UP

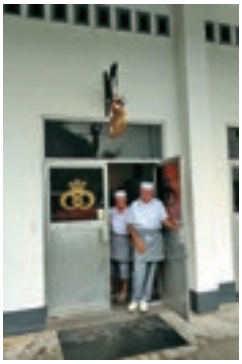
UNITED PLANTATIONS BERHAD

SUSTAINABILITY REPORT 2018

Productivity improvement - a harvesting team with motorised cutter.

Sustainability Report 2018

Contents



About This Report

(GRI 103-1, GRI 102-48, GRI 102-49, GRI 102-50, GRI 102-51, GRI 102-52)

United Plantations Sustainability Report 2018 covers the environmental, economic and social performance across all our operational and management activities within the UP Group, which include our plantations and mills in Malaysia - United Plantations Berhad (UPB) and Indonesia - PT Surya Sawit Sejati (PT SSS), our refinery – Unitata Berhad (Unitata) and our bulking installation – Butterworth Bulking Installation Sdn. Bhd. (BBI).

This report focuses primarily on activities carried out within the financial year ended 31 December 2018, with comparable prior year statistics where available and relevant.

In the previous 8 years, various aspects of our sustainability practices were presented in our Corporate Social Responsibility section of our Annual Reports, as the Group has always taken pride of its sustainable approach to all aspects of its operations.

This Sustainability Report will remain as part of our Annual Report.

The structure and content for this report draws upon guidance from Bursa Malaysia's Sustainability Reporting Framework which comprises amendments to the Listing Requirements, the Sustainability Reporting Guide and six supporting toolkits, and the GRI Sustainability Reporting Guidelines.

An internal Sustainability Committee at UP is responsible for officially coordinating with the various departments and subsidiaries in assessing and covering all key material sustainability matters within our Group.

In preparation of this report, we have engaged and considered the responses from both internal and external stakeholders and performed a thorough internal review and assessment of key sustainability aspects and impacts which represents the most critical areas of our Group's business and operations.

This exercise resulted in arriving at 22 material sustainability matters which are reflected in the materiality matrix included in this report.

As part of our sustainability processes and activities we will continue to strengthen our performance and disclosures to various stakeholders by monitoring our specific targets and key performance indicators, fostering close relationship with our stakeholders as well as harmonising material sustainability risks across the Group.

We hope to provide our stakeholders with an overview of our approach and continuous progress in meeting our sustainability commitments.

For additional information, please refer to our website: *www.unitedplantations.com*

External Assurance

(GRI 102-56)

GRI recommends the use of external assurance, but it is not a requirement to be in accordance with the Standards. We believe external assurance adds to the credibility and transparency of sustainability reporting.

In this connection, we are pleased to inform our stakeholders that KPMG has provided limited assurance over 10 selected Key Performance Indicators (KPI's) reported in our 2018 Sustainability Report thereby bringing additional value and credibility to our disclosure.

Their assurance report is available on pages 140 to 141.

Often seen in abundance on our plantations, these butterflies are indicators of a rich biodiversity, healthy environment and a healthy ecosystem.

Message From The CED
(GRI 102-14)

Dato' Carl Bek-Nielsen, Chief Executive Director, UP Bhd.

We are pleased to present our 2018 sustainability report to you in which we describe our Group's sustainability policies and actions in order to share our commitment on sustainability and to comment how we are pursuing this in practice.

Ultimately, it is our actions and behaviour that defines what type of company we are and for UP, I continue to see sustainability as one of the key pillars in our Group's Strategy which is of paramount importance to our long-term success.

For generations, UP has interweaved Economic viability, Environment Responsibility and Social Awareness into the way we conduct our business. This commitment was evidenced by the fact that the world's first RSPO certificate was awarded to UP in 2008.

We remain 100% committed to the RSPO principles and criteria and during 2017, we were the first plantations-based company in Asia Pacific and Africa to go beyond the current standard by being awarded the RSPO Next certification for some of our operating units.

These initiatives combined raises the bar for sustainable production even further by firmly upholding our Policies on No deforestation and No New Peat Development which were already introduced in 2010, as well as strengthening human rights and the wellbeing of the local community. We see this as a necessary commitment in order to assure the industry's future relevance and acceptance by consumers around the world.

Whilst the sustainability report is a relatively new concept, UP has over the years published updates on our sustainability journey as part of the CSR activities described in our Annual Reports.

We openly acknowledge that much more can be done and we intend to work harder at integrating and mainstreaming our sustainability efforts into our operations.

In this respect, I am pleased to report that the sustained efforts undertaken by our Company especially since 2005 were recognized by the Sustainable Business Awards in partnership with Global Initiatives who on the 29 January 2019 awarded United Plantations Bhd the winner under the category of "Climate Change". The conclusion by the National Advisory Panel which lead to this prize was:

Quote:
Through its focused efforts, United Plantations Bhd has managed to reduce its GHG emissions by 40% (with indirect land use change and nature conservation) per kg of refined oil produced from 2004 to 2017. They have also invested heavily in biogas plants which have helped to reduce their CO2 emissions.
: Unquote

On the same evening, United Plantations Bhd was also given a special recognition award under the category of "Land Use & Biodiversity".

Management discussing a full day field visit on UP's estates in Indonesia which remains a vital part of managing plantation.

Recognition is pleasing but it also raises the bar and compels Management to keep stimulating new progressive ideas, failing which, the positive momentum, created by so many individuals in our Group will slow down.

Bursa Malaysia's move to make sustainability reporting mandatory for listed companies in Malaysia clearly signals the importance for stakeholders to have a chance in evaluating companies based on their sustainability commitments. We strongly support this move.

During 2018, an expanded materiality assessment has been carried out in close collaboration with our stakeholders in which views and expectations on various topics have been discussed and documented thereby enabling us to identify and map the most relevant issues pertaining to our economic, environmental and social risks and opportunities.

This exercise has been very rewarding and is fundamental to achieving our business strategy and with that our well-being.

However, we must not forget, that our commitment to sustainability is an ongoing journey with no finishing line. We will therefore continue to align our business values, purposes and strategy with sustainability principles divided into four main areas, namely Employees, Environment, Community and Market place.

Employees

Our employees have been and will always be our core assets remaining a key pillar for the success and continued growth of our Group. In this connection, their welfare and rights as well as a safe and healthy workplace are of key importance in every aspect of our operations.

We remain focused on safety leadership and strategies targeting risk reduction as we value the lives and wellbeing of our employees and contractors. We are doing our best to improve awareness on safe practices and to enhance preventive skills among all our employees in order to minimise the risk of work place accidents. Whilst there were no fatal accidents in 2017, I regret to inform that one of our Company's tractor drivers met with a fatal accident in 2018 when he lost control of his tractor.

This was a most unfortunate event especially since so many have been engaged in taking mitigative measures to minimise the risks that may result in bodily injury or death. Nevertheless, the Company remains vigilant and will continue its regular in-house training programmes combined with impromptu safety audits in our mills, estates and refineries.

Progress was also made during 2018 to maintain the highest possible welfare standards for our workforce whilst simultaneously also focusing on improving on our environmental footprint. New investments in infrastructural amenities as well as improving on services to our employees will therefore also continue in 2019.

Environment

As the world faces the threat of global warming, we are all becoming increasingly aware that our presence on this earth leaves a mark on the environment. UP is committed to being a leader in environmental performance by not just focusing on good agricultural practices but also by committing itself to safeguarding the natural resources. Finding the right balance between Economy and Ecology is a cornerstone in our Group and much emphasis is therefore placed on reducing variables that impact our environment negatively.

Much scrutiny and criticism has been aimed at the palm oil industry, with accusations of habitat destruction and endangerment of protected species, indiscriminate burning and causing regional trans-boundary haze, as well as contributing towards social conflicts and climate change. Whilst palm oil production has contributed to certain aspects of the above and whilst there are rogue players who blatantly violate most environmental laws, it is important that the accusations are backed by holistic facts and presented objectively instead of being singled out as the lightning rod for the public's growing anger on issues concerning deforestation and climate change.

The palm oil industry is complex and far too often it is subject to being painted with one brush without recognizing the tremendous efforts undertaken by many different stakeholders, including producers, to promote the responsible production and consumption of sustainable palm oil.

Unjust and subjective accusations keep tarnishing the image of the industry without offering solutions or taking ownership of problems. This behaviour will get us nowhere apart from negatively impacting the livelihoods of millions of people whose sole objective is to uplift themselves out of poverty. We need to be more nuanced with our criticism but also highlighting good practices so others may emulate these.

Our Group therefore believes that producing palm oil sustainably is the only way forward wherefore it is important that all stakeholders support the RSPO, or other credible initiatives, in order to make sustainable palm oil the preferred choice. This above all else should be our common goal.

Reducing our Carbon Footprint

Our Group's commitment towards mitigating its "carbon footprint" and thereby its Greenhouse Gas (GHG) emissions remains a high priority to which new initiatives and investments continue to be made.

Following an updated and very comprehensive Life Cycle Analysis (LCA) report undertaken from January to February 2019 it was pleasing to note that UP from 2004-2018 has managed to reduce its GHG emissions per kg refined oil by 54% (including indirect land use change and nature conservation) compared to 46% in 2017 thus reaching a new record low GHG footprint per kg of refined palm oil produced.
Our target of reaching a 50% reduction (including indirect land use change and nature conservation) before the end of 2019 has therefore been reached and a new and revised goal of reaching a 60% reduction (including indirect land use change and nature conservation) by 2025 has been set by Management and will relentlessly be pursued through new innovations inspired by our strong collaboration in Scandinavia. (please refer to page 90)

During 2018, the Company completed and commissioned a strategic project it had been working on since April 2015. This involved designing a layout that encompassed the latest technologies available to create a perfect example of the circular economy within an oil palm plantation involving a 'state of the art' optimill, biogas plant and a uniquely innovative in-house refinery running without the use of fossil fuels.

The project covering 25Ha of land was inaugurated by His Majesty Sultan Nazrin Muizzuddin Shah Ibni Almahrum Sultan Azlan Muhibbuddin Shah Al-Maghfur-Lah, Deputy Yang Di-Pertuan Agong and Her Royal Highness Raja Permaisuri Perak Darul Ridzuan Tuanku Zara Salim on 17 January 2019 in the presence of the Mentri Besar Perak Darul Ridzuan, YAB Dato Seri Ahmad Faizal bin Dato Azumu, YB Teresa Kok, the Honourable Minister of Primary Industries, Malaysia as well as Excellencies from EU, Denmark, Netherlands, Sweden, Japan and the United Nations. It was a memorable day and I am extremely grateful to all those who made the effort to witness this milestone.

Conservation of jungle reserves and promoting biodiversity remains of key importance to the UP group. In this respect, it continues to be our view that conservation means development as much as it does conservation and that all growers should strive towards reaching this balance.

ZOO COPENHAGEN

Herein, I am delighted that our collaboration with Copenhagen Zoo which was initiated in 2007 and officially established in 2010, continues to flourish with many success stories arising from the hard work, research and studies undertaken to date.

The commitment and skills introduced by Copenhagen Zoo have been extremely fulfilling and has helped our Group operationalise not only the vital virtue sustainability but also helped to manage and nurture our more than 7,500 Ha jungle reserves in our Group.

Today, our Biodiversity team more than ever is responsible for mainstreaming environmental concerns into standard operating procedures. Nevertheless, more can be done and there are still areas in need of greater attention and where we in UP have to learn to see the light and not be blinded by the light -so to say.

The housing complex established in 2010, on Lada Estate in Central Kalimantan, Indonesia.

Employees children at the creche in Lada Estate, PT SSS Central Kalimantan.

The Unitata inland refinery.

Community

We recognise that we are part of a global community, and that we therefore have an obligation to bring about positive change to the lives for the families of our employees and our local communities. In that connection, we shall keep striving to play a positive role in and around the locations where we operate by first and foremost taking ownership of problems that arise.

Amongst others, we intend to do so by engaging and working closely with local communities in our efforts to uplift their living standards and to offer business and employment opportunities to interested parties wherever possible, thereby contributing to the wealth, resources and expertise to local economies and in particular, surrounding communities.

Through respect and engagement with local communities and community leaders in Indonesia we have seen positive developments in alleviating conflicts relating to land rights, which are handled in an amicable and transparent manner through proper grievance procedures and in line with the spirit of the RSPO which is described further in the report. Furthermore, continuous improvements were made during 2018 to maintain the highest possible welfare standards for our workforce and to ensure high standards of educational facilities provided for their children.

This naturally includes the continuous review and upgrading of our housing facilities provided to our employees, be this guest workers or local employees. Several new spacious houses were built in 2018 with more to come this year. We believe that in order for any business to develop fruitfully one must commit oneself to a long-term perspective and shun short-termism. Only by committing oneself to this and taking ownership can one conceptualize the true spirit of creating shared value (CSV) which is a fundamental step towards forming a sustainable and successful business.

Marketplace

UP recognises the importance placed by our customers and consumers on food safety, product quality and traceability of the supply chain. Full traceability demonstrates that we are in control of our operations and that our supply of palm oil is safe. This has opened up market opportunities amongst reputable brand manufacturers and retailers globally who view favourably the assurances of sustainable and traceable palm oil which we have been able to offer customers.

Since 2017, we have established a total overview of our supply chain and for our up-stream operations, we can identify the plantation from which fresh fruit bunches (FFB) are derived from and the palm oil mills from which the Crude Palm Oil and Palm Kernels are produced. This supply chain has been mapped out to ensure traceability and food safety and to focus on a structured approach should any grievances be raised by our stakeholders.

For our down-stream operations, we have also mapped our supply chain and whilst all our palm oil can be traced back to the plantations or the various palm oil mills, the main portion of the palm kernel oil which we use can only be traced back to the Palm Kernel crushing plants and palm oil mills. To trace all the palm kernel oil back to the plantations is still a challenge and is a process that needs to be pursued further in the coming years.

Whilst we acknowledge that we have come a long way in our sustainability journey, we are also aware that there are many challenges ahead which we will have to meet. The points I have touched on above serve only as highlight to this report, and will be further elaborated upon in the following pages (pages 29 to 141).

Finally, I thank you for your interest in our sustainability efforts and hope you will find our journey interesting. I would also like to thank our Board of Directors for their continuous support, guidance and interest in this report as well as all our stakeholders including NGOs for their active and valuable participation and inputs that have been of much value to our Group.

With the continuous commitment by our group including an active participation by all our stakeholders, I am confident that we will be able to face most challenges ahead of us as we keep moving forward with our sustainability commitments.

Dato' Carl Bek-Nielsen
Chief Executive Director (CED)

The UP Legacy And Values

Aage Westenholz, Chairman and Founder of UP Ltd (1906-1935)

Commander William Lennart Grut, Chairman of UP Ltd (1935-1949)

Tan Sri Dato'Seri B. Bek-Nielsen, Chairman (1978-1982) and Sr. Executive Director of UPB (1971-2003)

Tan Sri Haji Basir bin Ismail Chairman of UPB (1982-2002)

UP's commitment to sustainable agriculture originated with its founder, a Danish Engineer & Entrepreneur, Aage Westenholz who established UP in 1906.

Westenholz not only promoted a strong culture of innovation and an imaginative approach to business strategy but also of ethical conduct within plantation agriculture.

He was known for his philosophical ideals of co-operative working and profit sharing and promoted the following concept: "capital and labour ought to co-operate as two hands on the same body guided by one brain."

Westenholz was also known for setting the highest standards for the workforce, within the conditions of the day, and had as early as 1928 established a well-functioning hospital with good facilities and medical personnel to cater for the needs of the employees and their families as well as the communities surrounding the estates.

Another key figure during the foundation of UP was Westenholz's brother in-law, a navy officer, Commander William Lennart Grut.

The two stalwarts, Westenholz and Grut not only linked together in kinship, also shared common values of Vision, Compassion and Discipline and introduced the first jungle sanctuary (The Grut Sanctuary) as well as the concept of mulching to maintain soil fertility in the 1930's.

The focus on innovation and care for employees combined with ethical values laid down by our pioneers signifies the beginning of UP's early focus on Corporate Social Responsibility (CSR) which has become a part of the Company's DNA and emphasises the responsibility to manage our resources resourcefully and engage in activities that optimize returns for our shareholders and at the same time Creating Shared Value (CSV) for our employees and the society we operate in.

The central premises behind CSV are that the competitiveness of our Company and the health of the communities around us are mutually dependent, thus enabling UP to create economic value by also creating societal value.

Building Bridges Between Two Nations

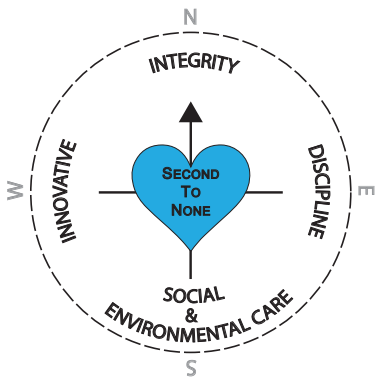
The late Tan Sri B. Bek-Nielsen who started his career with UP in 1951, continued the legacy of the early founders through hard work, discipline and being firm but fair throughout his career spanning more than 50 years. He was instrumental in expanding the Group through technical as well as agronomic innovation focusing on producing palm oil of superior quality.

In 1982 the late Tan Sri Haji Basir took over the chairmanship of UP and together with the late Tan Sri B. Bek-Nielsen ensured that a solid bridge between two Nations, Denmark and Malaysia, was galvanised further. Through this close collaboration the two stalwarts ensured that UP progressed into an internationally recognised Group.

Over the last 113 years since our foundation, UP has been focusing on maintaining social and environmental awareness and striving to the best of our abilities to create a balance between economy and ecology. This focus resulted in UP being awarded the world's first Roundtable on Sustainable Palm Oil certificate in 2008.

UP firmly believes "That no one person at the top is stronger than the pyramid of people who supports him or her". Emphasis on the attitude of continuous improvement combined with the values of Integrity, Discipline, being Innovative and focusing on Social and Environmental care are key aspects of UP's unique culture which is best described through our motto "Second to None".

Our Core Values



Our company's unique culture is best described through our motto "Second to None"

The United Plantation's Museum, a hidden gem of historical artifacts.

The UP Museum

In order to safeguard UP's rich heritage and as a tribute to the Company's founders and the different generations of employees and their families, suppliers, customers, surrounding communities and others associated to UP in one way or another, the Museum evolved. The UP Museum had its inception in 2006 in conjunction with UP Centennial celebrations and was officially opened by her Royal Highness Princess Benedikte of Denmark on the 15th September 2006.

The Museum is located modestly in the midst of Jendarata Estate on the grounds of the first Registered Office of the Company and is an institution that houses and cares for a collection of pictures and stories as well as artifacts and other objects of historical importance, and is truly a repository of the rich culture of UP encompassing various paraphernalia and memorabilia of the past.

