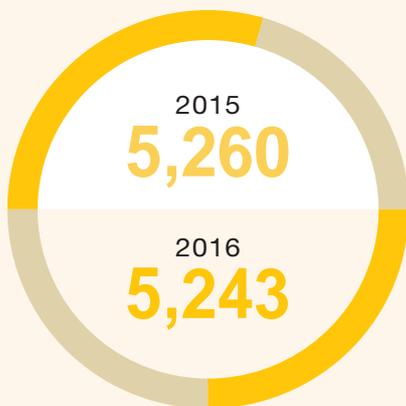
TURNOVER



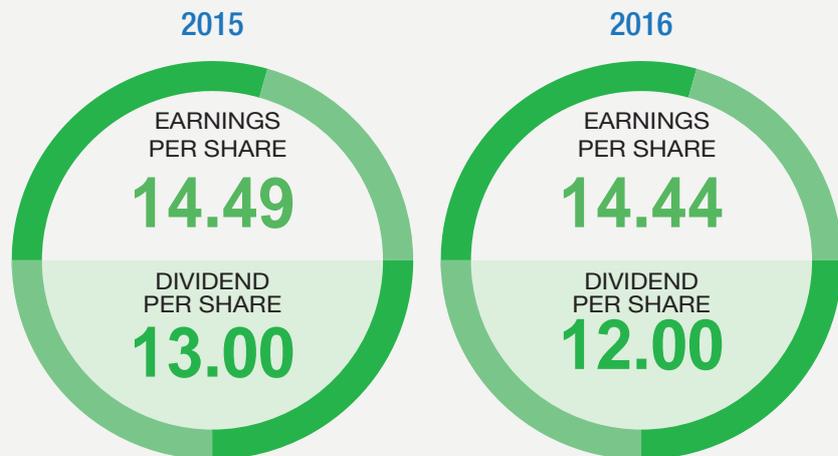
PROFIT BEFORE TAX



PROFIT ATTRIBUTABLE TO SHAREHOLDERS



EARNINGS/DIVIDEND PER SHARE



CASH & CASH EQUIVALENTS



KES Million

WHAT WE DO

Our Products



POWERMAX	a 42.5 grade blended cement that offers superior strength for use in building, civil and structural works.
POWERCRETE	a 52.5 grade cement made in conformance to Chinese standards to meet the requirements for the Standard Gauge Railway project.
NGUVU	a 32.5 grade cement used for general building and structural works.
TEMBO	a 32.5 grade cement used as an export brand.
MULTIPURPOSE	a 32.5 grade cement used for general building and structural works.
POWERPLUS	a 42.5 grade pure cement used for high strength concrete.
ROADCEM	In 2015, BCL introduced a Hydraulic Road Binder for soil stabilization in road construction works.

CONCRETE PRODUCTS

Ready mix concrete - pre mixed concrete delivered to customer site as a ready to use construction product.

PAVING BLOCKS

High quality pre-cast concrete paving blocks that offer paving solutions under the brand name "BamburiBLOX"

PRE-CAST MOULD RANGE

These are pre-cast mould products that include drainage and edge restraints products, fencing and walling products.

LAFARGE ECO SYSTEMS

Haller Park

Is a nature reserve that was transformed from a quarry wasteland into an ecological paradise, incorporating a variety of plant and animal species. The park serves as a recreation hot-spot for tourists and locals.

Butterfly Pavilion and the Butterfly Breeding House promote the recovery of displaced butterfly species that have lost their habitats due to forest destruction.

Bamburi Forest Trails

Are four nature routes for cycling, jogging, walking and fitness regimes. They allow visitors to experience alternating landscapes, from empty quarries, to lush forest, lakes, streams, palm groves and plantations of indigenous trees.

Sunset Terrace is a restaurant that allows visitors to relax, have a meal and admire the palm garden and the Great Lake.

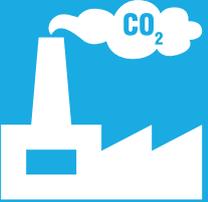
Shamba System

Through the 'Shamba System' local farmers are given a chance to participate in seasonal cultivation contracts to cultivate crops in the plantations where feasible. This is both at the Vipingo and Diani estates. Widows and elderly locals are given priority and staple foods such as maize and beans are the common crops cultivated for sustenance.

Locals who participate in the Shamba System applaud the project as it increases the arable land available to them in light of the increased scarcity of arable land in the two regions. The produce is also sold to raise money for other activities such as education, clothing and medical care.



THE YEAR IN REVIEW



INVESTED
1B
To cut our
Carbon Emissions



471
Employees



0
Fatalities

Blank space

4.2%
Employee
Turnover in 2016



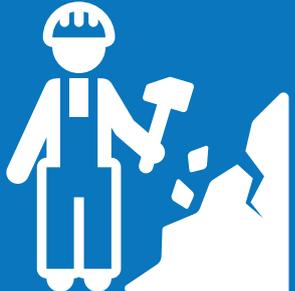
18%
Female
Employees



We Adopted
Geocycle
Waste Management



26,414
Suppliers
Signed Up



300
Hectares
Reclaimed.



We Use
Green
Energy



LETTER FROM THE MANAGING DIRECTOR

I am pleased to submit this report on behalf of our Company's good progress that has been made in advancing Sustainable Development in 2016 after our debut Environmental, Social and Governance (ESG) Report in 2015. Sustainability has been embedded as a key pillar in our strategy and a core value for the Company and therefore consider sustainability to be both a responsibility and a business opportunity.

Of significance was the launch of The 2030 Plan as illustrated in page 20-26, structured around a key objective which is to contribute to a more sustainable construction industry.

The 2030 Plan addresses four main fields of action: climate, circular economy, water and nature, and people and communities. This report details the progress we have made toward a series of short term targets in 2016 towards the ultimate 2030 Plan's key goal which is generating a good portion of our net sales from enhanced sustainability solutions.

Our top of mind priority value is health & safety with continuous transformation to improve and maintain our ambition of zero harm. Figures show that road traffic incidents represent the highest safety risk after construction site incidences and this must be addressed. Amongst the set of measures is an active focus on safer truck driving analysis and rewarding for good performance as part of the Health and Safety Passport Policy.

Since the publication of our last ESG report we have taken decisive steps to further improve compliance with our Code of Business Conduct. This followed the conclusion of an independent investigation related to our global operations and locally and among some of the resulting measures are the creation of a new Ethics, Integrity & Risk Committee and the adoption of a more rigorous risk assessment process focusing in particular on interactions with our third party stakeholders.

In 2017, we look forward to being host of the LafargeHolcim Foundation Awards for the Middle East Africa region. The Awards, which operate on a three-year cycle, are the most significant global competition for sustainable construction design, with around CHF 2 million in prizes going to proposals that best combine sustainable construction solutions with architectural excellence.

Our Company is equipped to effect a real change in sustainability in the industry. As major stakeholders of the overall construction industry we will use our experience to influence the standards for the industry and will work with our peers to drive a meaningful sustainability agenda for the cement sector.

Population growth and urbanization mean that the world will build more than ever before. At Bamburi Cement, we are determined to support that effort with building structures that are more affordable, beautiful, durable and sustainable. We have an important role to play in helping Kenya build better as we have captured in this report.



LETTER FROM THE MANAGING DIRECTOR (CONTINUED)

“Of significance was the launch of The 2030 Plan structured around a key objective which is to contribute to a more sustainable construction industry.”