Guests being shown the museum and told the history of UP Bhd.

Awards and Recognitions

2016	✓ Winner for the Best Corporate Social Responsibility Initiatives (CSR) category by the Edge Billion Ringgit Club (Below RM10 billion market cap).
2017	✓ Awarded 3rd placing out of 184 companies (Plantations)-Sectoral award based on two financial performance indicators by the Edge Billion Ringgit Club: - Highest Return on Equity over three years - Highest Return to Shareholders over three years ✓ RSPO NEXT Certification - (World's second RSPO NEXT Certification and the first for Asia Pacific and Africa) ✓ Awarded the ACCA MaSRA Commendation Award for Biodiversity.
2018	✓ Awarded Winner for the Best Sustainability Reporting by Europa Awards for Sustainability organized by EUMCCI 2018 ✓ MSPO Certification (for all UP's Malaysian operations) ✓ Awarded Winner for Climate Change and a Special Recognition Award on Land Use and Biodiversity by the Sustainable Business Awards Malaysia 2018 (SBAM) presented by Global Initiatives.

The Human Resource Environment Safety & Health Team of United Plantations comprising (from left) Mr. Lee Kian Wei, Mr. C. Mathews, Mr. Norhazizi Nayan, Mr. D. Jeevan Dharmapalan at the Europa Awards where UP won the Best Sustainability Reporting prize.

The Minister of Energy, Science, Technology, Environment and Climate Change, YB Puan Yeo Bee Yin handing over the award for Winner on Climate Change to UP's Chief Executive Director, Dato' Carl Bek-Nielsen.

Governance Structure
(GRI 102-18, GRI 102-19, GRI 102-20, GRI 102-22)

Effective governance and robust risk management policies and procedures combined with our core values are key for achieving long term success.

The Board of Directors of UP is responsible for approving the direction and overall strategy for UP Group and monitoring and management's progress in connection with the financial objectives and strategic priorities. The Board receives a formal Sustainability Report at least once a year before it is reviewed and approved for release to the shareholders and public.

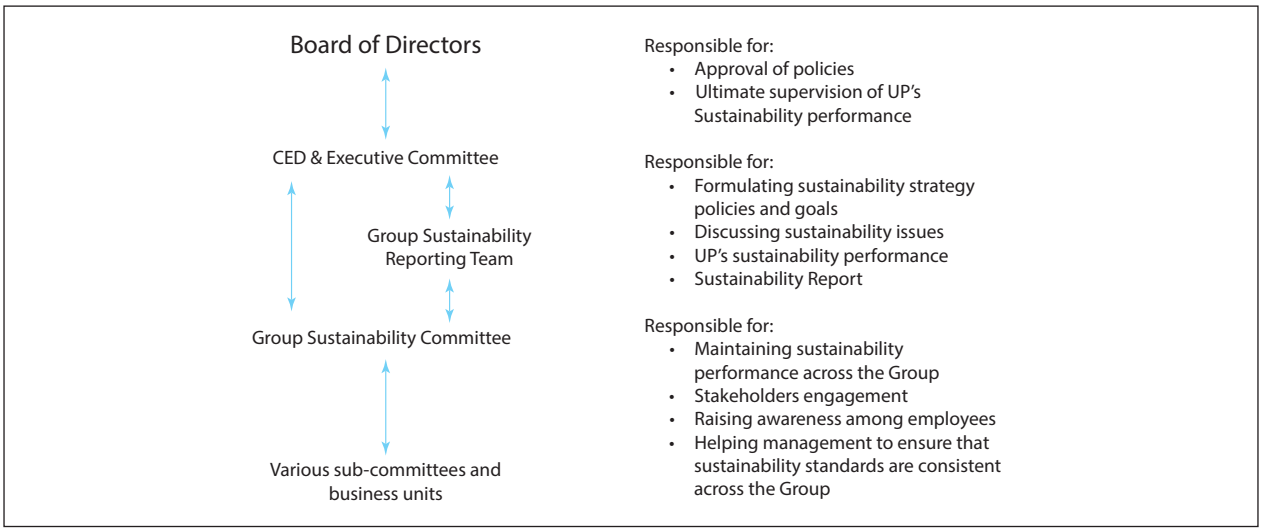
In relation to UP's overall sustainability objectives, targets and priorities, the Board of Directors has delegated responsibility to the Executive Committee (EXCOM) headed by the Chief Executive Director (CED), Dato' Carl Bek-Nielsen. The Executive Committee reviews and approves UP's sustainability objectives and monitors progress and sustainability developments within the Group.

The CED and EXCOM are assisted by the Group Sustainability Committee (GSC) which is chaired by the CED. There is also the Group Sustainability Reporting Team (GSRT) headed by Mr. Martin Bek-Nielsen, Executive Director, Finance & Marketing and includes key personal from Finance, Research, HR & Environment, Safety & Health, Share Registrar and Marketing.

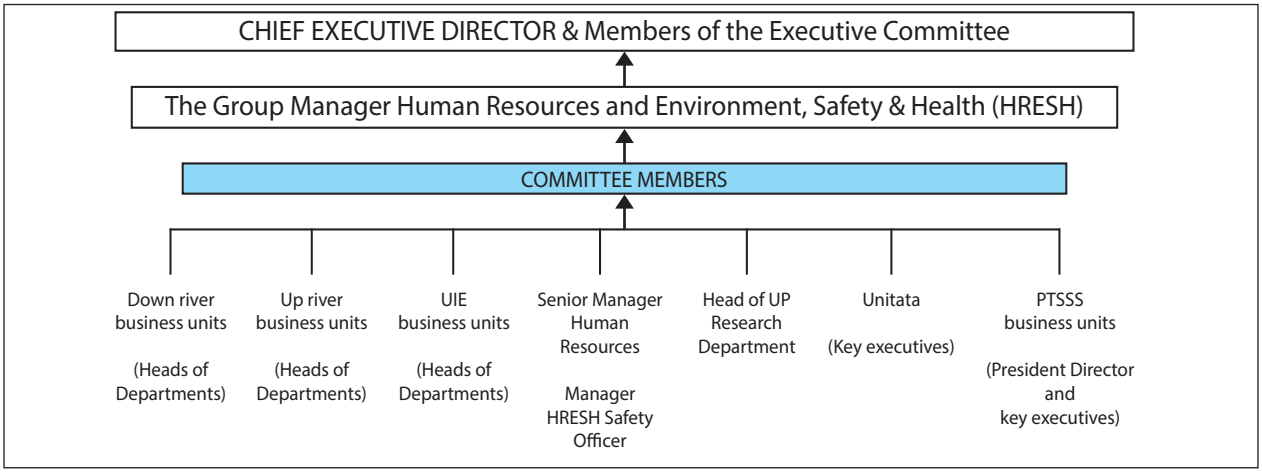
The GSRT collates all the information from GSC, stakeholders' responses and prepares the Sustainability Report. Sustainability matters have been a subject close to the heart of UPB. Officially established in 2003, the GSC (formerly known as Operations and Environment Management Committee) provides policy direction on strategic leadership on UP's Sustainability agenda, identifies our Group's most material issues in relation to risks and opportunities and monitors progress against targets set by the CED and EXCOM on a bi-annual basis.

Since the Sustainability Report became mandatory in 2016, Mr. Martin Bek-Nielsen has been briefing the Board, CED and EXCOM on the work of the GSRT and sustainability issues at every official meeting held. Sustainability is also a key aspect in the Group's Risk Management Structure which assesses various sustainability issues and developments in its annual Risk Assessment and Management process.

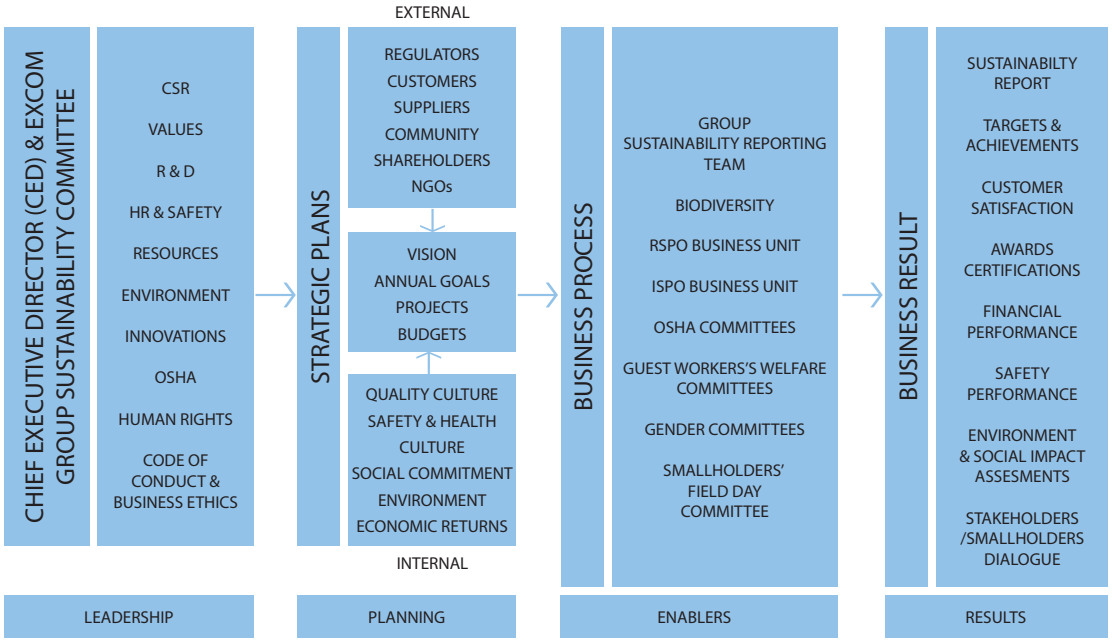
Sustainability Governance Management Structure



Group Sustainability Committee



Group Sustainability Systems Framework (GSSF)



UP's Group Sustainability Systems Framework (GSSF) is the system through which its commitment to environment and sustainable development including social and occupational safety & health matters are formalized. It is based on four key focus areas as follows:

Leadership of the Group Sustainability Committee is at the highest level of the company and is spearheaded by the Chief Executive Director Dato'Carl Bek-Nielsen. This committee provides policy directions on environment and sustainable development, occupational safety and health, allocation of resources and communications.

Planning encompassing external and internal needs that are formulated through the company's vision, policies, goals, projects and budgets.

Enablers are various sub-committees and teams that ensure the adoption of environment and operational practices that are in line with current best practices and policies.

The RSPO Business Units and the various sub-committees are enablers of the GSSF and ensure that the environmental and operational policies are implemented. They are guided amongst others by the RSPO's Principles and Criteria and following Manuals and SOP's :

1) RSPO Principles and Criteria
2) Field Management Manual
3) Standard Operating Procedures – Oil Palm Field Practices
4) Standard Operating Procedures – Palm Oil Mill operations
5) Occupational Safety and Health and HIRARC Manual
6) Environment & Social Impact Assessments and its Management & Monitoring Plans
7) High Conservation Value, High Carbon Stock Assessments and its Management & Monitoring Plans
8) ISO9001:2008, HACCP and Quality Manual for Unitata Refinery

Results are measured through customer satisfaction, safety performance, financial performance, environment protection and management and certifications.

The Group Internal Audit Department, together with the Group's Sustainability Division carries out audits on various sustainability issues and areas throughout the year to ensure compliance to the Group's sustainability policies and procedures.

Stakeholder Engagement
(GRI 102-15, GRI 102-21)

At United Plantations, we recognise that stakeholder engagement, assessment and feedback are an integral part of our global sustainability strategy and initiatives.

The stakeholder groups which are key to our operations and which have significant influence over the impacts of our business are carefully identified and are engaged at various platforms and intervals throughout the year.

The stakeholder engagement process which includes a proactive and both formal and informal approach, is carried out to fully understand their sustainability concerns and issues with a view to ensuring that their key interests in these areas are aligned with that of our Group.

We are continuously improving our stakeholder engagement approach which is now evolving into more tailored and targeted engagement sessions with our stakeholders and the following pages provide an overview of the efforts involved in our group's focus on stakeholder engagement.

The Director of Research, Mr. Ho Shui Hing providing an overview of UP's initiatives on integrated pest management to Ybhg. Datuk Shahril Ridza Ridzuan, former CEO of EPF and other officers of EPF. Today EPF owns 13.48%of UP's shares and has become the second largest shareholder in the Company.

Overview of Stakeholder Engagement

(GRI 102-40, GRI 102-42, GRI 102-43)

Stakeholders Group	Specific stakeholders addressed	Type of engagement	Frequency	Areas of interest	Outcomes	Addressed by specific Material Sustainability Matters*	Page reference
Shareholders & Investors	Shareholders both in Malaysia and in Denmark	• Engagement survey • Annual General Meetings, • Analysts briefings	• At least once a year • Once a year • Twice a year	Deforestation, pesticides & chemical usage, Occupational Safety & Health (OSH), free, prior & informed consent (FPIC) and product quality	Good relationship with shareholders and positive reputation amongst investors, constructive feedback	*3* *7* *10* *14* *17*	57 70 101 114 121
Customers/ Consumers	Major consumer goods manufacturers, Refineries, and end consumers	• Engagement survey • One-to-one meetings • Visits to Estates, Mills and our Refinery	• At least once a year • Periodic • Periodic	GHG emissions, discharges & waste management, deforestation, high carbon stock, peat development, human & workers' rights, social welfare, OSH, product quality, food safety & sustainability certifications and supply chain	Better awareness of UP Group's commitment to sustainability, and better understanding of our policies, culture and values	*2* *3* *4* *8* *9* *10* *17* *18* *19*	55 57 60 82 88 101 121 122 125
Employees	Executives, staffs and workers	• Annual employee survey, • Group Sustainability Committee meeting • Gender committee meetings, • Guest Workers Welfare Committee • Occupational Safety & Health Committee • Internal trainings	• Once a year • Once a year • Four times a year • Six times a year • Four times a year • Periodic	Human & workers' rights, social welfare, OSH, equal treatment, grievance resolution, product quality, food safety & sustainability certifications	Improved understanding of company policies and efforts taken to date, Inclusiveness in the management decision making	*8* *9* *10* *11* *15* *17* *18*	82 88 101 103 117 121 122
Small holders & Local communities	Small holders surrounding and near our operations in Malaysia and Indonesia	• Annual Small holders' Field Day and Town-Hall style meetings, • One-to-one communications	• At least once a year • Periodic	Biodiversity & conservation, pesticides & chemical usage, workers' rights, OSH, product quality and food safety & sustainability certifications	An opportunity to sustainably enhance the agricultural practices of smallholders, amicable solution to grievances, better social relations with UP Group.	*1* *7* *8* *10* *17* *18*	55 70 82 101 121 122
Government Agencies	DOSH, Labour Department, Indonesian local government, Indian High Commission	• Engagement Survey • One-to-one meetings	• Periodic • As and when necessary	pesticides & chemical usage, human & workers' rights, social welfare, OSH, equal treatment, code of ethics & governance, product quality, supply chain and evaluation of supplier/ contractors' sustainability commitment	An opportunity to share the Group's commitment, and policies and procedures to sustainable operations	*7* *8* *9* *10* *11* *12* *17* *19* *20*	70 82 88 101 103 104 121 125 127
Non-governmental organisations	SUHAKAM, TENAGANITA, AMESU, MAPA	• One-on-one meetings • Engagement surveys • Direct correspondences via email and telephone conversations	• As and when necessary • Once a year • As and when necessary	Biodiversity & conservation, water impacts, pesticides & chemical usage, workers' rights, social welfare, code of ethics & governance, grievance resolution and product quality	Better understanding of NGO's concerns and raised awareness of UP Group's sustainability commitments by NGOs	*1* *6* *7* *8* *9* *12* *15* *17*	55 67 70 82 88 104 117 121
Palm Oil Industry Group	Neighbouring plantations and, MPOA, MPOC, MPOCC	• Engagement surveys	• Once a year	GHG emissions, fire & haze, discharges & waste management, pesticides & chemical usage, human & workers' rights, OSH, product quality, food safety & sustainability certifications and commodity prices	Good relationship with industry group and maintain knowledge sharing to enhance the sustainability of industry	*2* *5* *7* *8* *9* *10* *17* *18* *21*	55 66 70 82 88 101 121 122 128
Suppliers and Contractors	Suppliers of various inputs and key contractors within the Group	• Engagement survey • One-to-one meetings	• Once a year • Periodic	Biodiversity & conservation, GHG emissions, discharges & waste management, deforestation, high carbon stock, peat development, workers rights, social welfare, OSH and product quality	Raised awareness of UP Group's sustainability commitments, better understanding of UP Group's business	*1* *2* *3* *4* *8* *9* *17*	55 55 57 60 82 88 121

** Please refer to Summary of Materiality Matters (22 Key Sustainability Issues) on page 42.*

Materiality
(GRI 102-15, GRI 102-46, GRI 102-47, GRI 103-1, GRI 103-2, GRI 103-3)

This report addresses key sustainability matters which have been identified after taking into consideration both the Group's view on significant environmental, economic and social aspects, impacts, risks and opportunities which are vital to the success and continued growth of the Group, and the views and responses from our stakeholders on pressing material issues.

In identifying the material sustainability matters, and opportunities, we have drawn information from various internal and external sources of information which include the views of the Group Sustainability Reporting Team within our organisation, stakeholders, industry groups, standards recommended by global and industry specific reporting bodies, such as the Roundtable for Sustainable Palm Oil (RSPO) and the Global Reporting Initiative (GRI) and existing peer literature.

As a result of the above mentioned exercise and evaluation of the Group's Sustainability Risks and Opportunities, we have this year identified 22 key sustainability issues under four main headers, namely Environment, Employees, Community and Marketplace, which we have assessed as being of high concern to stakeholders and of high significance for our Group in 2018.

Data collected from various stakeholders are then analysed and used to create a materiality matrix which also includes the assessment on the significance of the identified key sustainability matters and the prioritisation of stakeholders to the organisation. The resulting Materiality Matrix is as shown on the following page.

Material issues which have been identified are then assessed by the Sustainability Reporting Team to establish if there are policies and procedures in place to address and manage these issues, and if none, to ensure implementation plans are drawn up and presented to the management for follow up as part of the Group's sustainability commitment.

Quantifiable indicator data and targets are assigned where relevant and are communicated to our stakeholders via this Sustainability Report. The materiality assessment has been reviewed and endorsed by Executive Committee (EXCOM) of UP.

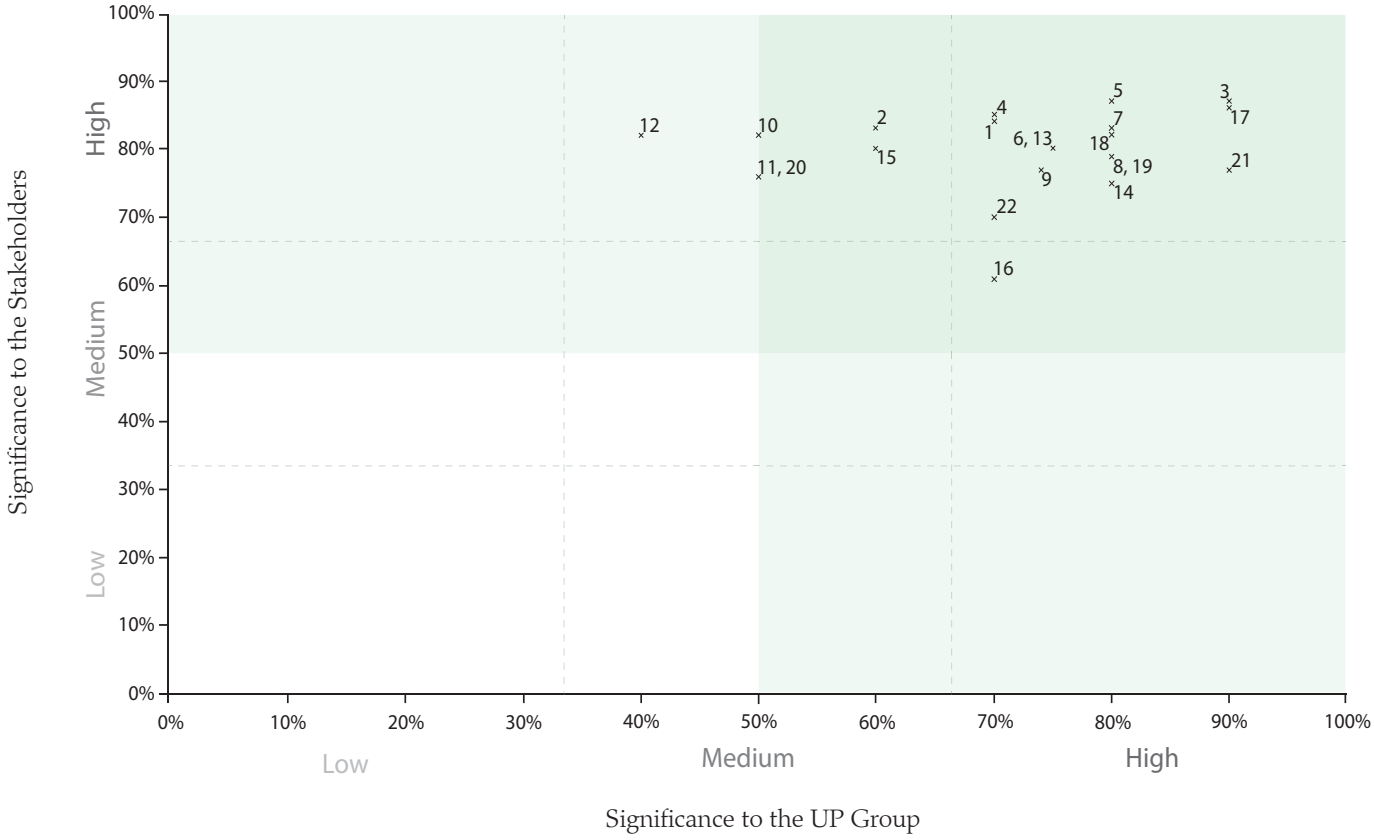
UP's light railway network stretching over 500km remains of vital importance in terms of facilitating an efficient and fragile transportation of its fresh fruit bunches from the fields to the mills.

Summary of Materiality Matters

22 Key Sustainability Issues	Relevant UN SDGs *	Stakeholder Groups
1. Code of Ethics and Governance	8, 16	- Shareholders - Employees - Customers/Consumers - Local Communities /Smallholders - Government Agencies / Regulators - Non-Governmental Organisations (NGO) - Palm Oil Industry Group - Suppliers/Contractors
2. Equal Treatment	5	
3. Human and Workers' Rights	1, 8	
4. Social Care and Workers' Welfare	2, 4, 8	
5. Occupational Safety & Health	3, 9	
6. Fighting the Haze and Preventing Fires	13	
7. Biodiversity and Conservation	14, 15, 16, 17	
8. Deforestation/High Carbon Stock	13	
9. GHG Emissions, Discharges and Waste Management	7, 9, 13, 16, 17	
10. Water Impacts	6, 9	
11. Peat Development	13	
12. Pesticides and Chemical Usage	12	
13. Community Welfare	3, 4, 8	
14. Free, Prior and Informed Consent	16	
15. Grievance Resolution	16	
16. Plasma Development (for Indonesia)	2, 12	
17. Product Quality	12	
18. Certifications for Food Safety, Sustainability and Others	12	
19. Sustainability and Traceable Supply Chains	12	
20. Evaluation of Suppliers/Contractors' Sustainability Commitment	12	
21. Commodity Prices	-	
22. Currency Fluctuation	-	

** Please refer to page 44 on United Nations Sustainable Development Goals (UN SDGs).*

Materiality Matrix



United Nations Sustainable Development Goals (UN SDGs)

Introduction

The Sustainable Development Goals (SDGs) were born at the United Nations Conference on Sustainable Development in Rio de Janeiro in 2012. The objective was to produce a set of universal goals meeting the urgent environmental, political and economic challenges facing our world. The SDGs replace the Millennium Development Goals (MDGs), which started a global effort in 2000 to tackle the indignity of poverty. The MDGs established measurable, universally-agreed objectives for tackling extreme poverty and hunger, preventing deadly diseases, and expanding primary education to all children, among other development priorities.

For 15 years, the MDGs drove progress in several important areas: reducing income poverty, providing much needed access to water and sanitation, driving down child mortality and drastically improving maternal health. They also kick-started a global movement for free primary education, inspiring countries to invest in their future generations. Most significantly, the MDGs made huge strides in combatting HIV/AIDS and other treatable diseases such as malaria and tuberculosis.

The SDGs came into effect in January 2016, and they will continue to guide United Nations Development Programme (UNDP) policy and funding until 2030. As the lead UN development agency, UNDP is uniquely placed to help implement the Goals through our work in some 170 countries and territories. UNDP believes that sustained, inclusive and sustainable growth is essential for achieving the 2030 Agenda. Growth can be inclusive and can eliminate poverty but only if all segments of society, including the marginalized, share the benefits of development and participate in decision-making. In this respect it is important to stress that the key objective of the UN and with that the SDGs is that no one is left behind when pursuing the SDGs.

The SDGs are unique as the goals and targets cover all of the key issues affecting us. They reaffirm our international commitment to end poverty, permanently, everywhere. They are ambitious in making sure no one is left behind. More importantly, they involve us all to build a more sustainable, safer, more prosperous planet for all of humanity.

UP and UN SDGs

As a company with global operations, UP respects and recognises the importance of its role in this global initiative. As such, the Group has mapped the relevant SDGs with each materiality topic and identified eight (8) UN SDGs with their specific targets that are most relevant to its business operations as well as key concerned materiality topic highlighted by the stakeholders.

SDGs	Specified Targets	Status	Action Plan
SDG 1 – No Poverty	1.1 – By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day	Ongoing	All employees of UP in Malaysia receive at least the minimum wage set by the Malaysian Government (Minimum Wages Order 2018), RM1,100/- per month with effective from 1st January 2019. The average earnings in United Plantations was 50 % higher from the minimum wage in 2018.
			Accommodation is provided free of charge to all workers with potable water supply and electricity at a subsidized rate.
			UP provides annual benevolent payments as well as other compassionate and educational payments/scholarships to the workers via the UP Benevolent Fund. The Benevolent Retirement Scheme was established in 1985 to provide retirement benefits to workers who have loyally served the Group for 10 years and above.
			UP helps smallholders to develop their land, including land preparation, for cultivation of oil palms under the Plasma Scheme. The scheme is expected to provide more opportunities for the smallholders and help alleviate poverty. To date a total of 1316.36 Ha of Plasma Schemes have been developed.
SDG 2 – No Hunger	2.1 – By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.	Ongoing	The Company facilitates the purchase of rice and sugar at wholesale price for its employees. Cooking oil is supplied to the general employees at a subsidized rate.
			The orchards with local fruits trees are established in estates for employees and residents' consumption. The Company also plants coconut palms and fruit trees around the workers quarters for their access and use. Residents are encouraged to plant vegetables in their backyard.
			UP established the Old Folks Home in 1967. The Home caters for the retired and aged employees who are given free boarding, food and medical care with a full-time caregiver.
SDG 3 - Good Health	3.8 – Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all.	Ongoing	There are two (2) Group Hospitals and seven (7) clinics in UP Group with full-time certified Hospital Assistants (HA) and ambulance services. In addition, there are regular visits by the Visiting Medical Officers (VMO) cum Occupational Health Doctor (OHD).
			Medicines and treatments are provided free of charge to all employees and their dependents as well as the neighbouring communities.
	3.9 – By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.	Ongoing	In line with our Company OSH Policy, we are committed to secure the safety and health of our employees at work. Nevertheless, we strive to maintain a safe and healthy working environment for our employees, customers and the public.
			Appropriate Personal Protective Equipment (PPE) are provided free of charge to the employees.
			Training on Safe Operating Procedures (SOP) and Hazards Identification, Risk Assessment and Risk Control (HIRARC) are conducted on a regular basis.
			Regular safety audits are conducted by the Company's Resident Safety Officer to identify any risks, safety non-conformances which are subsequently addressed by the management units.
			Potable water supply is provided to all employees and their dependents on the estates. Domestic water sample analysis conducted by accredited laboratory on a regular basis.
			The implementation of chemical measurement and transfer method by using new Anabranch Liquid Handling System significantly reducing the exposure of chemicals to the chemical mixing operators as well as reducing the soil and waterways contamination during pouring and transferring of chemicals.
SDG 7 – Renewable Energy	7.2 – Increase substantially the share of renewable energy in the global energy mix.	Ongoing	All mills in UP Group are equipped with Biogas plants which capture the methane gas produced when palm oil effluents are biodegraded by an array of bacteria thereby producing green energy. This considerably mitigates the Greenhouse Gas (GHG) emissions reducing the impact on climate change. Furthermore, the Electrification Project in one of our mills enables the conversion of biogas to electricity that is exported back to the national grid thereby displacing the need to burn coal.
			The state-of the-art new refinery, Unifuji utilises renewable energy derived from Biomass generated from the newly established neighbouring Optimill which creates a "circular economy" and best practice within the industry. This complex now operates without the use of fossil fuels significantly reducing the GHG footprint of the Groups operations.

SDGs	Specified Targets	Status	Action Plan
SDG 8 – Good job and economic growth	8.2 – Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.	Ongoing	The opening of new Optimill factory complex and Unifuji not only produces value added palm fractions but also provides employment opportunities for 150 people.
			The average earning of workers is 50% higher than the minimum wages based on their productivity.
	8.8 – Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, and those in precarious employment.	Ongoing	UP Group is committed to the protection and advancement of human rights wherever we operate. Our human rights policy is based on our core values on Safety and Health, Environmental Stewardship and Respect for people.
SDG 9 – Innovation and Infrastructure	9.4 – By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.	Ongoing	UP encompasses and amalgamates the most modern equipment and technologies available in the industry embracing the concept of the circular economy. This can be demonstrated through the Company's investment in the new Optimill and a new joint venture refinery called Unifuji.
			The VORSEP Dust Collector System has been installed in all of our mills where the dust emissions have been successfully reduced to the level far below permissible level by Department of Environment (DOE).
SDG 13 – Climate Action	13.2 – Integrate climate change measures into national policies, strategies and planning.	Ongoing	By creating a greater environmental awareness and by mapping out areas that contribute negatively towards greenhouse gas emissions the UP Group has through been able to make specific and target orientated green investments that has contributed towards reducing its GHG emissions by 46% (without iLUC), 40% (with iLUC) and 54% (with iLUC and nature conservation) per kg of refined oil produced from 2004.
			Nature tree reserves parks including the Group's 7,500Ha of jungle conservation area that has been permanently set aside. UP has effectively cancelled out the negative impact of iLUC on our GHG emissions.
			Throughout the years, additional railway tracks were laid to facilitate crop transportation bringing the total network length to about 540km. The in-house fabricated 90hp diesel locomotives can efficiently transport up to 180 MT of crop in a single trip, compared to an average 6 tonne payload capacity when using trucks or tractor-trailers. This superior efficiency offers substantial fossil fuel savings and mitigation of GHG emissions.
			Most of the oil palm residues including chipped trunks, fronds, EFB, fibre and shells are effectively utilised and recycled as organic matter back to the fields, in the form of organic mulch in the nursery thereby enriching our soils or as a fuel source displacing the use of fossil fuels whilst adding value to the biomass generated. To further enhance our biomass utilisation, 8 new Biomass Reciprocating Boilers have been built since 2005.
SDG 17 – Partnership for the Goals	17.16 – Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnership that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries.	Ongoing	UP and Fuji Oil agreed to establish a Joint Venture (JV) based on a common goal of a long-term partnership in which unique technologies, sustainable practices and first-class palm oil quality are combined. This JV has materialised into a super modern and efficient setup including a solvent fractionation plant.
			UP collaborates with Copenhagen Zoo in conducting research on leopard cats, King Cobra, the cultivation and planting of endangered tree species, restoration and rehabilitation initiatives as well as biodiversity conservation. This collaboration was initiated in 2007 and officially established on 1 October 2010, through a Memorandum of Understanding (MOU).

Targets and Achievements
(GRI 102-15)

Our targets and achievements drive us to continuously improve. In this report, we provide information about our progress of targets and achievements. They include targets in the areas of Certifications, Biodiversity, Climate Change, Community, Employees, Legal Compliance and Economics and others. The targets and the achievements to date provide an overview of our goals over a period of 3 years up to 2019.

Objectives	Targets Achieved To date	Target 2018	Status of Target in 2018	Target for 2019	Target for 2020	Addressed by Specific Material Sustainability Matter	Reference page	Relevant UN SDGs
Target 1 : Employees								
No child labour (under the age of 18 years, or as per local regulations)			No breaches in compliance reported or observed in external and internal audits			Human & Workers' Rights	57	8
No forced of trafficked labour in our operations			No breaches in compliance reported or observed in external and internal audits			Human & Workers' Rights	57	8
No retention of Guest workers' passports		Since its construction and evaluation, the Company has decided to replicate the construction of passport lockers in other estates in stages	In 2018, new passport lockers constructed in Ulu Bernam Estate	To replicate the construction of passport lockers in UIE and Ulu Basir Complex		Human & Workers' Rights	57	8
Phasing out of Paraquat	No Paraquat usage policy 2010		Achieved in 2010					3
No work-related fatalities		Zero fatality	One work-related fatality reported	Zero fatality	Zero fatality	Occupational Safety & Health	66	3
Reduce Lost Time Injury Frequency Rate (LTIFR) below 2014 levels. (12.27)		Introduce a behavioural safety approach	Continuous Improvement (LTIFR 6.56)			Occupational Safety & Health	66	3
To live up to the UN Guiding Principles on Business And Human Rights	Human Rights Policy 2013 Guest Workers Policy 2014	To establish United Plantations Information Centre (UPIC) in Bangladesh	In view of change in Government Policy on recruitment of Bangladeshis the establishment of UPIC is on hold.	Establish call centres in source countries for disseminating information to potential candidates		Human & Workers' Right	57	3
Target 2 : Environment (Biodiversity)								
Monitoring and management of HCV, SEIA and conservation areas.	2008		Ongoing monitoring and maintenance of the flora and fauna			Biodiversity & Conservation	70	15
Established the Kingham-Cooper Tree Species Reserve at UIE Estate.	2008		Ongoing monitoring and maintenance of the flora and fauna			Biodiversity & Conservation	70	15
UP and Copenhagen Zoo established a partnership with UP including establishing a Biodiversity Department	2010		Ongoing partnership			Biodiversity & Conservation	70	15, 17
Research on raising predators in the Insectary	2012		Ongoing research			Biodiversity & Conservation	70	15
No new oil palm development without RSPO NPP –protocols.	2014		We will comply with RSPO NPP for all future new oil palm plantings			Biodiversity & Conservation	70	13
Research on Rat control by Leopard cats in collaboration with Copenhagen Zoo	2014		Ongoing research			Biodiversity & Conservation	70	15, 17
Monitoring and management of HCS	2014		Ongoing monitoring and maintenance of the flora and fauna			Biodiversity & Conservation	70	13

Objectives	Targets Achieved To date	Target 2018	Status of Target in 2018	Target for 2019	Target for 2020	Addressed by Specific Material Sustainability Matter	Reference page	Relevant UN SDGs
Target 3 : Environment (Climate Change)								
Installation of Biomass Reciprocating Boilers	Jendarata Palm Oil Mill (2006), Ulu Basir Palm Oil Mill (2014), Ulu Bernam (Optimill) and Jendarata Palm Oil Mills (2017)	UIE Palm Oil Mill	Completed			GHG Emissions, Discharge & Waste Management	88	9, 12
No new development of peatland.	2010		Ongoing			GHG Emissions, Discharge & Waste Management	88	13
Install methane capture in all palm oil mills	2013 (Achieved in 2017)					GHG Emissions, Discharge & Waste Management	88	9, 12
Measuring GHG emissions for all palm oil operations (33%) reduction since 2004 (achieved in 2015) (iLUC including conservation)	2015	1.18 kg CO_2 -eq/kg NBD Oil	Achieved UP Carbon Footprint per MT of NBD oil reduced by 54% compared to 2004 levels with iLUC and nature conservation.	1.18 kg CO_2 -eq/kg NBD Oil	1.18kg CO_2 -eq/ kg NBD Oil	GHG Emissions, Discharge & Waste Management	88	7, 12
To measure the total GHG emissions per year for the UP Group			Ongoing			GHG Emissions, Discharge & Waste Management	88	7, 12
Conversion of conventional lightings to T5 lights with the potential savings in power consumption by 78 %	2015		Ongoing			GHG Emissions, Discharge & Waste Management	88	7, 12
To supply electricity to the National Grid derived from the biogas plant at UIE Palm Oil Mill	Export to national grid Achieved in 2016 (Nil flaring)		Ongoing			GHG Emissions, Discharge & Waste Management	88	7, 12
Monitoring and control of fire across our estates and neighboring areas with adequate firefighting capacity.	Two fire engines and other related equipment for PT SSS purchased.		Monitoring and control ongoing			GHG Emissions, Discharge & Waste Management	88	13
Monitoring of fire hot spots		Monitoring of fire hot spots from Global Fire Watch under the WRI Global Forest Watch Tool as monitoring aids.	Ongoing			GHG Emissions, Discharge & Waste Management	88	13
Installation of VORSEP System at Palm Oil Mills to reduce dust emission	Ulu Basir installed in 2015, Ulu Bernam (Optimill) and Jendarata Palm Oil Mills installed in 2017	UIE Palm Oil Mill	Completed			GHG Emissions, Discharge & Waste Management	88	9, 12
Water Footprint-reduction by 5% compared to 2015 level of 80 gallons per capita by 2018		60 gallons / capita/ day	Malaysian Operation: 69 gallons/ capita/ day Indonesian Operation: 76 gallons/capita/day	60 gallons / capita/ day	60 gallons / capita/day	GHG Emissions, Discharge & Waste Management	88	6