Bruno Pescheux
Managing Director





We Deliver on Our
PROMISES

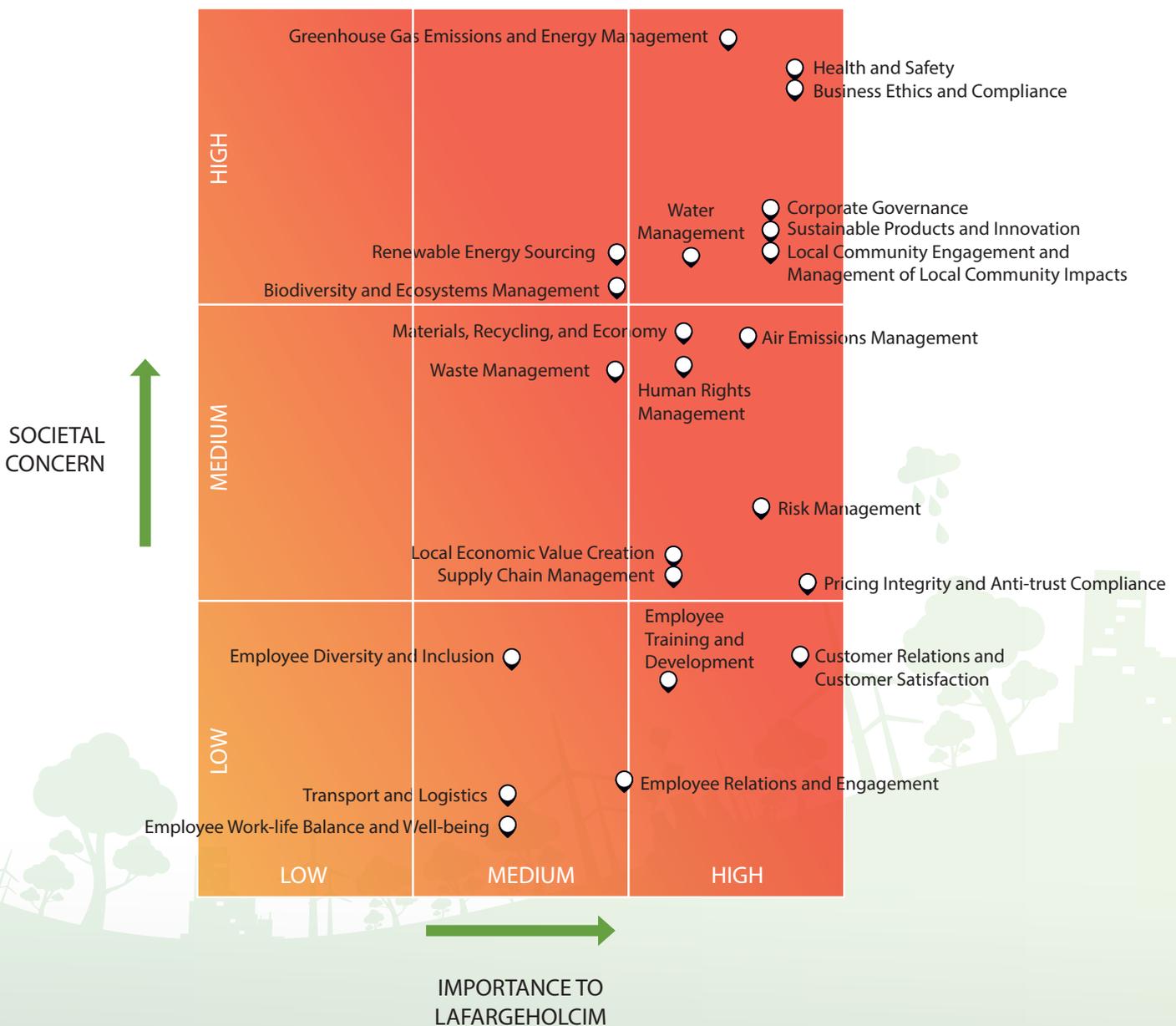
APPROACH

During the year, we employed a number of strategies to remain a sustainable business which we highlight in the following section.

OUR MATERIAL ISSUES

A sustainability issue is considered material if it could substantively affect the organization’s ability to create value in the short, medium or long term. Materials issues are often covered under five themes namely, Marketplace behaviour, Workplace practices, Corporate Governance, Community engagement and the Environmental stewardship. These themes reflect key relationships, spheres of influence, footprint of operation and stakeholder concerns. Material matters are determined by considering the sustainability context of the company, stakeholder issues and assessments of risks and opportunities within the operating environment half of the world’s population now lives in cities. It is estimated that this figure will rise to 70 – 80% by 2050.

This rapid growth of urbanization is also being witnessed in East Africa which accounts for nine of the thirty fastest growing cities in the world. Additionally, second cities within the region, that is, towns which are currently closely linked to major commercial centres are also experiencing growth and rapid urbanization. Urbanization brings with it specific demands for housing, infrastructure, city planning, provision of public services and management of negative externalities such as waste and emissions. Thus while rapid urbanization offers great commercial prospects for Bamburi, it also creates major sustainability responsibilities. Operating in this exciting yet challenging environment demands innovation, leadership and a clear vision for increasing shared value for all stakeholders.



GOVERNANCE AND INTEGRITY

Code of Business Conduct

Our Code of Business Conduct is embedded in the principles of LafargeHolcim which emphasizes its commitment to ethics and compliance with laws, sets forth basic standards of behaviour for its employees when dealing with clients, suppliers, competitors and the general public. It provides reporting mechanisms for known or suspected breaches while also ensuring prevention and detection of wrong doing.

To ensure that all employees were up to date on what was required of them, refresher trainings on the Code were held in 2015 and all employees were required to submit a declaration testifying to their understanding of and commitment to comply to the Code at the end of the sessions. In the second half of the year, LafargeHolcim launched the new Code of Business Conduct which is in line with the previous Code. Bamburi Cement has adapted the same practice. It also provides a toll free whistle blowing line that allows all employees the opportunity to make confidential disclosure relating to suspected impropriety or wrongdoing.

The Group has further defined the conduct expected of its suppliers through the Suppliers' Code of Business Conduct.

Ethics and compliance

Our ethics and compliance mechanisms are articulated in our Code of Business Conduct (CoBC) handbook. The CoBC framework is embedded on integrity; integrity in the workplace, in our business practices and in the communities in which we conduct our business. It incorporates health and safety, diversity, fairness and respect, protection of company assets and information systems including email and social media, anti bribery and anti corruption, gifts and hospitality, fair competition, accurate recording and reporting, conflicts of interest, insider trading, conducting international business and preventing money laundering, the environment, human rights and community engagement.

The Code of Business Conduct (CoBC) emphasizes its commitment to ethics and compliance with laws, it sets forth basic standards of behaviour for its employees when dealing with clients, suppliers, competitors and the general public. Every new employee is inducted on the CoBC while refresher courses are conducted by our human resources and legal departments. All employees and officers, regardless of their positions, are required to comply, with the rules set out in the CoBC. All staff members have signed a commitment to abide by the CoBC. Independence declarations forms are signed by all vulnerable committees such as the tender committee.



Mombasa Silos

OUR BUSINESS MODEL

The Group has undergone a business transformation process through the implementation of the Middle East and Africa (MEA) Business Model, a common business model in the MEA region, with standardised business processes on a single IT platform across all our business segments, Cement, BSP - (Ready Mix and Precast) and LES.

The project, named Project Safari for Wave 1 countries (Kenya, Uganda and South Africa), was implemented over a one year period. We went live with the MEA Business Model on 1 January 2017, as planned.

The programme was commissioned by the LafargeHolcim Group Executive Committee and is aimed at ensuring LafargeHolcim maintains speed and agility to perform in a competitive and dynamic market. The MEA Business Model will be deployed under the name project ATLAS in 31 countries of the MEA region by the end of 2019.

In Kenya, specifically, we expect the programme to align our business processes and generate value for us by making us more efficient, professional, disciplined and agile. It will help us improve our competitiveness by bringing us closer to our customers, lowering our operating costs and ultimately contributing to increased profitability.

Our focus in 2017 will be on the promotion of integrated processes and digital solutions to improve efficiencies in servicing our customers by leveraging on our Business Model. This is our commercial transformation journey, which should bring expected results soon.

Having embarked on this exciting journey, we look forward to a digitised 2017.

Our business is based on four strategic pillars

Cement	Aggregates	Ready-mix concrete	Other construction materials
<p>Extract value from market positions in mature markets</p> <p>Realize growth by addressing customer and end-user needs/pain points</p> <p>Differentiate through customer excellence, innovation and sustainability</p>	<p>In mature markets, create value through establishing critical mass in selected attractive markets</p> <p>In growth markets, create value through establishing critical mass in very large urban centers</p> <p>On a local needs/ opportunity basis, support differentiation and sustainability to enhance overall value to customers</p>	<p>Offer a differentiating value proposition to address customer needs through value-added products services and solutions.</p> <p>Support/hedge existing or future cement and aggregates businesses under a clear vertical integration framework.</p>	<p>Offer a differentiating value proposition to address customer needs through value-added products services and solutions.</p> <p>Need to support existing or future cement and aggregates businesses.</p>
			

FOCUS AREAS

These are the things that we hold close to our hearts
which influence our day to day operations.