Objectives	Targets Achieved To date	Target 2018	Status of Target in 2018	Target for 2019	Target for 2020	Addressed by Specific Material Sustainability Matter	Reference page	Relevant UN SDGs
Target 4 : Community								
PLASMA-schemed smallholders to establish in PTSSS (20% of Company's planted area in Indonesia i.e. 1770 Ha)		1770Ha.	1316Ha	454Ha		PLASMA Development	119	1, 12
All community based land conflicts to be addressed in a structured and transparent manner		To address land conflicts according to our established land dispute settlement procedure and to reduce number of cases	Ongoing			Free Prior Informed Consent & Grievance Resolution	114	3
Target 5 : Legal Compliance								
Hak Guna Usaha (HGU) permits for UP's land concession (18,663Ha) under PT SSS in Indonesia as per the President of the Republic of Indonesia decree 104, 2015 dated 28 Dec. 2015.	2,508.47Ha in Lada Estate obtained in 2005Ha in Lada Estate obtained in 2005Ha in Lada Estate obtained in 2005	To fully achieve objective	HGU for 6,004.15Ha obtained (Lada & Runtu Estate)	To fully achieve objective	To fully achieve objective	Code of Ethic & Governance	55	16
Target 6 : Economics								
Malaysia FFB Yield Per Hectare Oil Extraction Rate CPO Yield Per Hectare		25.11 21.98 5.52	26.67 21.47 5.73	26.33 21.90 5.47		Product Quality	121	12
Indonesia FFB Yield Per Hectare Oil Extraction Rate CPO Yield Per Hectare		23.68 25.50 6.04	24.69 22.94 5.66	25.34 24.55 6.22		Product Quality	121	12
Target 7 : Certifications								
Migros Sustainability Criteria Audit conducted by ProForest	2003					Certification for Food Safety, Sustainability and Others	51	12
World's first RSPO Certification for all 6 oil mills in Peninsular Malaysia *4 oil mills currently in operations - RSPO Re-certification (2013 & 2017)	2008	ASA 1 for 4 oil mills in Peninsular Malaysia	Achieved	ASA 2 for 4 oil mills in Peninsular Malaysia		Certification for Food Safety, Sustainability and Others	51	12
RSPO P&C –PTSSS (Lada POM & supply bases)		RSPO Certification for the balance of Lada POM & supply bases (HGU achieved areas)	Achieved	RSPO Certification for the balance of Lada Palm Oil Mill's supply bases (HGU achieved areas)	RSPO Certification for the balance of Lada Palm Oil Mill's supply bases (HGU achieved areas)	Certification for Food Safety, Sustainability and Others	51	12
ISPO P&C PTSSS (Lada POM & supply bases)		ISPO Certification for the balance of Lada POM & supply bases (HGU achieved areas)	ISPO scope extension audit for new HGU acquired areas was carried out 6th-10th August 2018 and awaiting issuance of certificate.	ISPO Certification for the balance of Lada Palm Oil Mill's supply bases (HGU achieved areas)	ISPO Certification for the balance of Lada Palm Oil Mill's supply bases (HGU achieved areas)	Certification for Food Safety, Sustainability and Others	51	12
World's second RSPO NEXT Certification and the first for Asia Pacific and Africa	2017	RSPO NEXT ASA 1	Achieved in September 2018	Ceased (Please refer to UP and Sustainability Certifications Section page 51)		Certification for Food Safety, Sustainability and Others	51	12

** UP has got 4 palm oil mills in Malaysia today as 2 of the mills have been decommissioned due to consolidation.*

Objectives	Targets Achieved To date	Target 2018	Status of Target in 2018	Target for 2019	Target for 2020	Addressed by Specific Material Sustainability Matter	Reference page	Relevant UN SDGs
Target 7 : Certifications								
MSPO Certification for all Palm Oil Mills and Estates in UP Malaysia		To seek certification for the 4 Palm Oil Mills in UP Malaysia	Achieved in September 2018	ASA 1 for all Palm Oil Mills and Estates in UP Malaysia	ASA 2 for all Palm Oil Mills and Estates in UP Malaysia New acquired plantations (Pinehill) to be MSPO Certified.	Certification for Food Safety, Sustainability and Others	51	12
External Assurance on Sustainability Report	First external assurance was conducted in 2017	To seek third party limited assurance on our sustainability report 2018	Achieved	To seek third party limited assurance on our sustainability report 2019	To seek third party limited assurance on our sustainability report 2020	Certification for Food Safety, Sustainability and Others	140	12
Unitata • ISO 9001 (1995) • HACCP (2003) • Halal (2004) • KOSHER (2005) • BRC (2008) • RSPO SCCS (2010) • GMP (2014) • MESTI (2014) • FDA (2008) • GMP +B2 (2017) • MPCA (2014 - Bi-annual certification)		Annual certification	Achieved	Annual certification	Annual certification	Certification for Food Safety, Sustainability and Others	122	12

UP and Sustainability Certifications
(GRI 102-9, GRI 102-12, GRI 102-13)

The Migros Criteria, ProForest and UP´s involvement in the RSPO

Whilst UP has focused on responsible agricultural production for generations, our formal journey towards being recognized as a certified producer of sustainable palm oil commenced in September 2003 when we were audited by ProForest and became the world's first audited producer and processor of sustainably produced palm oil in accordance to the Swiss supermarket chain, Migros' principles and criteria on sustainable palm oil.

UP's role regarding the RSPO remains one of being active and in this connection, we are pleased to state that our Company was one of the initial palm plantation signatories to the RSPO in 2004. Shortly after the establishment of the RSPO, UP was a part of the initial stakeholders group involved in developing the principles and criteria to define sustainable palm oil.

Global RSPO Members and Governance

The RSPO has more than 4080 members worldwide (from 92 countries) who represent all stakeholders along the palm oil supply chain. The primary objective of the RSPO is to promote a credible standard on sustainable palm oil production and the subsequent use of sustainable palm oil. All Members have committed to produce, source and /or use sustainable palm oil certified by the RSPO, in order to transform markets thereby making sustainable palm oil the preferred choice.

UP´s involvement in the RSPO today

Today our CED, Dato' Carl Bek-Nielsen is the Co-Chairman of the RSPO Board of Governors representing the Malaysian Palm Oil Association's seat. He was elected to this position in November 2014 and has thereby actively participated in and helped to oversee important developments and decisions within the RSPO.

UP and the World's First RSPO Certificate in 2008

UP's entire oil palm plantations in Malaysia were successfully certified in accordance with the RSPO Principles and Criteria on the 26th August 2008 thus becoming the world's first producer of certified sustainable palm oil. It subsequently conducted its second cycle recertification in 2013 and a third cycle recertification in 2017.

For its Indonesian operations, UP had moved towards the RSPO Initial Main Assessment for part of our HGU area in December 2017 and successfully obtained the certificate in November 2018. We anticipate to carry out the RSPO Surveillance Audit 1 concurrently with Scope Extension Audit for the newly acquired HGU area of 6004.15Ha in 3rd quarter of 2019. The Time Bound Plan for all the areas being certified will be in tandem with the hectarage issued with HGU certificates by the Government of Indonesia. This is expected by 2020.

For our Plasma scheme smallholders, full certification is expected by 2021 subject to issuance of individual land certificates by the local government

UP's RSPO certified sustainable production volumes

Our capability of supplying sustainably certified, traceable and high-quality palm oil and palm kernel oil is an important part of our commitment to our customers. Our total RSPO certified and traceable quantity available based on our own production was approximately 168,680MT of palm oil and 36,790MT of palm kernels in 2018.

Supply outpacing RSPO certified demand

Whilst it is commendable that approximately 19% of the World production of palm oil is now certified by the RSPO it is unfortunately still a fact that the global uptake of RSPO certified palm oil was only 47% of the supply amounting to 13,287,566MT of CPO in 2018, thereby outpacing demand. This is a dreadful message to the growers and clearly shows that there are many Western consumer good manufacturers (CGMs) and retailers who whilst being members of the RSPO have failed to take ownership of the sustainability commitments manifested within the RSPO.

The RSPO certified oil not purchased will end up in the supply chain without being sold as certified sustainable palm oil- but just conventional palm oil sending a negative message to growers worldwide.

UP and RSPO NEXT Certificate in 2017

In 2017, United Plantations became the first Company in Asia Pacific to become RSPO NEXT certified by taking on the challenge and voluntarily pursuing to obtain the RSPO NEXT Certification for two (2) of our business units and was successful in becoming the first Company in Asia Pacific to become RSPO NEXT certified. Nevertheless, upon successfully obtaining the RSPO NEXT Certificate, it became clear that the early commitments made to uptake palm oil with this higher sustainability standard within the RSPO disappeared with western CGMs and other clients showing no interest. The RSPO NEXT has been carved out in such a way that it is based on fulfilling the spirit of "Commensurate Effort".

Commensurate Effort in this sense obliges not just the eligible growers to produce but also commits any eligible buyer such as consumer goods manufacturers or retailers to also fulfill their part of the shared responsibility, namely, to offtake or purchase RSPO NEXT Certified Palm Oil thereby not inducing growers these ever stringent and high sustainability criteria only to find out that there is no demand.

As there has been no demand for RSPO NEXT products in the market, UP has decided not to proceed with RSPO NEXT Certification in 2019, even though we are

confident of fulfilling our commitment by going beyond the RSPO standard compliance. In addition, with the revised RSPO P&C Standards 2018 which has been voted through on 15th November 2018 we can see that the RSPO Standards has moved closer to the RSPO NEXT Standards.

Malaysian Sustainable Palm Oil (MSPO) Certification in 2018

The Malaysian Sustainable Palm Oil (MSPO) standard is a national certification standard created by the Malaysian Government and developed with inputs from stakeholders in the palm oil industry. First launched in November 2013, it officially came into implementation in January 2015. It is a mandatory certification and all RSPO certified millers and growers should be certified by 31st December 2018.

We are pleased to announce that all of our mills and estates in Malaysia have successfully obtained the MSPO Certificates in September 2018.

Indonesian Sustainable Palm Oil (ISPO) Certification

The Indonesian Government established a mandatory certification scheme in 2011, namely the Indonesian Sustainable Palm Oil Principles & Criteria (ISPO) to ensure that all producers within a few years will have to live up to certain standards when operating in Indonesia.

Being mandatory, producers in Indonesia will have to comply with the ISPO criteria and cannot hide behind the voluntary RSPO scheme as members only.

The ISPO standard includes legal, economic, environmental and social requirements, which largely are based on existing national regulations. The ISPO Initial Main Assessment for our Indonesian Plantations has been conducted concurrently with RSPO Initial Main Assessment in 2017 for a part of our HGU. Subsequently, the ISPO Scope Extension Assessment for newly acquired HGU area of 6004.15Ha was conducted on 9th August 2018 and awaiting issuance of the ISPO certificate.

Sustainable Palm Oil Transparency Toolkit (SPOTT)

UP participated in the Sustainable Palm Oil Transparency Toolkit (SPOTT) assessment conducted by Zoological Society of London (ZSL). SPOTT is designed to measure the transparency of Companies in public disclosures of best practices and sustainability commitments via the RSPO Annual Communication of progress (ACOP), RSPO New Planting Procedures (NPP) Public Notification, Company Annual/Sustainability Report and Company Websites.

The key objectives of the SPOTT assessment are to promote industry transparency and accountability to drive the uptake and implementation of environmental and social best practices in high biodiversity impact sectors.

SPOTT's online platform provides a scorecard and detailed assessments of upstream companies based on public disclosure of their operations, commitments and progress towards the implementation of best practice.

United Plantations Berhad maintains an active engagement and commits to collaborate with the Zoological Society of London (ZSL) in the progress towards improving sustainability reporting and enhancing a greater transparency.

Our current status on SPOTT assessment as of November 2018 is 86.50% resulting in UP being ranked as number 5 amongst the 70 assessed Global Oil Palm Plantations (In year 2017, the score was 81.90% and the rank as number 6 amongst 50 assessed Global Oil Palm Plantations).

For further details on SPOTT assessment for palm oil companies, please refer to https://www.spott.org/palm-oil/

Bapak Panut Wahono at the Lada palm oil mill where he is responsible for the grading operations that help to track crop ripeness standards.

Harvesting of tall oil palms remains a manual task requiring much skill and dexterity.

Watering young seedlings at the pre-nursery.

Employees
(GRI 102-15, GRI 103-2, GRI 203-1, GRI 205-2)

The success and achievement of our Group is related to our employees, both past and present, who loyally through hard work, strong leadership, honesty and respect have committed themselves to serve and dedicate their career and livelihood at UP. Without our employees which are the Group's core assets, the success and stability of UP would not have materialised.

1. Code of Ethics & Governance

Our commitment to adhere to ethical, honest and transparent business practices and governance.

2. Equal Treatment (GRI 405-1, GRI 405-2)

Our commitment to maintaining a workplace free from harassment of any kind, including harassment based on an employee's race, colour, religion, gender, national origin, ancestry, disability, marital status and sexual orientation

Code of Conduct & Business Ethics

A key element in UP's sustainability framework is our Code of Conduct and Business Ethics. We implement responsible and ethical business policies and practices in all aspects of our operations.

For further details on Code of Conduct and Business Ethics, please refer to http://www.unitedplantations.com/sustainability/pdf/Code%20of%20Conduct%20&%20Business%20Ethics%20Policy.pdf

Personal Data Protection
(GRI 418-1)

UP has a Personal Data Protection Policy to regulate the collection, processing and usage of personal data in the ordinary course of its business. This is to ensure that personal information whether such information is collected on paper, stored in a computer data base system or recorded on other materials are dealt with appropriately, and adequate security measures are accorded to such personal information under the provisions of the Personal Data Protection Act 2010.

Whistle Blower Policy
(GRI-102-16, GRI 102-17)

We are committed to high standards of ethical, moral and legal business conduct. This policy aims to provide an avenue for employees, that they will be protected from reprisals or victimization for whistle blowing. This policy is intended to cover protection for the whistle blower when raising concerns regarding UP, such as concerns regarding:

- Incorrect financial reporting
- Unlawful activity
- Activities that are not in line with UP's policy including the Code of Business Conduct; and
- Activities, which otherwise amount to serious improper conduct

For further details on Whistle Blower Policy, please refer to http://www.unitedplantations.com/sustainability/pdf/Whistleblower%20Policy.pdf

It is our obligation to honour and respect past and present employees who since 1906 have upheld our core values and focused on doing things right. Our employees are our core assets and human capital management is considered an integral and vital part of our operations.

Total number of incidents of discrimination and corrective actions taken for 2018

Total number of reported incidents of discrimination	NIL
Corrective actions taken	NIL

Gender Policy

In line with this policy, we endeavour to prevent sexual harassment and all other forms of violence against women and workers in the workplace or in the course of an employee's work.

For further details on Gender Policy, please refer to http://www.unitedplantations.com/sustainability/pdf/Gender%20Policy.pdf

Gender Committee

Our Gender Policy that is designed to protect our female employees. We have established Gender Committee who includes representatives from labour unions and management to promote female participation and advancement in the workplace, handle sexual harassment complaints and provide support for victims. When a harassment case is reported, informally or formally, the relevant committee investigates to determine if further sanctions are needed or if law enforcement action needs to be taken.

UP promotes diversity in a working environment where there is mutual trust and respect and where everyone feels responsible for the performance and reputation of our group. We will recruit, employ and promote employees on the sole basis of the qualifications and abilities needed for the work to be performed. Meritocracy is a Hallmark of our Group.

We are committed to diversity and have an equal employment opportunity policy. Below is the summary of our Group's employees as well as gender mix.

	UP Indonesia (PTSSS)	UP Malaysia	UP Group
Percentage Female Employees	28.8%	10.9%	14.2%
Percentage Male Employees	71.2%	89.1%	85.8%

UP Group

Employees – Year 2016 to 2018

(GRI 102-8, GRI 202-2, GRI 401-1)

	2018	2017	2016
UP Bhd	4,936	5,223	4,482
Unitata Bhd	282	242	213
Butterworth Bulking Installation Sdn. Bhd.	16	15	16
PT SSS1, Indonesia	1,274	1,345	1,215
PT SSS2, Indonesia	-	-	-
Total	6,508	6,825	5,926

Category of Employees (Malaysian) as at 31 December 2018

Employee Classification	Gender Classification		Age Classification			Ethnic Classification				Total
	Male	Female	18-30	31-50	>50	Malay	Chinese	Indian	Others	
Directors	2	-	-	-	2	-	2	-	-	2
Management	108	20	29	65	34	21	25	82	-	128
Staff	188	132	90	147	83	91	6	217	6	320
Workers	550	368	211	398	309	234	1	678	5	918
Total	848	520	330	610	428	346	34	977	11	1,368

Category of Employees (Other Nationalities) as at 31 December 2018

Employee Classification	Gender Classification		Age Classification			Ethnic Classification					Total
	Male	Female	18-30	31-50	>50	Others	Indonesia	Nepalese	Indian	Bangladeshi	
Directors	2	-	-	2	-	2	-	-	-	-	2
Management	13	2	3	7	5	2	13	-	-	-	15
Staff	43	12	16	39	-	-	55	-	-	-	55
Workers - PTSSS	859	347	331	816	59	-	1,206	-	-	-	1,206
Guest Workers - Malaysia	3,818	44	1,760	2,072	30	-	800	26	720	2,316	3,862
Total	4735	405	2,110	2,936	94	4	2,074	26	720	2,316	5,140

** Danish & British*

Grand Total = 6,508

We actively promote the employment of women at UP. We recognise that some work on our plantations is potentially more suitable for men due to the heavy physical nature of the tasks.

While male workers perform tasks including harvesting fresh fruit bunches, crop collection and evacuation to the railway cages for transport to the mills, women are assigned work including weeding, gardening and loose fruits collection. We provide crèches, playgroup classes and kindergarten at all operating sites to support our female employees and their children.

For Grievance Redressal Procedure for Sexual Harassment in the Workplace, please refer to http://www.unitedplantations.com/sustainability/community_grievance_harassment.asp

Total incidents of sexual harassment reported and corrective actions taken for 2018

(GRI 412-3)

Total incidents of sexual harassment reported	NIL
Corrective actions taken	NIL

3. Human and Workers' Rights

(GRI 401-2, GRI 402-1)

Human resource practices which respect universal human rights, including prohibiting the use of child or forced labour in our operations

UN Guiding Principles On Business And Human Rights

On 16 June 2011, the United Nations Human Rights Council endorsed the Guiding Principles on Business and Human Rights. In this context, UP have in place the following policies:

- Human Rights Policy
- Guest Workers' Policy

As per our continuous improvement efforts, we are focusing on retraining (reach, teach and remind) all our employees, customers, contractors, suppliers and communities on the core values which we are fully committed to.

During the launch of The Malaysia Chapter of the UN Sustainable Development Solutions Network (UN-SDSN) in 2015, UP was mentioned as one of the sustainable development solution initiatives being undertaken in Malaysia.

In the SDSN Malaysia Chapter, UP was identified as a "Business with a soul". This acknowledgement was indeed pleasing and indicates our commitment to being a leader in economic, environmental and social sustainability.

Human Rights Policy

United Plantations Berhad is committed to the protection and advancement of human rights wherever we operate. Our human rights policy is based on our core values on Safety and Health, Environmental Stewardship and Respect for people.

For further details on our Human Rights Policy, please refer to http://www.unitedplantations.com/sustainability/pdf/Human%20Rights%20Policy.pdf

Guest Workers Policy

We consider our foreign workers as guest and they are partners in our business along with our local workers.

For further details on our Guest Workers Policy, please refer to http://www.unitedplantations.com/sustainability/pdf/Guest%20Worker%20Policy.pdf

Guest workers have free access to their travel documents.

Guest Workers' Passport Lockers

We have constructed a room containing passports lockers within the plantations to enable our guest workers free access to their passports without any restrictions at Jendarata and Ulu Bernam Estate.

Since its construction and evaluation, the Company has decided to replicate in other estates in stages. Currently on other estates, passports of guest workers are voluntarily submitted with a written consent from the guest workers to the respective management for safe custody in the estates safe and is readily made available upon request.

Guest Workers Repatriation and Leave

With 85% of our workforce being guest worker, there is a frequent turnover of employees within our Group. We strongly promote freedom of movement which can be seen in the table above.

During 2018, 841 of our guest workers have been repatriated upon completion of their employment tenure. Another 444 guest workers went back on leave to their respective home countries with the majority returning back to resume their employment at UP. Nevertheless, 82 guest workers that had gone on leave did not return.

Repatriation and Leave during the year	2018	Total number of guest workers (%)
Total number of guest workers	3876	100
Repatriation	841	21.70
Gone on leave	444	11.46
Gone on leave and returned	362	9.34
Gone on leave and didn't return	82	2.12

Minimizing the Financial Burden for Guest Workers

We are committed to ensuring that exploitation of our guest workers have no place in our business operations.

We conduct assessments, interviews and spot checks to identify gaps and potential risks within our operations and develop mitigation plans and provide remedial actions.

Our guest workers are from Indonesia, Bangladesh, India and Nepal which constitute 85% of our workforce in Malaysia, as such our challenges are to identify and understand human rights impacts on our diversified workforce within our Group. From our assessments, we prioritise our implementation plans and focus on the risks to the vulnerable groups.

We identified that recruitment practices relating to guest workers may be vulnerable to exploitation at the source country.

Recruitment Practices

We recruit guest workers directly through the appropriate government approved channels as below:

- Indonesians- Indonesian Embassy –FWCMS-KDN
- Indians-E-Migrate System –FWCMS-KDN
- Nepalese –Nepal High Commission –FWCMS-KDN
- Bangladeshis – Awaiting new recruitment policy by Malaysian Government

**FWCMS - Foreign Workers Centralised management Services by Government of Malaysia*

**KDN - Kementerian Dalam Negeri/Ministry of Home Affairs of Malaysia*

**E-Migrate system by Government of India*

We do not charge any recruitment fees to reduce the financial burden on our guest workers. We planned to establish our Company's Information Centre at the source country of our guest workers, to facilitate communications to reduce exploitation, however this proposal has been put on hold until the release of new recruitment policy by the Malaysian Government.

As an alternative, we are planning to establish call centres in the respective source countries which will act as a bridge between the workers from villages to the main accredited recruiting agents in order to disseminate the job scope at the Plantations and conduct pre-departure briefings. It will also minimize the risks of sub-recruiting agents charging additional recruitment costs on the guest workers.

Guest Workers'Verification by HRESH Department

The HRESH Team verifies each and every guest worker on arrival to ascertain the recruitment supply chain and expenses from respective source countries until the arrival in Malaysia.

Appropriate translators are engaged on need basis during the interviews. This exercise is done to add credence for responsible sourcing within our supply chain.

Paying fair wages and employees benefits
(GRI405-2)

All employees of UP in Malaysia receive at least the minimum wage set by the Malaysian Government (Minimum Wages Order 2018), RM1,100/- per month with effective from 1st January 2019. We practice gender equality policy on wages payment and remuneration for all of our employees.

The average earnings of our workers supersede the minimum wages by more than 50% as reflected in the table below.

For our plantations in Indonesia there is a fixed minimum wage and this is revised annually by each provincial government. The company follows the minimum wage agreements and all new guidelines or revisions to the existing agreements are communicated to employees.

Percentage of Employees (Full attendance) Received Local Minimum Wages
(GRI 202-1)

	Male	Female
Malaysian operations	100%	100%
Indonesian operations	100%	100%

	2018	2017	2016
Total Average Earnings per worker per month – UP Group Plantations (Malaysia)	RM 1,595	RM 1,592	RM 1,472
Total Average Earnings per worker per month - UP Group (Indonesia) - Permanent Workers	IDR 3,767,903	IDR 3,391,159	IDR 2,567,777
Total Average Earnings per worker per month - UP Group (Indonesia) - Temporary Workers	IDR 3,276,675	IDR 2,409,208	IDR 2,566,166

Wage payment records are countersigned by the workers to acknowledge receipt and to confirm that they understand how wages are calculated. In Indonesia, the company in accordence to the labour law gives an annual bonus to celebrate the holidays depending on their religion, called Tunjangan Hari Raya (THR).

With the report published by Amnesty International, on 30 November 2016, targeting various plantation companies in relation to Human Rights violation within the plantation sector, it calls for diligent compliance with all relevant laws in this area. In this connection, we are increasing awareness by retraining and conducting audits within all operational areas of our group.

The results of these measures are being monitored and will be incorporated in our future reports in our efforts for continuous improvements. In Indonesia the traditional practice of wives assisting their husbands in harvesting have ceased by employing them into the estates' permanent workforce.

Benefit Provided to Seasonal Temporary Workers
(GRI 401-2)

Seasonal temporary workers are offered employment with appropriate insurance coverage and medical facilities.

Banking facilities

UP with the collaboration of Bank Simpanan Nasional has initiated the Automated Teller Machine (ATM) services at Ulu Bernam and UIE Estates, which provide workers with personal banking services in a swift, convenient and secure manner. Western Union visits selected estates to provide remittance services for the convenience of our guest workers.

Freedom to form a Union
(GRI102-41, GRI403-1)

Employees and workers have the rights to form and become members of labour unions. Through unions, workers have the right to carry out collective bargaining as permitted under Malaysia and Indonesia laws.

Minimum Notice Periods Regarding Operational Changes
(GRI402-1)

United Plantations Berhad is a member of MAPA (Malayan Agriculture Producers Association) which has collective agreements with NUPW (National Union of Plantations Workers) and the All Malayan Estates Staff Union (AMESU) Employees and workers have the rights to form and become members of labour unions. Through unions, workers have the right to carry out collective bargaining as permitted under Malaysia and Indonesia laws.

The Company also engages with the Food Industry Employees Union for refinery workers. The collective agreements are renewed every three (3) years where either party may serve on the other three (3) months' written notice to negotiate on new terms and conditions of employment and other related matters but no such notice shall be served earlier.

The timely and meaningful collective bargaining allows the affected parties to understand the impacts of the changes. It also gives an opportunity for both parties to work collectively to avoid or mitigate negative impacts as much as possible.

Consultative practices that result in good industrial relations help to provide positive working environments, reduce turnovers and minimize operational disruptions.

Banking facilities provided within the premises of the estate for the conveniences of our workers.

Guest workers arriving at the Kuala Lumpur International Airport being greeted and briefed by UP's Sr. Manager of HRESH, Mr. Norhazizi Nayan.

UP Group (Malaysia)	2018	2017	2016
% of staff as members of All Malayan Estates Staff Union (AMESU)	76	76	-
% of workers as members of National Union of Plantations Workers (NUPW)	16	14	23
% of workers as members of Food Industry Employees' Union	45	57	-
UP Group (Indonesia)	2018	2017	2016
% of workers as members of Union*	6	5	100

**In Indonesia, the union committee has been re-established and membership drive is in progress.*

4. Social Care and Workers' Welfare

Our commitment towards providing quality housing and social amenities and to maintain the highest possible welfare standards for the families of our workforce

Social Commitments

Providing and improving social amenities remains very much a hallmark within our Group. Continuous improvements were made during 2018 to maintain the highest possible welfare standards for our workforce.

For babies and young children UP continues to provide and maintain crèches for personalised childcare thereby ensuring that employees are comfortable about their children while at work.

Today, our Group has 9 Primary Schools and 7 Kindergartens which are maintained by the Company, providing education for more than 500 children ranging from age of 5 to 12 years. Bus subsidies for school children above the age of 12 years old are also provided for.

Places of worship for our employees, Group Hospitals & Clinics and an Old Folks Home to care for the aged and the homeless as well as a fully operational Danish Bakery are also a part of UP's care and commitment towards the wellbeing of its employees.

In addition, 49 scholarships were granted to children of our employees during 2018 thereby enabling these students to pursue their tertiary studies.

Social Amenities

The Community Halls on our estates continue to be put to good use providing our employees with vastly improved facilities for special functions such as weddings, engagements and other religious ceremonies.

Several new staff quarters and modern employees'houses were built during 2018 in line with the Company's goal to provide its employees with the best housing facilities within the industry.

Upgrading of our guest workers living quarters which our Company embarked on in 2010 has progressed well with the first two apartment blocks completed in 2011. These have provided the finest living facilities in our industry with a living area of 150m^2 per unit encompassing 3 bedrooms, 1 kitchen, 2 bathrooms and a large hall and patio. More than Two (2) additional terrace apartment blocks have been built in UIE providing first class housing facilities for 64 employees during 2018.

Sporting Activities

We encourage our employees to participate in sporting and social activities by providing facilities such as football fields, community halls, badminton courts, tennis court and futsal court etc. During the year several intercompany badminton and football tournaments were arranged providing fun and team work outside office hours.

In addition, annual sports days are held at selected estates to enhance friendship and community spirit through sports.

School children celebrating Independence Day at Jendarata Estate on the 31 August 2018.

UP Football Team, Jendarata FC emerged champions in the Lower Perak District League Championship held on 12 January 2019, after a number of tough matches to the delight of supporting fans and players.

Bernam Bakery

Bernam Bakery located on Jendarata Estate UP, 160km north of Kuala Lumpur, renowned for its Danish pastries and hand-made cookies, was the brainchild of our late Tan Sri Dato' Seri B. Bek-Nielsen.

It was established in 1982, purely out of necessity, to teach the local employees how to make good wholesome bread, for the local community, who found the quality of bread they bought from various dealers to be inferior, thus a scheme was created to enable the employees of the plantation to purchase quality bread.

The bakery, which is equipped with the most modern Danish machinery, was constructed within five months. Tan Sri Dato' Seri B. Bek-Nielsen enlisted the help of his good friend, the late Robert G. Pedersen, a master baker and retired lecturer from Holstebro Bakery School in Denmark, to train our local employees on the traditional art of baking original Danish bread and cookies on a no cost basis. It was amazing to see how the bakers became proficient within 6 months, thus providing our labour force with wholesome and nutritious secret recipes of bread and cookies of excellent quality, using shortenings produced by our refinery, Unitata.

The transfer of Danish Technology in the Baking Industry, took many years of dedicated work under the watchful eyes of the master baker.

The current bakery manager Mr. Jayarama Reddy and his team, do not only cater for the employees and the public but also is a proud supplier of high quality bread, pastries, cakes and biscuits to the many guests who visit United Plantations as well as certain outlets throughout Malaysia.

In January 2018, Mr. Vagn Nielsen, a Master Baker and a retired lecturer from Holstebro Bakery School in Denmark was invited to Bernam Bakery to train and work together with our local bakery team to help ensure that the quality in the final product is assured and found to be consistent.

Mr. Vagn Nielsen is a former student and friend of the late Mr. Robert Pedersen and it is therefore most pleasing that he has agreed to be associated with Bernam Bakery as a visiting Bakery Adviser together with his wife Mrs Else Nielsen going forward.

United Plantations Berhad – Old Folks Home

Our corporate culture is deeply embedded in our traditional values and legacy the Company's founders introduced nearly 113 years ago.

The Old Folks Home was officially opened by Minister of Labour, YBhg Tan Sri V. Manikavasagam on 17 March 1967 on Jendarata Estate and is the only one of its kind in this industry.

Set in a peaceful environment, it caters for the retired and aged employees who are given free boarding, food and medical care. A full time caregiver is also provided for the Home.

The Bakery Manager of Bernam Bakery, Mr. Jayarama Reddy and in the centre, the Danish Master baker Mr. Vagn Nielsen and his wife Mrs Else Nielsen who periodically visit Bernam Bakery to help uphold the quality of baking and transferring new technologies and practices on to the employees at the Bakery.

Fostering goodwill amongst local communities through sports.

Places of worship provided for all employees of different faith.

Benevolent Fund payments to our long serving employees in appreciation for their dedicated and loyal services.

Annual Benevolent Payments

Annual benevolent payments as well other compassionate and educational payments made by the Group to workers amounted to RM1,036,556 during 2018. The payments made through our various Benevolent and Educational Schemes are as follows:

1. UP Workers Benevolent Retirement Scheme (established in 1985)

2. UP Education and Welfare Fund (established in 1986)

3. UIE (M) Education and Welfare Fund (established in 1997)

The objective of the UP Workers Benevolent Retirement Scheme is to provide retirement benefits to workers who are loyal and have served the Group for 10 years and above and in addition to the workers entitlement under their respective collective agreements. Over the last 3 years, an average of RM295,000 per annum was paid out from this scheme.

The objective of the 2 education and welfare funds to grant scholarships for suitably qualified workers children or dependants, and other benefits such as welfare and medical costs to deserving cases irrespective of race, religion or creed.

The following tables summarises the annual benevolent payments made in the last 3 years. During the year, 66 retired workers received retirement gratuity, 49 school children received scholarships, 383 school children received bus subsidies and there were 93 beneficiaries from donations given by the Group.

Social Commitments of the Group

	2018 RM	2017 RM	2016 RM	Grand Total RM
Hospital & Medicine for Employees, Dependents & Nearby Communities	2,424,918	2,400,609	2,229,584	7,055,111
Retirement Benevolent Fund *	531,338	101,866	252,500	885,704
Education, Welfare, Scholarships & Other	298,841	298,269	299,824	896,934
Bus Subsidy for School Children	206,377	215,545	244,916	666,838
External Donations	127,359	120,008	302,997	550,364
New Infrastructure-Road, TNB and Water–Supply for domestic use	772,903	1,132,292	298,461	2,203,657
Employee Housing	7,134,389	11,879,818	5,937,022	24,951,229
Infrastructure Projects, Buildings, Community Halls, Places of Worship	2,508,547	6,773,589	1,502,571	10,784,707
Provision of Social Amenities	5,158,811	6,195,586	5,396,162	16,750,559
Total	19,163,483	29,117,582	16,464,037	64,745,102

Environmental Commitments of the Group

	2018 RM	2017 RM	2016 RM	Grand Total RM
Environment Friendly Operational Activities	6,680,501	5,147,810	6,395,566	18,223,877
Environment Friendly Project (Biogas, Biomass-others)	1,577,752	9,030,692	1,346,254	11,954,698
Biodiversity & Conservation (Forest reserve, Endangered Tree Species Projects, Collaboration with Copenhagen Zoo)	758,797	658,062	584,061	2,000,919
Total	9,017,050	14,836,564	8,325,881	32,179,494

** The above payments are in addition to the regulatory contributions by the Group to the Employees' Provident Fund, Social Security Contributions and other benefits.*

Training and Development of Employees

(GRI 404-1, GRI 404-2, GRI 410-1, GRI 412-2)

In UP our human capital is indispensable and our approach is "Reach, Teach" as well as "Reach and Remind'. Training schedules are prepared for our employees annually in the respective Estates and other Departments to ensure that the various trainings are being carried out on a regular basis throughout the year.

This is monitored and verified internally by the HRESH team and also through external auditors during RSPO/ MSPO/ISPO annual audits. As for Staff and Executive levels, trainings are generally conducted on a group basis. These trainings cover Occupational Safety & Health, Human Rights, Best Agriculture & Management Practices and Industrial Laws and others.

With 85% of our workforce being guest workers and with 20% annual turnover it is imperative that on the job trainings and re-trainings are constantly conducted. The scope further widens for certain type of categories, for instance, fire drills are being held periodically as per annual trainings programmes with the participation of neighbouring communities.

An employee who knows that he needs to wear his Personal Protective Equipment (PPE) during his operation at the site without being monitored/presence of his superiors is what internalizing the awareness altogether. Nevertheless, the trainings need to be constantly carried out as human nature also tends to take things for granted.

The competence and skills of the Group's employees are the main contributors to Operational Success. This, undoubtedly, also helps them to enhance their capabilities and build capacity. Life-long learning, through training programme, conferences and seminars which are relevant to the Group's businesses are identified on an going needs basis and the Company allocates a dedicated training budget to support the continuous development of our employees.

The training's effectiveness transpires in the awareness of our employees during unannounced internal audits and performance monitoring.

The Chief Executive Director of UP addressing all officers within the Group during the annual field day held at Ulu Bernam Estate on 22 September 2018.

5. Occupational Safety and Health

(GRI 403-4)

We are committed to securing the safety and health of all our employees at work and strive to maintain a safe and healthy working environment for our employees, customers and public

We value our work place safety and health as being of paramount importance for all our employees and our respective Managers/Heads of Departments are responsible in implementing this policy.