OUR PILLARS SUMMARY

	Climate	Circular Economy	Water & Nature	People & Communities
In house	Shs 800 Million invested in upgrade of electronic precipitators to curb stack emissions Rehabilitation of 300ha with wide variety of tree species contributing to pollution control and CO2 absorption 60% fossil fuel consumption replaced through alternative fuels at Nairobi Grinding Plant	5 companies supported in co-processing of waste through Geocycle Kenya. Utilization of waste as alternative fuels; agricultural biomass and 1,500 tons of waste tyres	Environmental Management System Continued our support to biodiversity protection covering 400 species of indigenous trees, shrubs and lianas, 180 species of birds, 71 species of butterflies, 34 mammal species and 14 amphibian species	Maintained leadership in health and safety of our employees and contractors. Conducted health educational forums for our employees and stakeholders
Beyond our fence	298,400 tree seedlings planted across 150 schools in Kilifi and 1000 seedlings distributed to 6 schools in Kwale for tree planting	Reduction in waste to landfills due to total solution offered by Geocycle process Availability of international level expertise through LafargeHolcim network for complex waste disposal solutions	97620 seedlings offered to schools through GIC Phase II in partnership with KenGen Foundation and Better Globe Forestry Foundation. 150,000 visitors provided with environmental education through Haller Park and Forest Trails	Mother to child program catered for immunization of 2,789 children, family planning support for 70 mothers and follow up of 480 expectant mothers Shs 85 million spent on community engagement
Innovative solutions	Alternative fuel substitution including use of rice husks, waste tyres etc to reduce energy consumption	Developed innovative processes to reuse products after their productive life thus extracting maximum value, regenerating their service life and protecting their natural environment	Water harvesting education and implementation through GIC programme	Maskani brand providing innovative construction solutions. Builders Academy trained 1,808 masons from 25 towns across the country in 2016



OUR PEOPLE ACHIEVEMENTS



Together we
Achieve



Safety Statistics	Year		
	2013	2014	2015
Lost Time Injuries (LTI)	1	2	1
Lost Time Injury Frequency Rate (LTIFR)	0.43	0.55	0.26
Total Injury Frequency			
Rate (TIFR)	1.36	2.49	0.77
Fatalities	0	0	0
Visible Felt Leadership			
(VFL) reports	2,459	2,106	2,114
Safety Observations	10,337	11,393	17,219
Training in safety (hours)	13,881	11,360	12,377

- Task observation**

We encourage safe behaviour by employees through careful consideration of the safety risks associated with a task and the necessary mitigation actions that should be taken before engaging in the task

- Safety observation**

We inculcate a culture of recording and reporting safety issues including near misses, unsafe conditions, unsafe acts and good practices consistently

- Risk assessment (five questions)**

We evaluate the level of safety risk associated with our work using a series of five key questions

- Closure rate of high risk actions**

We are committed to reducing and eliminating all high risk actions and have created clear targets in this regard

LAGGING INDICATORS

Lagging indicators include the traditional safety measurement indicators that provide historical data on key safety metrics. They are useful for providing information on safety trends and particularly indicating adherence and compliance to safety rules and standards. They evaluate the overall effectiveness of a company in ensuring safety. Bamburi Cement has moved emphasis away from lagging indicators to leading indicators so as to proactively address safety risks and concerns.



OUR PEOPLE

KEEPING OUR PEOPLE SAFE

Material issues in the workplace involve a company’s efforts to be a responsible employer. We continue to work on improving our health and safety culture and create a zero harm environment. Some of the key issues relevant for Bamburi include:

HEALTH AND SAFETY

On the leading indicators: overall road safety compliance, safety observations; closure of high risk actions, risk assessment audits and VFL (Visible Felt Leadership) reports we recorded good performance with increased focus on the risk assessment audits and closure of high risk actions. In Kenya, we unfortunately recorded 2 LTIs (Lost Time Injuries) in the Mombasa Plant in July 2016 and one in the Nairobi Grinding Plant in November 2016. One medical injury was recorded in the Mombasa Plant in February 2016.

Description	Budget	Actual
	2016	2016
TIFR (Total Injury Frequency Rate)	0.65	0.83
LTIFR (Lost Time Injury Frequency Rate)	0.22	0.55
Fatalities	-	0
LTI (Lost Time Injury)	-	2
Medical Injuries	-	1
First Aid Injuries	-	12
Road Overall Compliance	95%	95%
Safety Observation Reports	12,782	17,470
Closure Rates for high risk actions	100%	98%
Risk Assessment Audits	2,453	3,529
VFL Reports	1,991	1,838

In road safety, there was good performance on journey management and pre-loading/off-loading trucks inspections. There was also a significant improvement in driver behavior which is monitored through road patrols GPS systems installed in all trucks working for us.

After introduction of the driver’s league matrix from a benchmarking exercise with Shell Vivo, we are able to rank our drivers based on their driving behaviors. Ten drivers from different transporters were awarded in December 2016 based on the analysis drawn from road patrol assessments and GPS review.

Health

We ran a number of initiatives in the plants to improve employee wellbeing. Many projects were implemented to reduce dust emissions (e.g the drier project in Nairobi Grinding plant), reduce noise in the plant through isolation and engineering controls such as silencers at the silo blowers and also projects dealing with ergonomics to reduce manual handling by workers. We also carried out training for nannies and employees’ wives on basic first aid and emergency response in a home setting. 2 sessions were conducted; one in Nairobi and another one in Mombasa.



OUR PEOPLE (CONTINUED)

Reward and Sanction Policy

This policy is supported by the Health and Safety passport and was well implemented across all the sites. By the end of the year, we had a total of 30 employees and contractors rewarded in the country for the Health and Safety employee or contractor of the month award. The best employee and contractor out of the 30 were awarded as Health and Safety Employee of the year and Health and Safety Contractor of the year respectively. The awards presented by the CEO included a cheque of Shs 100,000 to each of the 2 winners.

Leadership Training

We rolled out a Health and Safety Leadership training for Managers in the first half of 2016. The modular programme included assignments and coaching sessions, with the Managers graduating in November 2016. The Supervisor level sessions are scheduled for 2017 as part of the 2017 Health and Safety Improvement Plan.

In 2016, the Company continued to focus on implementation of annual health assessments that included a new aspect of ergonomics checks and training on proper back care.

In addition, there were a number of health promotion activities whose aim is to ensure employees increase control over and improve their health through health education and awareness initiatives such as work / life balance, diet and nutrition, alcohol and other drugs, promotion of good mental health, health and fitness, stop smoking campaigns , physical strength and endurance, etc. The health promotion program is also extended to the community and we launched a campaign together with the Mombasa County dubbed 'Let's Talk about Cancer'. This campaign aimed at increasing awareness of importance of early testing as Cancer ranks 3rd leading cause of death in Kenya; 980 people were tested and over 3,000 people received communication materials.

The Company has taken a step further in the fight against cancer and has partnered with Coast General Hospital to establish a Cancer Unit, that will be ready in 2017. This takes cognisance of the fact that supportive care is crucial in reducing the cancer burden and boosting the quality of life for patients. The Company's Mother Child Community Programme saw 2,789 children immunised against preventable diseases, 70 mothers received family planning support and 480 expectant mothers received support at our staff clinic.



Health and Safety Employee of the Year



Nairobi Managers graduation



Health and Safety Contractor of the year



Mombasa Managers graduation



OUR PEOPLE (CONTINUED)

ROAD SAFETY

Every day, between 600 – 650 trucks transport Bamburi materials and products covering over 20 million kilometres per annum. According to the WHO, Kenya is ranked 15th worldwide in terms of number of fatalities per 100,000 vehicles on the road. In a country where over three thousand road related fatalities occur per annum, we have experienced minimal accidents and no fatalities due to a comprehensive and stringently implemented road safety practice. In 2006, we recognized that while industrial safety was world class, road safety data indicated a close resemblance between the county data and our own data. A road safety programme, which aims to address the root causes of accidents, was thus established to address this situation. The road safety programme is anchored on several pillars as follows:-

- **Driver management**

All drivers carrying Bamburi products must attend and successfully graduate from a defensive driving course. Additionally, they undertake annual medical check-ups with eye testing being of paramount importance.

Drivers must have certain qualifications including five years accident free driving experience with the specific truck. A driver induction process is in place to ensure that all drivers are conversant with our expectations.

- **Vehicle management**

All vehicles are subject to a 21 point inspection on every visit to the plant. Vehicles must be fitted with a GPS system to allow for driver behaviour monitoring. The monitoring involves journey and speed management to avoid issues like over speeding, harsh braking and freewheeling. Check points are situated every 200 kilometres where drivers are able to refresh and debrief before continuing with their journey.

- **Load management**

The load must be in compliance with the national legislation. Over loading is strictly forbidden. Load weights are stringently recorded at all entry and exit points.

- **Management review**

The top leadership of the transporter company are expected to model visibly felt leadership in the area of road safety.



Chairman NTSA, Director General NTSA, MD Bamburi and Regional H&S Director, LafargeHolcim MEA Region at the “Drive Safe, Work Safe” flag off in Athi River



Children participating at the launch of “Drive Safe, Work Safe” in Athi River

OUR PEOPLE (CONTINUED)

KPIs are developed for the management including the Chief Executive. Each company is expected to recruit a safety manager who is fully empowered to enforce compliance to prescribed safety standards. Bamburi undertakes to train the Safety Manager. Regular reviews are conducted with the transporter company with the KPIs being tracked and reviewed on a quarterly basis.