For further details on our Occupational Safety And Health Policy, please refer to http://www.unitedplantations.com/sustainability/pdf/Occupational%20Safety%20&%20Health%20Policy.pdf

Estate Group Hospitals

The Company operates two well-equipped estate group hospitals in Malaysia and a modern Health Care Centre in Indonesia with trained resident Hospital Assistants supervised by Medical Doctors.

Regular inspections of the employees' housing are made by the Hospital Assistant to ensure that sanitation, health and drainage standards are maintained according to the Company's policies.

Human Resources and Environment, Safety & Health (HRESH) Department

The HRESH Department is responsible for formulating and developing policies and policies and procedures which are aligned with objectives and core values of the Group in respect to managing people, workplace culture and the environment.

The key HR functions include recruitment, selection, training, succession planning, welfare and safety.

Besides managing HR, the Department is responsible for driving the sustainability agenda of the Group, which includes ensuring that the Group conducts its business in a responsible manner that adheres to global standards and meets stakeholders' expectations.

The team also engages in strategic partnerships to strengthen the sustainability practices of the Group.

The Company's Safety and Health Officer makes periodic workplace inspections. Safety Committee meetings are held in accordance with Department of Safety & Health (DOSH) regulations.

Safety operating procedures and system checks for all processes and equipment are in place and product quality standards are stringently maintained in a responsible manner.

Training of employees working with pesticides is a continuous and weekly process in United Plantations.

Chemical Health Risks Assessment (CHRA)

CHRA and Medical Surveillance programmes are regularly carried out for all employees engaged in handling pesticide and other chemicals. In this context, training programmes in the use of personal protective equipment for workers exposed to hazardous chemicals are regularly conducted and documented and have been a vital part of our operations for many years. Audiometric tests and fire drills are also conducted on a regular basis. These are kept up to the mark by the periodic workplace inspections carried out by the Company's Safety and Health Officers. CHRA renewal are conducted every five years and we are on schedule.

Hazard Identification, Risk Assessment and Risk Control (HIRARC)

In recent years, HIRARC has become fundamental to the planning, management and the operation of a business as a basic risk management practice. In line with our approach of preventive measures as a way of providing safe workplaces, we have conducted HIRARC on all our operations. With HIRARC, we were able to identify hazards, analyse and assess their associated risks and then apply suitable control measures. We are pleased to report further positive changes in our working environment with the introduction of HIRARC. Every three years or whenever there are changes in the process or activities the HIRARC shall be reviewed. The records shall be maintained for at least three years (in some cases legislative requirement will determine the minimum time to retain records).

Fatal Accident Rate (FAR)

(GRI 403-2)

Fatal Accident Rate calculation is as per the below formula(Malaysian OSH Act 1994 JKKP8)

$$\text{Fatality Rate @ Fatal Accident Rate (FAR)} = \frac{\text{No. of fatalities} \times 1000}{\text{Annual average of No. employees}}$$

Our aim is to avoid all incidents that put our employees at risk and to achieve zero fatalities. Every fatality is followed by a thorough review of the cause and action undertaken to eliminate the factors involved. All reviews have been reinforced with continued efforts in

the training and retraining on the use of appropriate protective equipment in order to minimize risks. Every tragic accident is formally investigated and the Group ensures that the necessary bereavement arrangements are handled compassionately. Compensation under the Government's 'Foreign Worker Compensation Scheme' or SOCSO are provided to the bereaved family.

Fatal Accident Rate (FAR)

	2018	2017	2016
Fatal/1000 Employees*	0.19	0	0.21

** For Malaysian operation only.*

Lost Time Injury Frequency Rate (LTIFR)

(GRI 403-3)

LTIFR refers to Lost Time Injury Frequency Rate, the number of lost time injuries occurring in the work place per 1 million man-hours worked. From the table below (year 2018) shows that 6.56 lost time injuries occurred on our jobsite every 1 million man-hours worked.

Lost Time Injury Frequency Rate calculation is as per the below formula (Malaysian OSH Act 1994 JKKP8)

$$\text{Frequency Rate @ Lost Time Injury Frequency Rates (LTIFR)} = \frac{\text{No. of accident} \times 1{,}000{,}000}{\text{Total man-hours worked}}$$

In 2018, 49 % of accidents involved harvesting operations (thorn pricks, debris falling into eyes, cutting stalk, fronds falling on body, 16 % commuting accidents and 35 % others (factory operations, tractor and lorry related, slipped and fall, hand tools related as well as sundry works). We are introducing a behavioral safety approach to further enhance the safety culture in the Group.

Lost Time Injury Frequency Rate (LTIFR)

	2018	2017	2016
Frequency/Million Hours*	6.56	9.04	14.3

** For Malaysian operation only.*

Workers with high incidence or high risk of diseases related to their occupation in 2018

Workers with high incidence of diseases	Workers with high risk of diseases
NIL	NIL

6. Fighting the Haze and Preventing Fires

There shall be no use of open burning/fire in new or ongoing operations for land preparation, land management, waste management, or any other reason other than justified and documented cases of phytosanitary emergency.

In 2014 and 2015, South East Asia experienced some of the worst incidences of haze caused by the widespread forest fire in Indonesia, which were exacerbated by the El Niño weather phenomenon.

The causes of fires vary greatly. The impacts can be catastrophic, including loss of life and loss of primary biodiversity. We understand that fires present long-term commercial risks and potential costs are high.

Wider risks also include threats to national climate change goals, environmental sustainability and poverty reduction.

Zero Burning Policy

We will be conducting a series of community workshops to educate our local communities about the environmental and social consequences of slash-and-burn farming, as well as to promote alternative methods of land clearance.

Our goal is the total eradication of fire as a means to clear land by the local communities. We conduct periodic fire drills to ensure the preparedness of our emergency response team (ERT) as well as functionality of the firefighting equipment. This year we did short period of drought in Indonesia. There were some isolated fire incidents which burnt approximately 30 Ha of grassland. However the fire was immediately extinguished by our ERT in PTSSS.

Hectares Burnt In Fires

	2018	2017	2016
Non Planted	31.20	6.00	30.89
Planted	0.55	1.16	107.14
Total	31.75	7.16	138.03

Outer Ring Range of ≤500 m

	2018	2017	2016
Outer ring ≤500 m (Ha)	1 *Small farmer's field	Nil	≤ 1 *Small farmer's field

Fire drill conducted in Runtu Estate with external stakeholders.

Training session conducted for our Emergency Response Team.

A pair of majestic Changeable Hawk Eagle (Nisaetus cirrhatus) spotted resting on a forest tree at PT SSS.

Environment

(GRI 102-12, GRI 102-13, GRI 102-15, GRI 103-2)

UP strives towards being recognized as the leader in sustainable agricultural practices, environmental performance whilst safeguarding natural resources and respecting the balance between economy and ecology. We focus on continuous improvement in order to minimize waste and our overall carbon footprint and through investments and a dedicated Group Sustainability Committee, we have introduced policies to break the link between palm oil and deforestation.

UP – A responsible producer of Palm Oil

As a responsible producer of Palm Oil, UP strives towards being selected as a preferred supplier of superior quality, certified and segregated palm oil traceable back to the plantations.

We fully adhere to the principles & criteria of the RSPO and have voluntarily incorporated higher standards that amongst others ensures:

- No deforestation
- No new development on peat soils
- Reduction of Greenhouse Gasses (GHG)
- Increased focus and respect for local and indigenous communities including smallholders and benefit of their socio-economic development.

We are committed to Responsible Agricultural Practices and strive towards finding the right balance between Economic, Social and Environmental aspects of our business.

Committed to Continuous Improvement

UP's objective is to become even more environmentally friendly by being committed to continuous improvement. In order to achieve progress various environmental projects are implemented, consumption and emissions are monitored, and best practices are identified by benchmarking aspects of our operations internally and externally.

To further emphasise our commitment on sustainability UP has since becoming the World's first RSPO certified plantations in 2008 as well as achieving, in 2017, the World's second RSPO NEXT Certification and the first for Asia Pacific and Africa, introduced additional environmental policies and focused on further improving our good agricultural practices that go beyond the RSPO's existing principles and criteria.

Environment Footprint

UP is very much aware of the footprint it leaves on the environment. Our group therefore constantly strives towards reducing variables that impact the environment negatively. Focus on reducing GHG, energy, water and waste is therefore a vital part of UP's environmental policy.

The following pages describe UP's various environmental projects, policies and commitments in place as well as progress made.

Environment Policies in place

i) Zero-burn policy (1989)

ii) No primary forest clearing policy (1990)

iii) No bio-diesel production /supply policy (2003)

iv) No HCV forest clearing policy (2005)

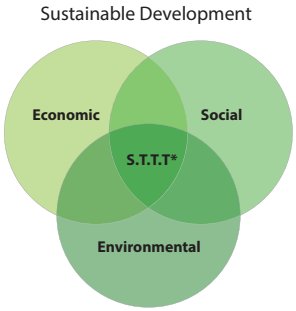
v) Methane capturing policy (2006)

vi) No Paraquat use policy (2010)

vii) No new planting on peat policy (2010)

viii) High Carbon Stock Assessment & Land Use Change Analysis for new plantings to prevent deforestation (2014)

For additional information, please refer to our website: *www.unitedplantations.com*



*Sustainability through Transparency, Traceability & Trust

The Lima Blas jungle sanctuary which was set aside in 1926.

7. Biodiversity and Conservation
(GRI 304-2, GRI 304-3, GRI 304-4)

Efforts undertaken by the UP Group to conserve jungle reserves and wildlife sanctuaries as well as promoting green corridors as part of our commitment to the environment

UP receives a Special Recognition Award for Land Use and Biodiversity efforts

During an event hosted by PricewaterhouseCoopers (PWC) on 29 January 2019, it was gratifying that years of environmental focus resulted in UP receiving a special recognition award for its efforts on land use and biodiversity. Continuous focus to develop and strengthen this area of importance will continue going forward.

Environmental and Biodiversity Policy

We at United Plantations Berhad are committed to sustainable development through protection of the environment and conservation of biodiversity. Our objectives: -

- Conducting our operations under the best principles of agriculture, that is compatible with the natural environment and in full support of Integrated Pest Management techniques and Best Management Practices for all over areas including existing plantations on peat.

- Promoting the conservation and development of biodiversity within our group of plantations.

- We want to ensure that our agricultural operations comply with the following criteria:

  - No development on high carbon stock forests (HCS)

  - No development on high conservation value forest areas (HCV)

  - No new development on peatland regardless of depth

  - Not to operate or develop within international or nationally designated protected areas

  - Compliance with all relevant laws and National Interpretation of RSPO Principles and Criteria.

  We strive to maintain an open and dynamic approach towards continuous improvements in respect of HCV, HCS and GHG Emissions to strengthen our policy on No Deforestation.

- Continuously working to mitigate our water footprint related to our operations, maintaining buffers along natural waterways, harvesting rainwater, frugal water usage, monitoring of its quality and judicious use of pesticides and weedicides.

- We are committed to reduce and phase-out chemicals that fall under the WHO Class 1A & 1B and Stockholm or Rotterdam Conventions. We will continue working with stakeholders to determine and implement alternative pest control strategies to totally phase-out these chemicals when effective and suitable alternatives are available.

- Continuously working on sound soil management e.g. determining appropriate amount and composition of nutrients based on annual leaf nutrient analysis, empty fruit bunches systematically applied in field, planting of leguminous cover crops.
- Continuously working towards a dynamic and innovative waste management and utilization system aimed towards zero waste and recycling.

- Continuously focusing on promoting new technologies with low environmental impact as well as reducing greenhouse gas (GHG) emissions.

- Removal of native tree species and capturing, poaching and hunting of animals, especially Endangered, Rare and Threatened species are prohibited. However, we respect the traditional rights of indigenous groups and communities to hunt in legal, non-commercial and sustainable manner without involving Endangered, Rare and Threatened species and jeopardizing long-term viability of the species.

- We will strive to commit our employees, contractors, suppliers, trading partners and stakeholders to adhere to this policy and thereby focus on traceability within our supply chain.

Adjacent Protected and Conservation Areas (GRI 304-1)

Our Kumai Estate in PTSSS is approximately 2km away from the famous Tanjung Puting National Park which is known to have a large diversity of forest ecosystems, including lowland forest, freshwater swamp forest, tropical heath forest which is called "kerangas", peat swamp forest, mangrove forest, and coastal forest.

Tanjung Puting was originally declared as a game reserve in 1935 and a National Park in 1982. It covers a total area of 415,040 hectares.

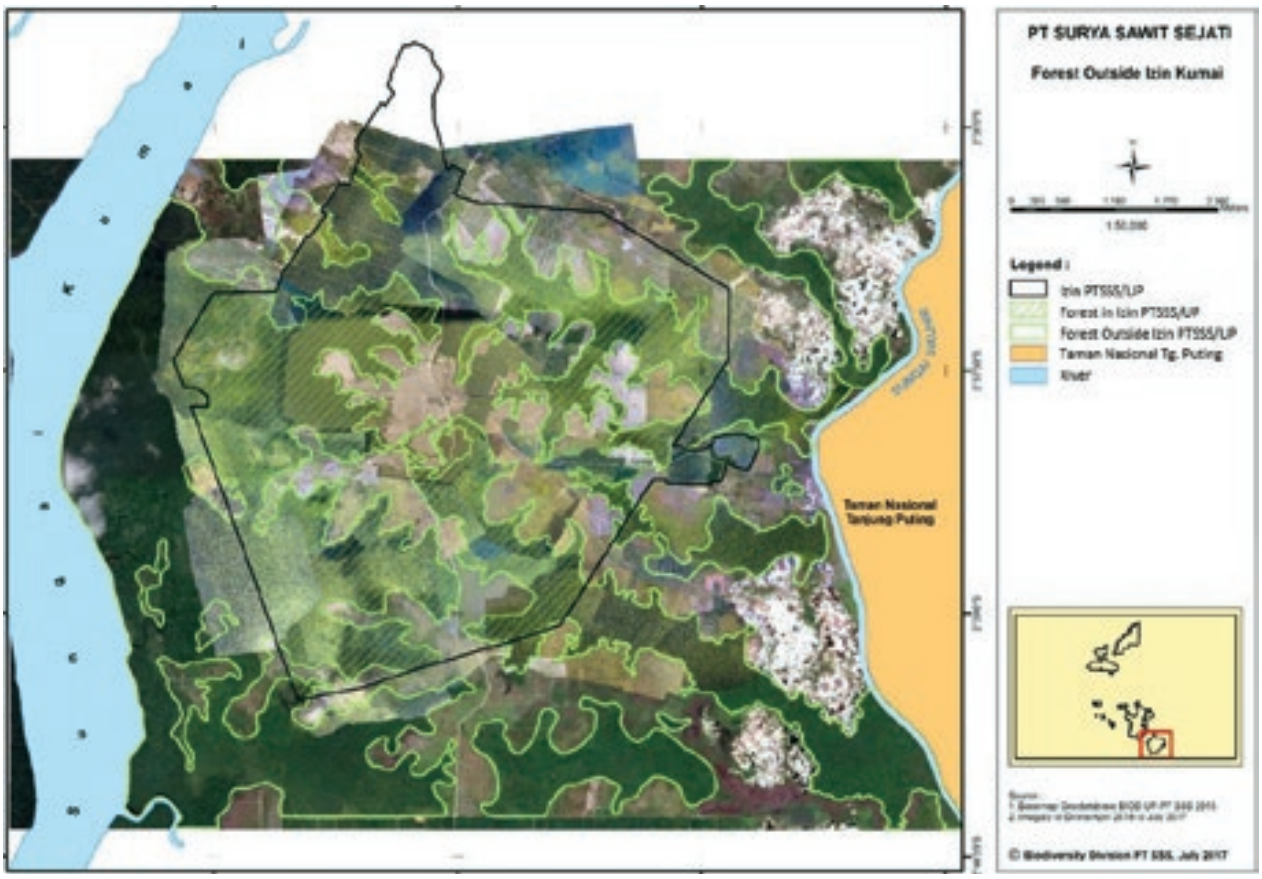
The best known animals in Tanjung Puting are the orangutans, made famous through the long-term efforts of the Orangutan Research and Conservation Program (predecessor to OFI), based at the landmark Camp Leakey research station.

Tanjung Puting is also the habitat for proboscis monkeys as well as clouded leopards, civets, Malaysian sun bears, mouse deers, barking deers, sambar deers, and the wild cattle known as banteng. Tanjung Puting hosts over 230 species of birds, including hornbills, deep forest birds, and many wetland species.

Endangered and Protected Species

UP has a policy of "zero tolerance" to the killing of endangered and protected species, herein also orang-utan, *Pongo pygmaeus*.

Staff that are directly or indirectly involved with the killing of and/or solicitation of killing, trading and harvesting of endangered and protected species, be it plants or animals, will be dismissed immediately. To the best of our knowledge, illegal killing and capture of orang-utans has not taken place on any of the properties under the legal management /jurisdiction of UP.



Biodiversity and Partnership

Conservation of jungle reserves and wildlife sanctuaries as well as promoting green corridors are examples of our commitment to the environment. To date, United Plantations has set aside more than 7,500 Ha of land for conservation purpose representing approximately 16% of our total planted area in order to encourage biodiversity and wildlife on our estate. In Indonesia, UP has set approximately 40% of its land concession for the purpose of conservation.

Riparian reserves are maintained to preserve flora and fauna, provide wildlife corridors, ensure water quality and prevent erosion. In order to develop effective conservation strategies, we need the assistance of experts in these fields who have established a series of collaborations and partnerships. One such partner is Copenhagen Zoo (CPH Zoo) which was initiated in 2007 and officially established on 1 October 2010 through a Memorandum of Understanding (MOU) between UP and CPH Zoo.

In order to better manage our large conservation areas, UP set up its Biodiversity Department (BioD) under the purview of Dr. Carl Traeholt, our Group's Chief Environmental Advisor a month later. It marked an important milestone for the Company's target of producing certified sustainable palm oil in Indonesia and being able to document the environmental integrity of its Indonesian operations.

The Biodiversity team consists of a Division manager with solid natural resources management experiences, supported by five subject specialists and five field staff. This is supplemented by additional contract-workers when the need arises. The team is responsible for mainstreaming environmental concerns into standard operational procedures and focus on activities primarily within the following areas:

- Biodiversity (Fauna and Flora)
- Habitat and Ecosystem
- Forestry and Rehabilitation
- Hydrology and Limnology
- GIS and Mapping
- Integrated Pest Management
- RSPO and ISPO
- Protection and Monitoring
- Community Outreach

Biodiversity Department

The completion of the BioD office took place in a very short period of time and this remarkable achievement is a testament to the hard work and commitment by all involved. The new BioD office was laid as part of the Lada Estate field office and was officially opened in September 2011, when the BioD made a short presentation to Her Royal Highness Princess Benedikte of Denmark, UP's senior management, Copenhagen Zoo's vice-director Mr. Bengt Holst, and other prominent guests at the new auditorium.

One of the key components in making the BioD a success which is our common goal, was to develop internal capacity to manage and conserve UP's ecological resources, and to make first-hand information about biodiversity assets easily available.

This is possible with the current BioD consisting of Dr. Carl Traeholt, our Group's Chief Environmental Advisor, Mr. Bjorn Dahlen Environmental Advisor, Mr. Muhd Silmi, Manager BioD and essential topic specialists, such as a limnologist, a forester/botanist, zoologist, herpetologist and a database officer. These subject specialists are supported by two chief rangers and a number of ranger assistants, as well as a native tree nursery manager.

The Company's Biodiversity Team headed by Dr. Carl Traeholt from Copenhagen Zoo (3rd from left) and Pak Muhammad Silmi the Biodiversity Manager (far left) flanked by the Executive Director of UP, Mr. Loh Hang Pai (2nd from left), Dato'Carl Bek-Nielsen (4th from left), Mr. Aseervatham, Manager Runtu Estate (2nd from right) and the President Director, PT SSS Mr. Muhammad Ratha during a field visit where issues relating to conservation, rehabilitation and outstanding issues were discussed.

Leopard cats are excellent rat-predators. An adult cat will kill and eat more than two rats on average per day.

Biodiversity Department's activities in 2018

By Dr. Carl Traeholt and Mr. Muhd Silmi

United Plantations' Biodiversity Division was created in 2011, exactly eight years ago. In this period of time, the Division has undertaken an impressive amount of activities in support of the company's commitment of producing sustainable palm oil. In the past, many exciting activities and accomplishments have been reported. For example, the Biodiversity Division has worked with leopard cats, *Prionailurus bengalensis*, as predator of rats to replace the environmentally detrimental chemical control.

The work with the sumatran cobra (*Naja Sumatrana) and* king cobra (*Ophiophagus hannah*), the world's largest venomous snake, has not only produced some amazing results. It has attracted one of the World's best known and respected herpetologists, Romolus Whitaker, who continues to grace UP/PTSSS in Kalimantan and offer support and capacity building every year.

Dr. Rom Whitaker visits our Indonesian estates and has been instrumental in guiding the Company's biodiversity department in its extensive studies on the king cobra. (Insert picture -BioD Team implanting radio transmitters.)

Orangutans are regularly recorded in PT SSS' conservation forests. Now begins the huge task of managing the population.

The Biodiversity Division has also undertaken numerous cameratrap surveys, bird and tree surveys to document the biodiversity within the company's conservation areas. The BioD has recorded many of Borneo's endangered species to date, among them Asia's only great ape, the orangutan, *Pongo pygmaeus*.

While these are exciting and inspiring stories about exotic species, the BioD is about far more than that. An entire host of other activities commenced right from the modest beginning in 2011, including developing a GIS database that incorporates literally all the team's recorded data, be it from camera trap pictures, radio-tracking locations, number of tree seeds collected, time and place of illegal logging to recovery of aquatic fauna. Most of these stories are rarely told, however, some of these will be revealed in the following.

Biodiversity in PTSSS

To date, the BioD has recorded a stunning 67 species of mammals, 179 bird species, 46 reptiles, 22 amphibians and 78 fish. This is expected to increase significantly in the future as more surveys are completed, especially with regards to bats. Many of these are listed as either critically endangered (Cr), endangered (E) or vulnerable (Vu) on the International Conservation Union's Red List (IUCN).

In addition, a total of 285 plant species have been recorded, with more than 100,000 seeds and seedlings collected and propagated in two purpose made tree nurseries, before being out-planted in rehabilitation areas. Whereas some activities associated with this enormous database relate to RSPO compliance, many goes well and beyond compliance activities.

Bats constitute a very important trophic layer in any ecosystem. They are the only flying mammals and predate on a host of insects. The BioD team has commenced a dedicated bat survey.

The first record of the rare flat-headed cat (Prionailurus planiceps) in Runtu Estate.

In 2018, the BioD recorded two new exciting discoveries. First of all, the team captured on camera a flat-headed cat, *Prionailurus planiceps*. It is the size of a domestic cat and is the rarest cat species in SE Asia and is listed as Endangered on the IUCN Red List.

It is found in peat-forest and wetlands and, in contrast to most other cat species, the flat-headed cat has semi-webbed feet, is an excellent swimmer and loves water. It feeds mainly on aquatic animals such as fish, amphibians and small reptiles.

Another very exciting record is the return of the Borneo clouded leopard, *Neofelis diardi* to the rehabilitation site Field 86 in Lada Estate. It is the largest terrestrial predator on Borneo, weighing up to 30kg and is an expert tree-climber as well. Hence, it is also known as the "tree-leopard".

The return of this magnificent cat to Field 86 is a wonderful testament to the positive restoration of the area after almost 10 years of work.

The clouded leopard (Neofelis Diardi), recorded for the first time in field 86.

The red durian, (Durio dulcis), is now extremely rare in Borneo. The BioD has now propagated hundreds of this species and will continue to collect more fruits in the future.

The Borneo red durian, *Durio dulcis*, used to be widespread across most of Borneo's lowland areas. Local people consider it the sweetest of all durians, however, the tree has also very high timber value and the past 20 years' massive deforestation have resulted in the species becoming increasingly rare.

Today, this once common wild durian is listed as "Vulnerable" on the IUCN Red List.

The BioD team identified a local villager who still had a single tree standing adjacent to Runtu Estate's conservation forest. Learning that the owner planned to fell it for timber, the BioD team purchased as many fruits as possible, making it financially beneficial for the owner to keep the tree. Subsequently, the BioD team has propagated almost a thousand seedlings that will be out-planted for the benefit of both humans and wildlife in the future.

Rehabilitation – a measure of success

Rehabilitation of tropical rainforest and wetland is a monumental task that takes years of dedication, innovation and hard work. There is no existing "hand book" to facilitate this process, simply because tropical rainforest loss is a relatively new phenomenon and rehabilitation has not been undertaken sufficiently long term to provide solid results of "dos and don'ts".

The BioD team commenced on rehabilitating a sensitive wetland, Field 86, in Lada Estate in 2011. The need for this was a combination of the field being sensitive biodiversity area as well as important for managing/ prevent flooding of planted area further downstream.

The question remains if the restoration and rehabilitation process has had its desired effects i.e. mitigate flooding and bring back biodiversity?

To date, it is very pleasing to report back that there has been no flooding in adjacent areas ever since corrective measures were installed.

Concurrently, the BioD has monitored the biodiversity throughout the years, both with regards to regrowth as well as species composition of understory birds. The latter is a good measure of "health" for rainforests as these are sensitive to any habitat disturbances.

The data collected show a positive recovery i.e. many trees planted almost 10 years ago are now 10-12m tall and the area, once a wasteland, is now covered with vegetation other than *lalang* and invasive ferns.

The area oozes with birds quipping and our results that there are now 24 species of birds inhabiting Field 86, compared to nil in 2011 (graph on page 77) This, combined with the new record of clouded leopard, is a success-story in the making and a testament to long-term dedication to such tasks.

Behind all this, there lies an enormous amount of work. The rehabilitation process began with revisiting old satellite images of the area, including adjacent areas, to be able to restore the stream to its original flow as well as to assess the type of habitat it was before mistakenly being cleared. Subsequently, the BioD developed a list of tree species to plant in the area, choosing a range of species suitable for this type of habitat and with a value for wildlife too.

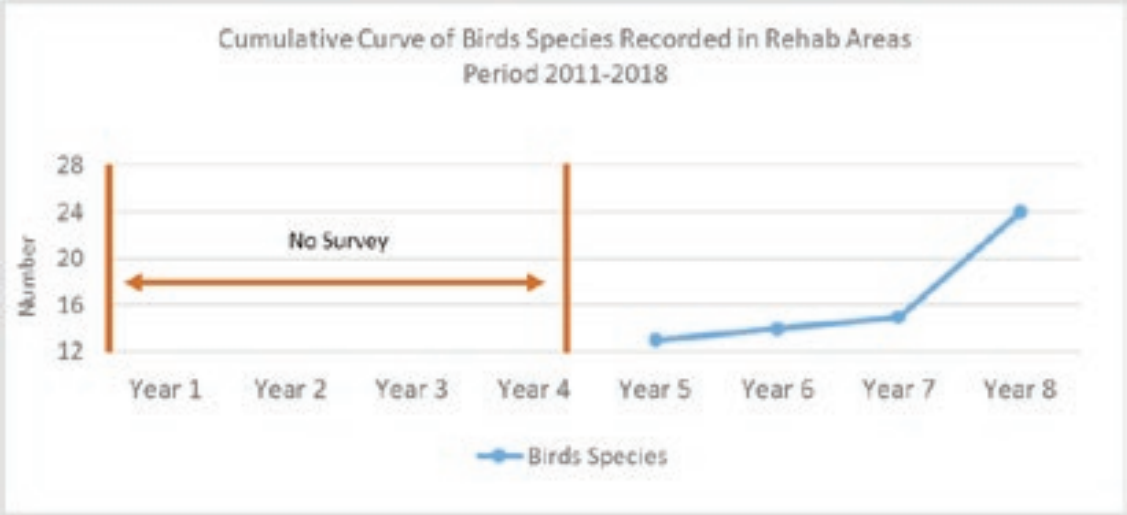
Biodiversity Manager, Mr. Muhammad Silmi, in front of a Rengas tree taken in 2014 (left) and again in 2019 (right) showing the successful rehabilitation process of tree species.

This was to ensure that, not only will the area be restored, but it will also be enriched and become a small important natural oasis in the middle of a sea of plantations. Then began a dedicated search for the desired tree species in adjacent forest tracts, collection and propagation of tens of thousands of seeds, followed by out-planting of tens of thousands of seedlings and finally a constant monitoring of growth rate, mortality rate and leaf area in test plots.

For the first 3-5 years, the BioD also had to "clean" the area around each tree for weed, to prevent small, still fragile, seedlings from being outcompeted by weeds and climbers. All this was undertaken in knee-deep water, using machetes, GPS, measuring tape and notebooks.

Today, similar processes are taking place in many other areas. The challenges and difficulties varies from site to site, however, sustained dedication and hard work will produce the desired results too. For some sites, the BioD will venture into "Phase 2" of the rehabilitation process, which is to enrich the habitat with species that provide edible fruits and leaves for wildlife. One can only marvel at nature's resilience and ability to recover, if only humans are willing to dedicate ourselves to the task and provide the necessary circumstances for this to take place.

Dr Carl Traeholt
UP Group Chief Environmental Advisor
and
Mr. Muhd Silmi
Manager Biodiversity Division



From zero birds in Year 1, the BioD has monitored the bird community in Lada's Field 86 annually. Once the trees reach a height of about 2m (Year 5), there has been a steady increase of species.

An aerial photograph of Field 86, Lada Estate Div II. From planted land, the area is now covered with trees as tall as the surrounding palms indicating the importance of rehabilitation. As an example the recorded bird species has increase significantly in the current area.

Various types of wildlife including five monkey species captures from our BioD Department's camera traps.

An aerial view of UIE's Lagoon Tree Reserve, an oasis of flowering tree and fruits, shelter and food supply for birds and mammals.

Tree Reserves

The Lagoon Tree ('Kingham-Cooper') Reserve.

This 7.50 hectare area established in 2008 started as a barren piece of land surrounding the Lagoon (man-made-lake supplying UIE Palm Oil Mill with processing water requirements).

The Lagoon Tree Reserve had since been planted with several thousand local trees, and now resembles a natural thick jungle, with over 250 diverse species and 12,000 trees at this area alone.

A major source of planting material, serves as a gene-bank for the on-site Nursery to germinate harvested seeds and for growing the saplings to be planted on this Estate, as well as the other Estates in the Group to be able to establish its own reserve areas.

The Lagoon is well stocked with a variety of local fish species, attracting numerous bird types (fish eagles, kingfishers, bee eaters, egrets & herons) as well as mammals such as the Malayan Otter.

Main-Office Tree Parks.

Extending beyond the Lagoon, are a number of other fields planted with more diverse trees, emphasis on rare and valuable hardwoods such as the Dipterocarpaceae Family (Shorea, Hopea, and Dipterocarpus).

Additionally, a variety of "food chain" species have been planted to provide food & nesting for birds, habitat for wildlife.

The Anak Macang Riverbank Reserve.

This 5.85 kilometres strip of land along the southern boundary to Anak Macang River (which is not permitted to be cultivated with commercial crops, as regulated by the RSPO, and which has to revert back to natural vegetation).

Since 2011, it has been enriched with a variety of jungle tree species and become a pleasant, diverse area for biodiversity. Numerous valuable hard-wood (Dioterocarpaceae species like Anisoptera Marginata, from James Kingham's Nursery. Penawar Hutan Sdn. Bhd.) as well as Hopea species and Shorea species from the UIE Nursery have been planted here.

To date, well over 3000 trees have been planted along the Anak Macang Riparian Reserve, adding to the variety of wild trees available for the desired range of Biodiversity.

The main focus during 2018 has been the harvesting and raising of tree seeds to the sapling stage, for transplanting and supplying the other Estates in the Group, which one day should replicate the project commenced on UIE in 2008. The trees serve "a 360 degree purpose": not only being admired as magnificent life form but also to provide future generations of planting material for propagation and conservation.

To date, over 18,500 trees have been planted on UIE in the numerous Parks and Reserves which will no doubt be a lasting legacy for generations to come.

Geoffrey Cooper
Estates Director, Downriver

The indigenous jungle tree nursery at UIE(M) where thousand of jungle tree seedlings are raised every year.

Riparian rehabilitation at the Anak Macang. Today more than 3,000 indigenous and rare jungle trees have been planted to intensify the old riparian reserve.

8. Deforestation and High Carbon Stock

UP is fully committed to its NO deforestation policy and contributes to the protection of critical ecosystems and biodiversity in and around the landscapes where we operate. By strictly avoiding land clearing in High Carbon Stock areas, UP ensures that it is in full compliance to its NO deforestation policy of July 2014

New Planting Procedure (NPP) and Responsible land use planning

The RSPO New Planting Procedure (NPP) consists of a set of comprehensive and participatory technical assessments and verification activities to be conducted by growers and certification bodies (CB) prior to a new oil palm development, in order to help guide responsible planting.

The NPP applies to any development of new plantings, regardless of size (Ha). The intention is that new oil palm plantings will not negatively impact primary forest, HCV, HCS, fragile and marginal soils or local people's lands. UP subscribes and supports this stance.

The Main Assessments of the NPP are as follows:

- Soil suitability and topographic surveys
- Social Environmental Impact Assessments (SEIA)
- HCV and HCS assessments
- Stakeholder engagement, including Free, Prior and Informed Consent (FPIC)
- Land Use Change Analyses (LUCA)
- GHG assessments

A successful implementation of the NPP ensures that all the indicators of the RSPO Principles and Criteria (P&C) are being implemented and therefore in compliance when the new development starts. One of the outputs of the NPP is a report that proposes how and where new oil palm plantings should proceed, or not, for a given management area. The NPP report is posted on the RSPO website for public consultation for a duration of 30 days. Planting and any associated development (such as road development) can only begin once the NPP is completed and RSPO approval is granted.

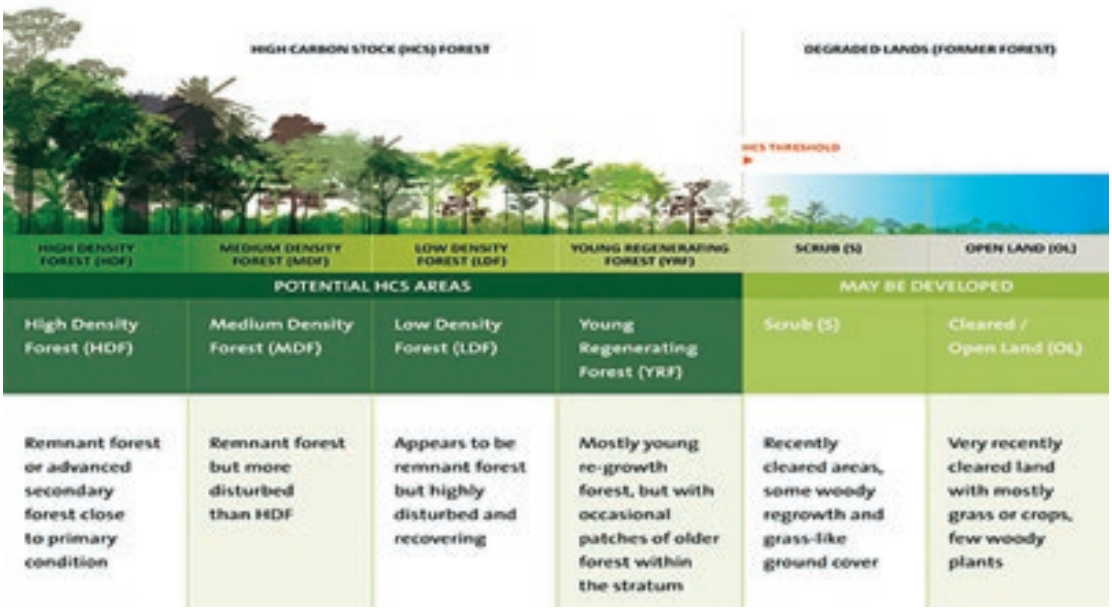
High Conservation Value (HCV) Assessment

As a member of RSPO, UP is 100% committed to embrace and implement the sustainability concepts outlined in the RSPO Principles and Criteria (P&C). In line with the RSPO P&C as well as Indonesian laws, Environmental Impact Assessments (EIA's) and HCV Assessments were conducted prior to commencing plantation development by UP.

UP has not only followed the recommendations of these assessments but expanded the scope to include much larger conservation areas than that stipulated in the EIA and HCV assessments. To date more than 7,500 Ha are set aside as conservation areas in line with the Company's policy to maintain and manage the ecological integrity of the landscape in which UP operates its palm oil plantations, as well as to provide necessary habitat for endangered and critically endangered species that are found in or adjacent to UP properties.

High Carbon Stock (HCS) Assessment

Since 2014 UP has introduced a High Carbon Stock Policy to all its future developments. HCS Assessment is a methodology that distinguishes forest areas for protection from degraded lands with low carbon and biodiversity values that may be developed. The methodology was started by Golden Agri-Resources(GAR) and



Greenpeace during the development of GAR´s Forest Conservation Policy, with the aim to ensure a practical, transparent, robust, and scientifically credible approach that is widely accepted to implement commitments to halt deforestation in the tropics, while ensuring the rights and livelihoods of local peoples are respected. Since 2010, the HCS approach has had separate expert reviews and inputs from multiple stakeholders to develop a methodology which is a practical tool to address the need for forest protection within agricultural development.