In December 2016, we held our Annual Road Safety Campaign, the 9th since the first held in 2006. The annual campaign under the theme “Drive Safe Work Safe” started in Mombasa Plant and the caravan made a stopover at Nairobi Grinding Plant. This annual campaign is supported by our transporter partners, National and Local stakeholders including NTSA, Police, NGOs, drivers and other road safety stakeholders.

We also involved the sensitization of the youth on road safety in the campaign by including performances from children on road safety. Over 1,000 Boda boda riders were also trained during this period. The caravan traversed the northern corridor from Mombasa to Malaba making stopovers in major towns to engage the road users on road safety.

Several practices underpin the road safety programme. These include road patrols by Bamburi staff and the transport companies, continuous driver engagement through tool box discussions, accident review where these occur across all transport companies, annual premise audits for the transporters. At the plant, traffic marshals have been hired to manage 500 – 750 trucks that visit the Bamburi premises on a daily basis and ensure that on-site accident do not occur. Designated drivers are provided by transporters whose mandate is within the company premises.

Transport companies sign up to the supplier’s code of business conduct which binds them to observe the same standards that Bamburi ascribes to, thus ensuring that the company is responsible within its supply chain and avoids outsourcing ethical challenges. All Bamburi premises perform using the same road safety practices and standards and no site will commission the other sites non-conformity. Use of dedicated drivers – Dedicated drivers have been deployed at NGP and Mombasa Plant to assist highway drivers take a break on arrival at the sites while their trucks are being loaded or offloaded at night.

This ensures that the drivers get adequate rest to manage fatigue while ensuring their trucks are well utilized and in safe hands.

Diversity and Inclusion

In 2016, Bamburi Cement was awarded the Women’s Employer of Choice Award. The Employer of Choice Awards are the first East African Employer Attractiveness Awards voted entirely by the East African talent pool, using data gathered by Careers in Africa Employer of Choice survey that was conducted across the region’s top employers across a range of themes and sectors. The awards were organized by Global Careers Company (GCC) and Willis Towers Watson at Radisson Blu Hotel. On Thursday 9th September 2016, the winners were revealed and recognised at a gala dinner.

In winning the Women’s Employer of Choice award, Bamburi Cement beat Microsoft, P&G, Unilever and Oracle. This is a testimony that Bamburi’s diversity and inclusion program, is gaining recognition with our stakeholders.



OUR COMMUNITIES ACHIEVEMENTS



A Partnership that
Breeds Growth



2016 Key Achievements



Ingrained within Bamburi Cements' value system is the long-standing commitment to make positive, tangible and sustainable difference, within our communities

Affordable Housing



35 Projects



185 Projects

Builder's Academy



1,434 masons
trained



1,808 masons
trained

Supplier Code of Conduct



30% Reduction

OUR COMMUNITIES

AFFORDABLE HOUSING SOLUTIONS

LafargeHolcim realised the need for affordable housing in the countries it operates in and provided construction solutions through its subsidiaries. In Kenya, Bamburi Cement is aligned to LafargeHolcim's global objective of establishing business initiatives with social impact. The Affordable Housing initiative provides customers with access to construction funding through partner financial institutions, architectural drawings, bill of quantities, technical assistance and construction advice. These services are packaged in a product which is part of Bamburi Cement's value added offering, known as Maskani.

The Affordable Housing Initiative focuses on three main initiatives

1. Housing Finance
2. Earth and Cement
3. Mass Housing

Results so far

- Close to 250 households were impacted, both financed and self-financed.
- Maskani Initiative expanded its scope to cover Mombasa.
- Rolled out a pilot project to manufacture stabilised soil bricks
- Worked in conjunction with the Mobile Concrete Lab to offer customers on-site testing. Notably, the laboratory is fitted with state-of-the-art equipment for on-site testing of aggregates, fresh and hardened concrete and soil stabilised pavement layers. Testing is conducted in the presence of the customers or their representatives.

Builders Academy

Digital masonry training

In an effort to upscale the Builders Academy training sessions, the marketing team engaged a digital solutions provider, Kuza Biashara to conduct a pilot that would validate whether masons are comfortable using digital technology for learning as opposed to the face to face type of training that we currently use for the Builders Academy training sessions. The pilot was conducted in 3 cohorts in Embakasi, Githurai, Ruaka, Githongoro, Ruai and Utawala between June and August 2016. Using the Kuza Edge Digital Platform, the selected masons were trained on 5 courses; professionalism in construction, time management, managing emotions, customer relations and communication skills. The program was designed with a focus on 40% core skills, 40% social skills and 20% vocational skills.

A total of 175 masons against a target of 100 masons were engaged. Out of the 175, 115 masons attended 2 or more courses while 76 attended 3 or more courses. The pilot had a number of key findings that will be used to expand the pilot study into other parts of the country in 2017.

Key findings:

1. Masons initially struggled with the digital platform but were more comfortable learning digitally vs. the face to face since they could control the amount of time spent on understanding the content in each course.
2. The level of assistance (on digital/devices) reduced after every session.
3. The ability to reach a higher number of masons digitally with content on construction highly supersedes the numbers that can be reached through face to face.
4. The biggest challenge with the digital platforms was the inability to conduct practical sessions which was the preferred model of learning by most of the masons.



Masons keenly listening to a guide on a tour of Bamburi Special Products plant in Athi River.



Masons using the Kuza Digital Platform to access courses in Githurai



An affordable Maskani Initiative house

OUR COMMUNITIES (CONTINUED)

Cement Stabilized Earth Blocks

Urbanization challenges in emerging countries require construction techniques and products that are: Innovative, sustainable and benchmarked to traditional techniques. LafargeHolcim has developed green cements and adapted the technique of mixing earth and cement to offer a novel approach to the production of sustainable Compressed Stabilized Earth Bricks – CSEBs. The input of cements in green infrastructure is not well understood. Modern cements are holistically green cements and play an important role in environmental sustainability - production of low CO2 emission cements; Consumption of wastes generated by other industries; Use of alternative fuels e.g. tyres ; Use of bio-fuels and in quarry rehabilitation. The development of this innovative approach of CSEB dovetails well with our agenda. This innovative technology has been used successfully in Malawi, and based on this experience, we have held initial capacity building sessions with identified potential contractor partners in Kenya. The production of CSEB's involves the use of local materials; earth, water and sand, and typical use of damp mix – low water content.

The key outcome is that for environmental sustainability – no firewood, green cement (low CO2 emission), there is 60% water reduction versus fired bricks, avoid transport and concomitant fuel consumption and ultimately, the engagement and mobilization of local community in technology transfer. In line with LafargeHolcim's stakeholder engagement approach, Bamburi Cement identifies its stakeholder's as those who have influence over our activities as well as those who are impacted by them. We proactively seek to identify, engage, manage and partner with our stakeholders to create shared value. We employ different channels and mechanisms to engage with our stakeholders. These engagements vary in intensity, scope, purpose, frequency and type depending on the stakeholder group and the issue at hand.

Our stakeholders are:

1. CLIENTS AND END-USERS

These are the people who matter most to us and we always endeavour to give them the best of our products and services. They comprise of the workforce that bring up buildings and the individual owners who purchase our cement to build their structures. In a move to appreciate and give back to them, we partnered with the National Construction Authority and organized a Digital Masonry School whereby masons drawn from all over the country could get a chance to hone their building skills in a conducive and learning oriented environment. We trained 3,600 masons. Our customers were also not left behind. We had a Zawadi Challenge reward scheme to reward customers for their continued loyalty through the earning of points every time they purchased a ton of Nguvu or Supaset Cement. They would then redeem the points for holiday's, motorbikes, fridges e.t.c

2. WORKFORCE

Our employees are the people who are at the forefront of our agenda and campaigners of who we are.

In Kenya, we have a total of 471 employees broken down in the following centres.

Employee Headcount

Site	Headcount
Mombasa	221
Head office	109
NGP	55
LES	25
BSP	61
Total	471

In order to keep their engagement high, we actively engage with their unions in a quest to reach a common ground on issues that occur. We also have in place mechanisms to recognize and reward exemplary performance. An example is our annual bonus program which is applicable to all employees. These help us to ensure our staff remain engaged and motivated.

3. LOCAL COMMUNITIES

We draw resources and our social licence to operate from the communities around our plants, installations and properties. We seek to maintain mutual and respectful relationships with these communities. We engage the community regularly to ensure that we are conversant with their concerns about our operations and also to facilitate social investment programs. We will continue to champion improvements in the lives of community members through our social investment activities

4. PUBLIC AUTHORITIES

We partner with government agencies in the housing, construction, environment and safety sectors with an aim to adhere to the national legislation and regulations under our area of operations. The mutual interest helps us to foster good relations with them.

With one of our partners, The National Construction Authority, we signed a Memorandum of Understanding to ensure competence in the building and construction industry. This year, we have managed to train 3,600 masons in professionalism in construction, customer relations and life-skills, including communication and stress management.

5. SHAREHOLDERS & INVESTORS

We constantly engage with our Shareholders and Investors in an effort to remain a sustainable and growing business. Their opinions and advice are really valuable to continued success in operations. Our top 10 Shareholders are as follows:

OUR COMMUNITIES (CONTINUED)

1. Fincem Holding Ltd
2. Kencem Holding Limited
3. Standard Chartered Nominees
4. Amarjeet Baloobhai Patel & Baloobhai Chhotabhai Patel
5. Standard Chartered Kenya Nominees Ltd A/C KE002382
6. Paramount Company Ltd
7. Standard Chartered Kenya Nominees Ltd A/C KE002258
8. Standard Chartered Nom A/C KE 11993
9. Standard Chartered Nominees A/C 9230
10. Standard Chartered Nominees Non-Resd A/C 9944

6. BUSINESS PARTNERS

Collaborations

Collaborations with both internal and external partners were done through successful customer engagements and execution of projects. Some of the projects engaged in included:

- **Itare Dam Development, Kuresoi – Nakuru**
Aggregate characterisation and mix design trials conducted at early construction stage.
- **Hass Tower Development Project, Nairobi**
A special high strength, Class 60, self-compacting concrete was formulated in conjunction with LafargeHolcim Research and Development Center in France. The concrete was successfully delivered to cast underground test piles for the iconic 67 floor Hass Towers project in Upper Hill.
- **Avic HQ Development Project, Nairobi**
A special concrete incorporating an anti-expansion and waterproofing agents was formulated and cast by BSP into 5 number rafts that will form the foundations of the 6-Tower complex AVIC Africa headquarters.

7. PRODUCT QUALITY

Mobile Concrete Laboratory

The mobile concrete laboratory in its first year of operation was able to make 232 site visits for both our cement and ready mix concrete customers where technical support was provided through onsite testing, aggregate analysis and concrete mix design solutions. The lab was able to convert sites using competitor products resulting in extra revenue of Shs 37 million.



Our mobile laboratory

Concern for Business Partners

Business partners are key stakeholders for Bamburi. We therefore manage our logistics network with a view of gaining efficiencies and cost savings for our transporters. One of the major concerns for our business partners is the amount of time that their trucks spend at our plants either offloading raw materials or loading finished products. In addition, we have undertaken certain measures to improve the performance of the logistics system

including:

- Payload optimization: We ensure that trucks gain better fuel efficiency per ton of cargo loaded on the truck through payload optimization thus reducing their environment impact and improving returns to transporters through lower costs per unit of produce ferried.
- Optimization of ship loading operations of imported bulk products thus reducing time spend on offloading and saving costs since we don't incur demurrage expenses
- Used our Mariakani yard for ship offloading of imported clinker so as to ease transportation to NGP and gain remarkable cost savings.
- Measuring and controlling service level performance by various transporters to various regions.

Supply Chain Stewardship Supplier Code of Conduct

We work with a large number of suppliers and contractors. The Group takes a proactive approach to sustainable business practices ensuring that our suppliers and contractors adhere to Group's ethical business requirements. All major contractors and suppliers have signed up to our supplier code of conduct which provides clear ethical and responsible business requirements. Every year, we undertake an ethical assessment of our key suppliers and contractors to ensure they are applying our code of ethics in their operations.

Local Supplier Development

We are committed to support local suppliers and ensure that their experience in working with us is meaningful. Among the measures we have undertaken to support local contractors include:

- Increased the efficiency of our packers at our Grinding Plant in Kenya from an average of 68tph (Tonnes per Hour) to 75tph thus reducing waiting time.
- Debottlenecked our entry points at our Grinding Plant in Kenya by installing a second cement weighbridge in October 2015 to reduce congestion of trucks at the main gate.
- Installed a weighbridge at the bulker loading point to prevent over or under filling of silo trucks.

OUR COMMUNITIES (CONTINUED)

- Actively monitor our truck registration and driver behaviour to proactively address any behavioural concerns that would affect efficiency.
- Used pallets at palletizing shed to improve loading and off-loading time.

Customer Relations

Our Customer Relationship Management Tool offers a key platform for managing and achieving expectations. It enables the company to respond in an effective and speedy manner to customer needs, concerns and complaints. Our response to customer complaints is managed through the OTIFIC (On Time, In Full, Invoiced Correctly) model. In addition, the Group has invested in an M-Service portal that offers an easy to use, digital platform on which customers can transact their business with us through their mobile phones or tablets.

Education

With the aim of providing quality education, we support the construction and renovation of classrooms and made donations towards bursaries. Investments in infrastructural development in schools help improve education and literacy standards in the community.

Community Empowerment

We support organisations and communities to implement development projects in income generation, security, road safety, employment creation and construction of social amenities. The projects range from small scale community initiatives to larger scale nationwide initiatives.

- Training on good road safety practices and defensive driving of 4,500 boda boda operators and road users
- 4 boreholes for the Mwembelegeza Community in Mombasa.
- Over 3,000 bags of cement donated in the construction of roads, classrooms and old citizens' home nationally
- Donation to WEMA Center who provide support to street children and vulnerable orphans.

PROMOTING A HEALTHY COMMUNITY

A healthy community is critical for the economy to thrive in a sustainable way. We support the communities we operate in through initiatives that promote good health. In 2016, we focused on cancer awareness and treatment in the coast region. To this end, we donated Shs 12 million towards the renovation and equipping of the Cancer Unit at the Coast General Hospital, the only cancer unit serving the entire coastal region. In addition, the Company facilitated free cancer screening for the neighbouring residents at our Mombasa Plant during the cancer awareness month. Other health initiatives include the mother to child program where we provide medical support at our staff clinic

in Mombasa to community members with a focus on mothers and children under the age of five years. The Program saw a total of 2,789 children receiving various immunization avert death from preventable diseases, 70 mothers receiving family planning support and 480 expectant mothers were followed at our staff clinic.

PARTNERSHIPS

In June 2016, Lafarge Eco Systems formalised a Partnership with Pwani University to collaborate in areas such as biodiversity and habitat monitoring, research projects, ecosystem management, awareness creation and capacity building.

BOABAB TRUST

Nguuni Nature Sanctuary

The Nguuni Nature Sanctuary is becoming a "natural island". The dense human settlement surrounding has resulted in security and human /wildlife conflict becoming an issue. This has, however, been mitigated with the installation of a 5.5 kilometres live fence. Maintenance work of the infrastructure has been expensive, especially roads, nature walk paths, picnic sites, and firebreaks as well as Phase II of the electric fence installation.

The Mtopanga Training and Demonstration Farm

Mtopanga Farm is a centre of innovative agriculture and environmental farming techniques, which serves grassroots farmers and peri-urban middle class dwellers. In 2016, we focused on adding to our family backyard garden. The family backyard garden forms part of our training facilities on the farm and in our communities where several farmers have replicated the gardens on 500m² plots around community dams. We conducted educational tours for 505 school children while 75 individuals showed interest in various subjects. Climate change contributed to poor rainfall in 2016 and only 534mm of rainfall was recorded between January and December. We intend to build resilience by planting drought tolerant crops and this has been a major focus for training. We have re-introduced and encouraged the cultivation of crops such as finger millet, pearl millet, sorghum, cowpeas and amaranth.

Agriculture Society of Kenya (ASK) Show and Partnership With Ministry of Agriculture

The Baobab Trust participated in the ASK Show of 2016. At this event the Baobab Trust trained farmers on how to use the Farmers App as a source of information for basic organic and innovative agriculture techniques on their farms.

Farmers Field Day

The following were highlights of the event:

- Birika system I, which recycles water from the bottom of a fish pond for irrigation, using water loaded with fish manure

OUR COMMUNITIES (CONTINUED)

- b. Birika system II, which recycles water from the top of a fish pond for pond aeration, using water loaded with green algae. Photosynthetic green algae produces oxygen during the day, increasing the amount of oxygen available to the fish
- c. Bustani III, which utilises a simple and highly adaptable prefabrication construction technique
- d. Integrated poultry and fish production systems
- e. Flexi biogas systems
- f. Zero-grazing dairy goats
- g. Pisciculture – integrated rice and fish system
- h. Mushroom production
- i. Apiculture – bee

Junju Primary School

The school has been a beneficiary of several projects all sponsored by Bamburi Cement Limited

- A computer lab with 6 functional PCs donated by Bamburi. This lab was recently used by the Kilifi county government in training locals on computer literacy and e-government. Hiring of the lab generated income for the school and is also used to teach students on basic computer skills
- One million tree project that has seen over 1500 seedling planted in the school compound. The school has sold some of the mature trees to local wood traders and generated income from the sale
- A student environmental club has been formed to spearhead the tree planting activities giving the students an opportunity to learn more on environmental conservation.

The school hosts a garden of 'mipingo' trees which have become rare in the area due to over-cutting by wood carvers.

- Two classroom blocks that were built by Bamburi that are now host the lower primary section of the school
- A fully kitted library that was donated by Bamburi Staff members including shelves and learning charts
- A water tank donated by Bamburi for water catchment during the rainy season. The water stored is utilized during the dry season

Vipingo Estate

Bamburi Cement has established a cordial relationship with the local Mwambelegeza community, permitting them to practice their indigenous religious practices within the property. This is due to the existence of sacred caves and indigenous sites within the property that have historically served as the focal point for traditional religious practices for the local communities.

A local medicine man operates from the caves within the heavily forested Vipingo estates, an area that is currently being actively mined by the company. The local community observe Health and Safety requirements in accessing the sacred site including wearing reflective jackets but are free to visit the site at will. The medicine man plays an important role in the community as a traditional healer and spiritual leader. He is also the custodian of traditional knowledge and practices inherited over generations on traditional healing, medicinal practices and spiritual guidance to the community. Although the property is duly owned by the Company, Bamburi Cement has acknowledged the pivotal place played by the traditional medicine man and sacred shrines in the lives of the local community. Community access to the sacred site and medicine man is guaranteed by the company as part of its commitment to respect indigenous community practices and the sanctity of community cultural and religious practices and sites. This is in accordance to the standards elaborated in the International Finance Corporation (IFC) Performance Standards with specific reference to performance standard 7 on indigenous communities and performance standard 8 on cultural heritage. Community consultation remains the cornerstone for this engagement with free and unrestrained access provided to community within specified guidelines.

Sports and Culture

We recognize that sports play a key role in terms of promoting health and well-being, as well as supporting cohesion and development initiatives amongst communities. By partnering with organizations and sponsoring cultural events, we promote the preservation of natural heritage in arts, music and culture.

- Mombasa International Cultural Festival
- Beaujolais Nouveau
- Bastille Day
- Alliance Francaise - Mombasa and Nairobi
- Kilifi Cultural Festival

Sponsorships

By supporting events, conferences and projects that are closely linked to our business and the community we foster relationships that are focused on generating long term value.

- Kenya Association of Manufactures (KAM) Energy Management Awards
- Boabab Trust Fund
- National Road Safety Campaign
- FiRe Awards & conference
- Mining Conference
- KEPSA Speakers Roundtable
- East African Community Day celebrations



OUR COMMUNITIES (CONTINUED)



Primary school pupils participate in the one million tree project.



Pupils enjoying books donated to their library by Bamburi.

OUR COMMUNITIES (CONTINUED)



Human wildlife coexistence at Nguuni nature Reserve



A Mtopanga demonstration farm on the banks of a community dam



School children touring one of our demonstration farms



A farm management training in session



A community training in session.



On 26 November 2016, an open Farmer's Day was attended by 120 people.



Birka Irrigation System



Mushroom Cubicle



Family Backyard Fish Pond



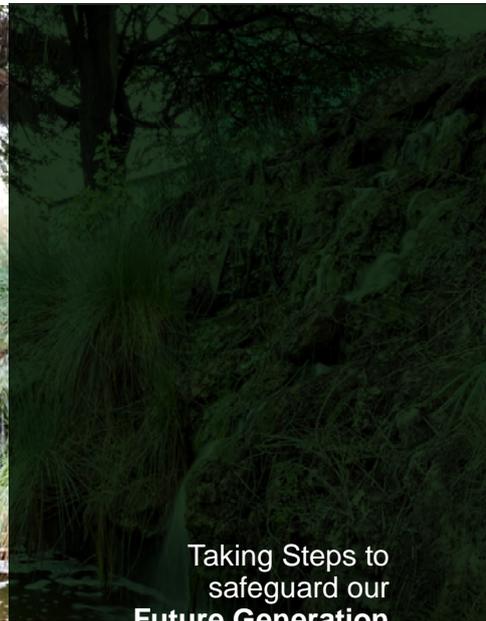


A section of Nairobi Skyline



We stand firm, in our
promise of **High Quality**
Cement Products

CLIMATE ACHIEVEMENTS



Taking Steps to
safeguard our
Future Generation



2016 Key Achievements

- Launched ISO 14001:2004 certification of Nairobi and Mombasa Plants.



Environmental Sustainability
is our Core Focus Inorder to
Ensure our Own Sustainability.



CLIMATE



MANAGING CLIMATE CHANGE

Rehabilitation and Climate Change

Lafarge Eco Systems contributes significantly towards combating climate change through the rehabilitation of Bamburi Cement's quarries, biodiversity conservation and sustainable land utilization. Our rehabilitation programme has resulted in the greening of over 300 Hectares of land. These greening activities contribute to the pollution control system through the absorption of CO₂ emissions. Bamburi forest plantations also provide renewable timber and firewood for energy.

Managing Emissions

Our ambitions are focused on reduction of specific CO₂ emissions by 2030 vs (1990) through innovative solutions. Our investments of over KES 800 million in the past 5 years in the upgrade of the Electrostatic Precipitators with more efficient bag filter technology, to curb stack emissions in our operations, was a key milestone in our drive to be compliant to Global Environmental Standards and in line with our Sustainability Ambition goals.

Further to this, we consistently undertake emission monitoring within our operations and conduct regular external air quality audits to ensure that the ambient air quality at all our operations are within the legislated limits and that requisite reports are provided to the regulator as required by law.

Air Quality

Dust emission is a major and stubborn component associated with cement production which needs to be managed progressively. We have undertaken several measures to address this challenge with varying degrees of success. One of the most successful approaches has been the use of electrostatic precipitators with bag filters which have been installed at the two plants in Mombasa and Nairobi.

Baghouses are incredibly versatile and can be engineered for almost any dust producing application by varying size and bag types. They offer high treatment efficiency, safety and ease of operation thereby providing an environmentally friendly technology for air quality management. They have been found to be the best available technology for the two operations as they operate even during periods of power failure. Current investment in this technology is in excess of KES 1 billion.

Gas Emissions

Cement production also results to the emission of several forms of gases. We undertake gas monitoring within the plant using online probes that capture the gas constituents and concentrations within the combustion chambers. External air quality audits are undertaken annually as per the NEMA requirements to ensure that the ambient air quality at the plants is within the legislated limits.

CLIMATE (CONTINUED)

Logistics Network Optimization

Every day, approximately 600 - 650 trucks deliver raw materials or finished goods for Bamburi Cement. We have therefore worked on improving the performance of our logistics network so that we gain environmental and social benefits. In many cases, especially with finished goods, trucks are forced to transport produce to a customer and then return empty. This phenomenon is called empty miles.

We have worked at reducing the number of empty miles covered by trucks so as to reduce the overall costs and also environmental impacts of these trucks, through a network optimization strategy. This strategy identifies produce that can be transported on return trips to ensure that trucks travel fewer empty miles. This includes using clinker trucks to backhaul cement to Eastern and Coastal regions.

Use of rail transport

As part of our effort to reduce the impact of road transportation, we have embarked on an effort to increase the use of rail transport. On average we transfer 35 – 45KT by rail annually from Athi River to Uganda.



MANAGING ENERGY

We are continuously working on improving our plant and logistical efficiencies such as reduced power consumption, better alternative fuels substitution, process optimisation for better energy consumption and increased alternative fuels substitution.

Clinker to Cement Ratio

Clinker can be blended with a range of alternative materials. The clinker-to-cement ratio (percentage of clinker compared to other non-clinker components) has an impact on the properties of cement. Ordinary portland cement can contain up to 95% clinker. Substitution therefore has to consider the cement quality that is anticipated so as to identify the type and proportion of alternative main constituents that can be used. Yet the reduction of the clinker-to-cement ratio means lower emissions and lower energy use. Bamburi Cement has therefore made efforts to reduce the amount of clinker utilized substituting it with secondary additives so as to reduce the amount of energy used and emissions produced.

CIRCULAR ECONOMY ACHIEVEMENTS



Value Creation Through Transformative Production

2016 Key Achievements



Sustainable solutions to reduce our dependency on natural resources and fossil fuels

Projects	2015	2016
Cement stabilised blocks (Durabrick)	Signed MoU with Mama Sarah Obama foundation to produce 110,000 blocks to construct an ECD Center at Kogelo, Siaya.	80,000 blocks have been produced.
Alternative Fuel	Average supply of used tyres at 400 tons per month. Achieved a monthly average substitution rate of 50% using rice husks mixed with tyre dust.	Average supply of used tyres at 1,500 tons per month. Achieved a monthly average substitution rate of 60% using rice husks mixed with tyre dust.
Fuel cost index environmental conservation		30% reduction

CIRCULAR ECONOMY

CIRCULAR BUSINESS MODEL

Enhance a circular and resource-efficient business model

To ensure the long-term success of its businesses, we aim to minimize our environmental impact and maximize our positive contribution. We implement a business model making the best use of water, recovering energy from waste and biomass sources, and enhancing biodiversity preservation.

Our cement, concrete, and aggregates activities and manufacturing processes require natural resources, such as water and energy. But such resources are becoming scarce, and the competition for their use is increasing between domestic purposes, agriculture, and industry. Our quarrying operations can also have an impact on ecosystems. This is why we constantly work to optimize our use of natural resources by managing our environmental footprint effectively and creating value where possible by using recycled materials or incorporating other actors in the management of common watershed basins.

We implement a circular and resource-optimized business model, which covers:

- Substituting fossil fuels with industrial or municipal waste and biomass to power our cement plants. This allows waste to be recovered safely and in an environment-friendly way, which also provides solutions to waste generators while reducing our consumption of fossil fuels.
- Managing our own water use through best practices such as rainwater harvesting and water recycling. In addition, we influence other actors across the entire basin to promote community access to safe water and sustainability of local water supplies.

- Implementing consistent and robust rehabilitation and biodiversity management at all extraction sites, in cooperation with experts and local stakeholders. Our objective is to deliver a net positive change in biodiversity by creating, preserving, and restoring natural habitats and contributing to species conservation.
- In addition to reducing our environmental footprint, our natural resource preservation actions aim to meet our local communities' needs.
- We provide more water to communities in water-scarce areas by, for example, building check dams and reservoir pits.
- We create local jobs by developing pre-processing capabilities and direct sourcing of waste.

Geocycle Kenya -

Sustainable Waste Management Solutions

In 2016, Bamburi Cement Ltd launched the Geocycle brand in Kenya. Geocycle is a waste management organisation owned by LafargeHolcim with the main objective of recycling waste to energy or raw material for cement plants with a promise of a zero waste future.

The current waste management solutions available in the country consume resources rather than conserving them. Geocycle Kenya employs globally accepted waste management systems and utilise Bamburi Cement kilns to dispose waste through co-processing. Co-processing offers a superior environment solution based on the following:



Bamburi staff preparing seedlings for planting in the one million tree project.



CIRCULAR ECONOMY (CONTINUED)

- high temperatures,
- excess oxygen
- long residence times completely destroying waste materials, leaving no residue for landfill

In addition, co-processing reduces greenhouse gas emissions as the waste from the process is used to replace fossil fuels, preserving non-renewable fossil fuels and natural resources as the energy and mineral value of the waste materials are recovered.

Our promise is clear:

Day by day, we work relentlessly to bring society a step closer to a zero-waste future key highlights from Geocycle Kenya include:

Industrial waste:

In 2016, Bamburi Cement Ltd worked with five industries to dispose their waste via co-processing. By disposing their waste in Bamburi Cement Ltd kilns, these companies were enabled to achieve their zero-landfill policies thus contributing positively to the environment. By harnessing the Geocycle global network and expertise, we aim to engage more companies to dispose of their industrial waste.

Waste-oil

Waste-oil is categorised as hazardous waste, meaning it should be disposed of with great care. Geocycle Kenya is in discussions with the oil sector in Kenya to dispose of the waste-oil generated in the country through co-processing, which is the internationally accepted approach.

Solid waste - Tyres

With more Kenyans owning vehicles and road transport on the rise, the generation of waste tyres has increased. Waste tyres create a major environmental challenge when not properly disposed. Bamburi Cement Ltd disposed of about 1,500 tons in 2016, solving the environmental challenge and substituting the fossil fuel consumed in cement making process.

Agricultural waste

We continue to work with the community within the Mwea irrigation scheme to collect and deliver rice husks to our Nairobi Grinding Plant. Rice husks are used as an alternative fuel, substituting 60% of fossils fuel consumption at our Nairobi Grinding Plant.



Waste tyres at one of our processing plants



Rice husks ready to be processed in one of our processing plants.

CIRCULAR ECONOMY (CONTINUED)

Sustainable Construction,

Soil Stabilised Blocks

A Memorandum of Understanding was signed with Mama Sara Obama Foundation for Bamburi to provide technical training, soil stabilized blocks machines to manufacture 110,000 blocks towards the construction of an Early Childhood Development center in Kogelo, Siaya. The projects is transforming the current dilapidated Senator Obama school to an ultra-modern education complex constructed by sustainable soil-cement blocks called Durabrics. By end of the year over 80,000 blocks were produced.



Soil preparation for stabilised blocks



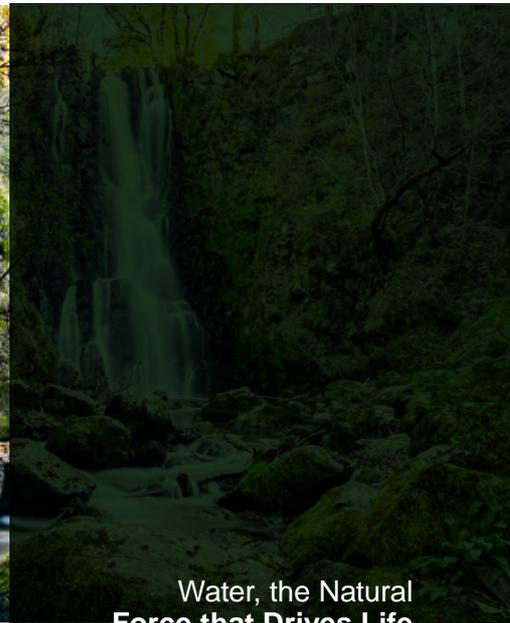
Finished stabilised blocks



Actual production of the stabilised blocks



WATER AND NATURE ACHIEVEMENTS



Water, the Natural
Force that Drives Life



2016 Key Achievements

Projects	2015	2016
Biodiversity Management		Total of 310 Hectares rehabilitated Pioneer Planting Ecosystem development (enrichment planting).
Haller Park & Forest Trails	113,966 visitors	149,785 visitors
Green Initiative Challenge	81 schools	120 schools



Improving on our environment to make a positive contribution to nature

WATER AND NATURE

Managing Environmental Impact

Environmental stewardship is concerned with the direct and indirect impacts of a company on living and non-living natural systems including ecosystems, land, air, bio-diversity and water. It involves a lifecycle approach covering the entire value chain of a product from input to final product.

Bamburi Cement views the natural environment as an integral part of the Company's operational concerns. The entire production system seeks to ensure that quality requirements, operational procedures and processes focus as much on the natural environments as they do on other key product indicators.

Thus the production process seeks to create the best quality product while being sensitive to the environment. For example, input quality, amounts and combinations are determined with both product quality and environmental impacts in mind. Thus, environmental concerns begin right at the mining level through responsible sourcing, determination of key quarry variables and oversight over raw material quality. It extends to the actual production process and forms a key variable in the distribution logistics.

Environmental Management System (EMS)

In Kenya, we embarked on the process of developing a comprehensive and effective Environmental Management System (EMS) to manage overall environmental responsibilities and performance with the commitment of obtaining ISO 14001:2004 certification in 2017.

To reach this goal we have in place a program that is managed and coordinated well, guided by our Environmental Policy, and with a roadmap that encompasses the development of operational controls, documentation and manuals. Being a leader in effective environment management, we continuously strive to benchmark with and to achieve the highest level of conformance to not only local but Global standard practices developed, a practice we are proud of.

Water consumption is monitored through flow meters across the operations. Water consumption is high with the Nairobi plant consuming approximately 1.8 million litres per month and the Mombasa operation consuming approximately 150 million litres of water per month. Water is mainly sourced from onsite boreholes at the two plants. Potable water is obtained from the Nairobi and Mombasa County supply mains.

BIODIVERSITY

Bamburi Cement through its ecosystems subsidiary is enhancing the co-existence of industry and nature. Through Lafarge Eco Systems, our environmental and rehabilitation arm of the business, we remain strong in our vision to be the centre of excellence in land management, quarry rehabilitation and Biodiversity management.

A total of 61 tree species are listed on the International Union for Conservation of Nature (IUCN) Red Data List, 21 of them as critical, endangered or vulnerable. Many of the indigenous species are now reproducing in the restored ecosystems and forming populations. Food plants as well as flowering plants have been introduced to attract and sustain the rich biodiversity, including butterflies and birds. More than 180 species of birds have been recorded in the rehabilitated areas, including two bird species that are listed as endangered and 71 species of butterflies.

In addition, we have recorded 34 mammal species, two of which are listed as vulnerable/endangered on the IUCN Red List and 24 as Least Concern or Near Threatened and 14 amphibian species. Several animal species such as monkeys, bush-babies and antelopes, act as seed dispersers and are intentionally used as such, while butterflies and other insects, as well as bats, bush-babies and others act as pollinators. Diverse insects, millipedes and other arthropods as well as fungi act as de-composers in the ecosystem, turning the former quarry into a functional ecosystem.

ENVIRONMENTAL CONSERVATION

Sea turtle project

As part of our conservation programme, our turtle project saw us secure 70 nests at both our hatcheries in Jumba and Bamburi and maintain our close link with the KWS.

Nesting summary

No. of nests	70
No. of eggs	7,447
No. of hatchlings	4,949
No. of turtles tagged	8
No. of nests	2,029
No. of laid eggs	220,116
No. of hatchlings	165,973
Tagged turtles	86
Hatching rate	75%

Species	No. of Nests
Green	1,995
Hawsbill	48
Olive Ridley	13



WATER AND NATURE (CONTINUED)



Turtle Tag



Ranger translocates eggs to the Bamburi hatchery



Jumba beach cleanup on 6th August 2016 with 78 participants comprising school children, fishermen and local residents. 180kgs of trash was picked from 750 metres of beach.



KWS warden addresses the conservation programme

Haller Park and Forest Trails

Haller Park is located South of the Bamburi Cement Plant along the Mombasa /Malindi highway. A product of the company's efforts, since 1971, to convert barren landscape of disused limestone quarries into vibrant and diverse ecosystem of forest, grasslands and ponds.

Currently, Haller Park plays host to a variety of wildlife including hippos, giraffes, buffalos, and antelopes as well as smaller mammals and birds. The Park consists of a Game Sanctuary, Reptile Park, small demonstration fish farm area, Palm Garden, Crocodile pens and a giraffe viewing platform, offering a variety of attractions at the various points to educate and entertain the over 160,000 visitors who visit the park every year.

The diversity of vegetation is considerable, from mangrove palms and majestic indigenous shade trees to coastal forests where several of these plants are rare and endangered. There are 4 nature routes in the Forest Trails for cycling, jogging, walking and fitness enabling the visitor to experience alternating landscapes from empty quarries to lush forest, lakes, streams, palm grooves and plantations of indigenous trees.

Today, this world class nature and environmental park stands as a beacon of successful decentralization of environmental management to regional and local levels and adaptation of social responsibility.

South Quarry View Point

The South Quarry Viewing Point was developed as an opportunity for Bamburi to showcase a visual and living demonstration of the rehabilitation story and rehabilitation management within its subsidiary Lafarge Eco Systems. This was ensured through offering educational experience to the visitors on how the quarry face develops and the role Lafarge Eco Systems plays in the rehabilitation of the mined quarries by demonstrating the beginnings of rehabilitation, ecological management and showcase development. It is a spectacular demonstration of how the ecosystem is developed from a bare quarry floor to the dynamic relationship of the wetlands, forests and habitats.

Butterfly Pavillion and Breeding House

The pavilion is home to more than 16 species of butterfly.

Reptile Park

Lafarge Eco Systems boasts one of the most modern Reptile Parks in Eastern Africa. It was initiated around the concept of educating the general public on the importance of snakes to mankind and their role in ecosystems. Visitors are able to view the snakes in their terrariums designed to mimic their natural environments. The snakes are sourced from the surrounding rehabilitated forest as well as pet snakes that were either abandoned after their guardians relocated. It also serves as a safe home for injured snakes and those whose natural habitats had been destroyed or encroached.

WATER AND NATURE (CONTINUED)

Wildlife Sanctuary

The Company works with the Kenya Wildlife Services (KWS) in the management of the biodiversity resources. Haller Park hosts a wildlife sanctuary where we receive wild animals from KWS and at the same time donate wild animals to national parks throughout the country.

Aqua Culture

As a result of excavation, small lakes, ponds and swamps are formed and become habitats for fish, birds and reptiles created. Wherever possible, water bodies and swamps are inter-connected by channels for the free movement of aquatic organisms. In a larger lake such as the wildlife sanctuary hippopotami are introduced to keep the water-body healthy and prevent it from silting. The Bamburi Integrated Aquaculture system constitutes of the fish farm, crocodile unit, and a bio-filtration component. The rejected fish are used as part of food items for the crocodiles.

The system is run biologically, with no pesticides, artificial fertilizer or chemotherapy for fish, crocodiles and plants being applied. This is to avoid upsetting the delicate balance in the system.

Tree Plantations

This is part of Bamburi's rehabilitation efforts where already mined areas and reserve lands at Vipingo and Diani estates are utilized to establish tree plantations. The plantations include the use of specified indigenous plants vegetation to diversify vegetation and create a coastal indigenous forest as well as produce wood as fuel for the cement kilns to substitute fossil fuels & reduce fuel costs and green-house gas emissions. Bamburi partners with neighbouring communities in seedling production through establishment of community nurseries and training in nursery management. This in turn creates employment opportunities and raising awareness of environmental conservation.



Pupils learning about a tortoise at Haller Park in Bamburi Mombasa.

WATER AND NATURE (CONTINUED)

Bamburi participates in a number of projects including the greening within our operations in Mombasa aimed at creating an ecosystem rich in bio-diversity through the planting of indigenous trees, shrubs and fruit trees.

The company works with other agencies including The National Environmental Management Authority (NEMA), the Mombasa County Government and the Kenya Wildlife Services (KWS) in the management of the biodiversity resources. Bamburi also champions the World Environmental Day as part of raising awareness on biodiversity conservation.

The Green Initiative Challenge (GIC)- Phase II

Our commitment on sustainable environmental management also extends to development of partnerships with organization with similar ambitions. Our partnership with KenGen Foundation and Better Globe Forestry for the second phase of the Green Initiative Challenge (GIC) Program, a schools' afforestation project that targets schools in Embu, Machakos and Kitui Counties in Kenya was launched in 2015.

The Green Initiative Challenge (GIC) program is designed to encourage and enable schools to participate in environmental activities by developing small forests and woodlots within their compound for multiple benefits. Under the 10-year program, the target is to plant a total of 460 acres with 300,000 commercial and wood fuel trees and 113,956 fruits trees in 919 new schools over that period.

The objective is to boost awareness and participation of school children in environmental conservation via sustainable management and harvesting of tree seedlings, provide schools

with renewable source of wood fuel thereby reducing pressure on surrounding forest resources, contribute to reduction of green house gases through carbon sequestration by growing woodlots, and with the aim of securing the catchment area around the hydro generation dams.

OUR 10 YEAR VISION

300,000
COMMERCIAL AND
WOOD FUEL TREES

113,956
FRUITS TREES

460
ACRES

919
SCHOOLS.

10
YEARS

Kshs 120
Million



WATER AND NATURE (CONTINUED)



Children drawn from various schools participated in the Green initiative Challenge (GIC) Phase II.





WATER AND NATURE (CONTINUED)

WHAT WE GET OUT

Schools and Students

- The trees are grown in schools and institutions of higher learning.
- The students are encouraged to tend the trees so that from an early age they appreciate the value of environmental awareness.
- Trees will provide shade for the children.
- Timber can be sold as an alternative income source for schools.
- Program can be used as part of learning especially in subjects that revolve around the environment and nature.

Company

- Reduction in carbon footprint.
- Opens up new avenues for partnerships with the community and county.
- Builds sustainable and mutually beneficial relationships with the community.
- Provides a platform for members of staff to engage with students and school leadership, participate in the tree planting and mentorship.
- Securing in the mid and long term the catchment area of hydro dams - a cheaper and renewable source of energy

Social Impact

- Creates a conducive environment for students and society that promotes better standard living.
- Improves community sensitization and awareness in matters relation to the environment.

Financial Impact

- Monetary value received upon sale of the mature trees
- Source of food (fruit trees)

Environmental Impact

- Climate amelioration.
- Soil erosion control.
- Aesthetic value.
- Carbon footprint reduction.





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