"The amount of carbon and biodiversity stored within an area of land varies according to the type of vegetative cover. The HCS Approach stratifies the vegetation in an area of land into six different classes using analyses of satellite data and ground survey measurements. These six classes are: High Density Forest, Medium Density Forest, Low Density Forest ,Young Regenerating Forest, Shrub, and Cleared/Open Land. The first four classes are considered potential High Carbon Stock forests.

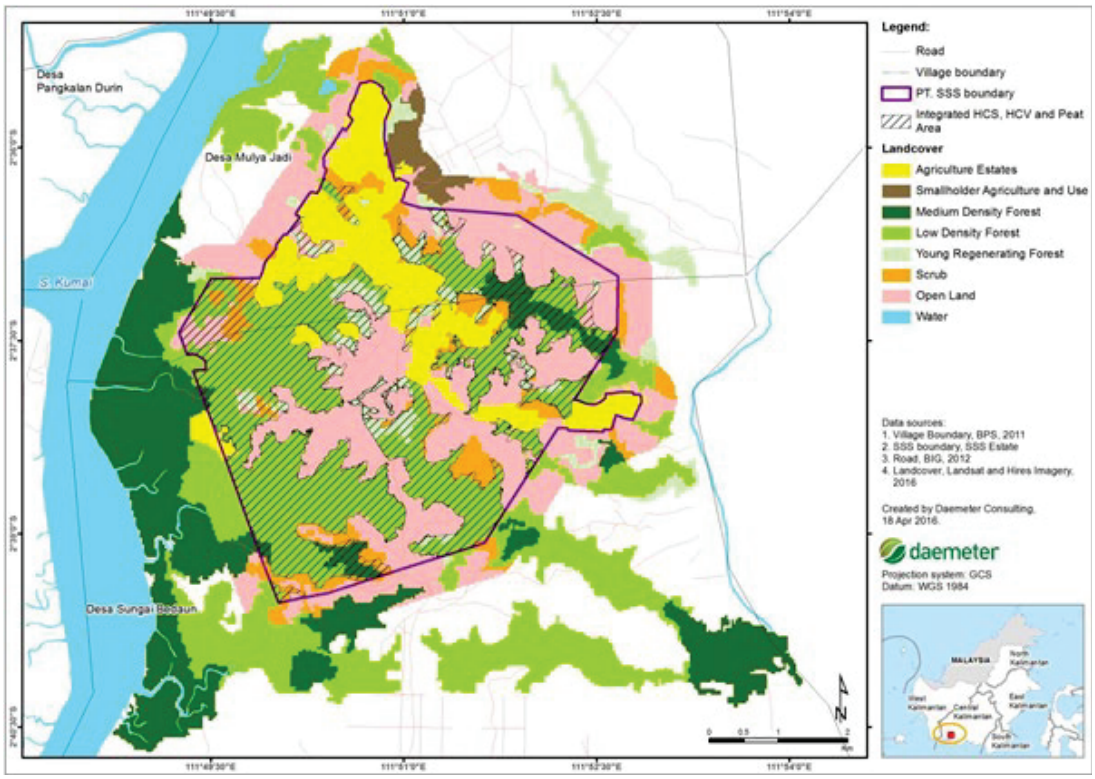
Each vegetation class is validated through calibration with carbon stock estimates in the above-ground tree biomass and field checks. Community land rights and uses are mapped, and the HCS forest patches are further analysed via a Decision Tree to identify viable and optimal forest areas for potential protection and areas for development.

The methodology respects local community rights through its integration with enhanced Free Prior and Informed Consent (FPIC) procedures, and respecting community land use and livelihoods.

It requires participatory community-land use planning and management, applies conservation planning tools to the identified HCS forest areas, and combines with mapped community land use, HCV, peatland and riparian areas to delineate areas for conservation, restoration, community land use, and/or areas potentially available for plantation development.

The HCS Approach is a breakthrough for plantation companies and manufacturers who are committed to breaking the link between deforestation and land development in their operations and supply chains. The approach represents the first practical methodology that has been tested and developed in active concessions in Asia and Africa with input from a variety of stakeholders. It is a relatively simple tool that plantation companies can use for new developments while ensuring that forests are protected from conversion.

Identification of HCS forests can also help governments fulfil commitments to reduce greenhouse gas emissions resulting from deforestation because it allows the mapping of forest areas that should be conserved (thus preventing GHG emissions).



The consolidated map which integrates the results of the patch analysis (HCS area), peat mapping, HCV assessment and FPIC study in Kumai.

As of November 2016, the HCS Approach converged with the HCS+ and following the release of the HCV-HCS Assessment Manual in November 2017, which requires all HCS Approach assessments to be conducted as integrated HCV-HCS Assessments, UP will also only appoint licensed HCV assessors and HCS registered assessors for future joint assessments if new developments are to take place. (source: *www.highcarbonstock.org*)

UP's HCS assessment and Plasma development plans

In adhering to UP's No Deforestation Policy of July 2014 and minimizing its Carbon Footprint, UP in October 2014, requested Daemeter Consulting to perform a Land Use Change analysis as part of RSPO's New Planting Procedure (NPP).

Daemeter Consulting is a leading consulting firm promoting sustainable development through responsible and equitable management of natural resources, particularly in Asia's emerging economies. (For more info see: www. daemeter.org)

The Objective was to produce a land use map indicating exactly which areas ideally should be set aside for conservation and what areas UP could develop solely for its Plasma commitments in the Kumai Concession area.

UP has since then fully adhered to the Assessments conclusions and recommendations and the plasma development project in the Kumai concession area has progressed well during 2018, and is a fine example of how development and conservation can go hand in hand for the benefit of the local community and the environment.

Environmental concerns

Oil palms are highly efficient producers of vegetable oil, requiring less land than any other oil-producing crop. Despite being one of the more sustainable sources of vegetable oil, there is concern that the growing demand for food and biofuel could lead to rapid expansion of palm oil production and result in serious environmental and social consequences.

NGOs and Palm Oil

Palm oil producers worldwide, continue to be exposed to much criticism by predominantly Western Non-Governmental Organizations (NGOs). Their accusations take the form of generalized views that disregard the positive socio-economic impact of the industry and continue to highlight mainly allegations of deforestation, environmental degradation, social conflicts and economic problems.

Nonetheless, dialogue with NGOs in a constructive atmosphere of goodwill and fairness is essential in order to pursue the process of achieving a balance between the natural environment and habitat as well as the need for economic development. Those dedicated to this cause always need to be aware of the other side's case and thereby do their best to remain objective.

Conservation and development going hand in hand based on the NPP and HCS assessments.

Consequently, the RSPO promotes sustainable palm oil production practices that help to considerably reduce deforestation, preserve biodiversity and respect the livelihoods of rural communities.

The Challenges of Protecting Forest Areas from Development

As of 2017, more than 5 million hectares of forest is estimated to have been spared from oil palm development in Indonesia.

This is largely attributed to the individual NDPE commitments of key companies within the sector, alongside government policies. However, ensuring that these areas are not converted in the future remains a challenge.

The pressure for further land use change by other producers and sectors that have not subscribed to global sustainability standards continues to grow.

Companies with NDPE commitments currently account for approximately 2/3 of the combined refining capacities of Indonesia and Malaysia, which still leaves a leakage market of approximately 1/3 of the refining capacity annually.

Stakeholders from the goverments, private sector, industries, civil society, markets and the public must continue working together to close this gap.

Deforestation – How to balance Development & Conservation

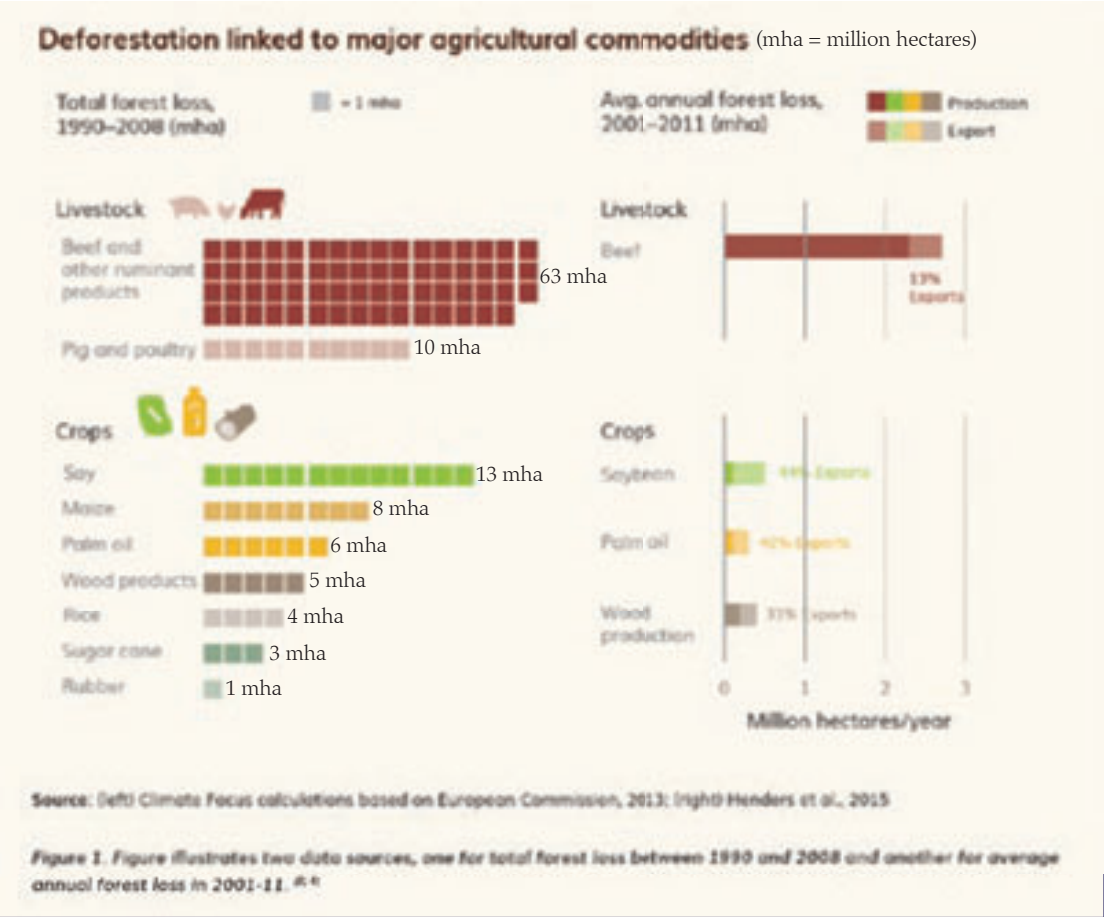
UP has a clear commitment against deforestation as enshrined in several of our policies: 'No primary forest clearing policy (1990), 'No HCV forest clearing policy (2005)' and 'High carbon stock assessment & land use change analysis for new plantings (2014)'.

Whilst a certain portion of oil palm cultivation, just like all other agriculture, is a result of land use change, it is incorrect to single out the oil palm industry as the lightning rod for the world's growing anger on global warming and deforestation. Globally, according to the Food & Agricultural Organisation (FAO), about 12 million hectares of forests are cleared every year.

Between 1990 to 2018, more than 375 million hectares of forest were cleared and converted into other uses such as commercial ranching, agriculture, town expansion as well as infrastructural projects amongst others.

Oil palm areas globally have increased from 3.7 million hectares in 1990 to 20 million hectares in 2018 or a net increase of 16.3 million hectares or equal to less than 5% of the total deforestation from 1990 to 2018. Nevertheless, whilst fully supporting and recognising that ongoing initiatives must be intensified to minimise the impacts of

Ecology and Economy- riparian reserve being maintained alongside Sg Bernam at the Jendarata Bulking Installation.



Total Forest Loss (between 1990 to 2008) =
113 million Ha

- Beef = 63 mha (55%)
- Soy = 13 mha (11.5%)
- Pig & Poultry = 10 mha (8.8%)
- Maize = 8 mha (7%)
- Palm oil = 6 mha (5.3%) or 1/10 of Beef
- Others = 13 mha (11.5%)

deforestation and greenhouse gas emissions, there is an acute need by the NGO fraternity and scientific network including politicians in the West to direct their attention on other areas which have a disproportionally greater impact on deforestation and greenhouse gas emissions.

In this context, it was with much interest that the US NGO, The Union of Concerned Scientist (UCS) who on the 14th of December 2016 published an article entitled "Ending Tropical Deforestation.

Have we got our Priorities Backwards?"in which concluded that the NGO fraternity including the UCS had got their priorities wrong. The findings concluded that the main drivers of commodity-based deforestation were in fact not palm oil production but several other commodities.

An article by the USC states,

Quote: *"I don't want to go overboard with the mea culpa here. Companies have to take responsibility to their actions, and their lack of action. They can't just say "The NGO community made me do it". But the Climate Focus Report and the new data from the Amazon demonstrate forcefully that when we get the priorities wrong, there are consequences":* Unquote

Earlier in the same article it is also stated that

Quote: *"The data is pretty clear: by far the biggest driver of deforestation is beef. Soy is second, but far behind in terms of importance and palm oil and wood products are even smaller drivers, causing only about a tenth as much deforestation as beef":* Unquote

9. GHG Emissions, Discharges & Waste Management

(GRI 302-1, GRI 302-2, GRI 302-4, GRI 306-1)

Investments and efforts undertaken to reduce GHG emissions, and in promoting green energy starting with the Biomass Reciprocating Boilers and Biogas Plants

Much more attention must be directed towards the adverse impacts of fossil fuel usage and minimising this as about 65% of all CO_2 (eq.) emissions still come from burning fossil fuels. The world purchases about 93 million barrels of crude oil per day (equal to about 130.1 million MT per day).

In connection with the above it is important to apply more pressure on mineral oil producers as the impact on greenhouse gas emissions is larger than what most people believe. As an example, it is worthwhile mentioning a small country like Norway who has often wished to be seen as the stewards when minimising deforestation and greenhouse gas emissions.

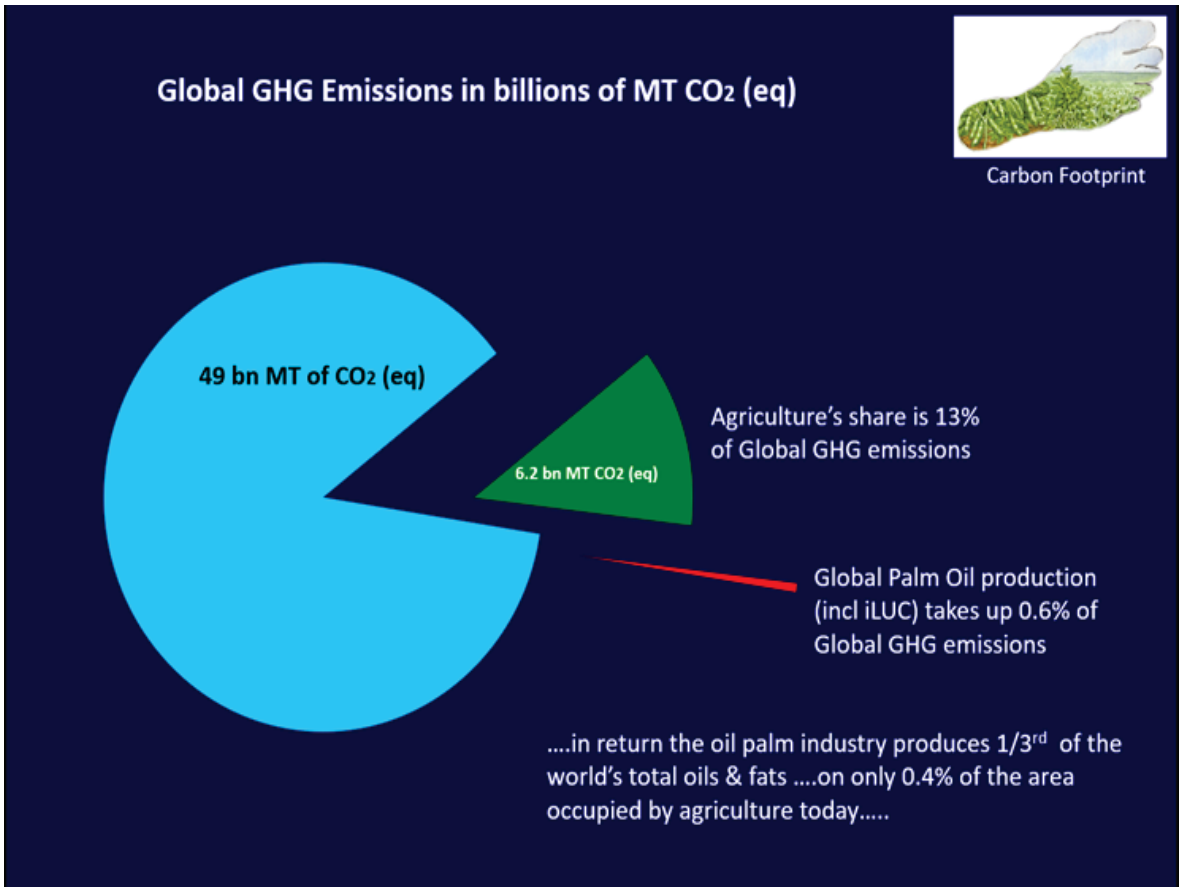
Nevertheless, little Norway today produces about 2 million barrels of crude oil per day.

This alone is equal to 913,194 MT of CO_2 emissions/day or similar to the CO_2 (eq.) emitted from clearing 1793 hectares of tropical jungles per day or a deforestation rate of 650,000 hectares per year. However no one seems to address this acute problem.

What we therefore need much more of is a balanced approach to what we all have to do to help minimise the impacts of deforestation and greenhouse gas emissions and not just a selected few.

There must be a "commensurate effort" failing which trust will be eroded and goals will not be reached.

Indeed, things should be put in perspective and acknowledgement given to the fact that palm oil production is not the main cause of deforestation. Nevertheless whilst recognizing that ongoing initiatives must be intensified to minimize the impact of not just agriculture but all activities that in one way or the other contribute to deforestation and global warming.



The latest and largest Biogas Plant built in 2017/2018 located at the Optimill and generating electricity which is used internally.

United Plantations' Carbon Footprint Initiatives

Since 2005 UP has actively been pursuing means of identifying ways to reduce its Greenhouse Gas (GHG) emissions and with that its reliance on fossil fuels.

Life Cycle Assessment (LCA)

(GRI 305-1, GRI 305-2, GRI 305-3, GRI 305-4, GRI 305-5, GRI 307-1)

In 2006 following the completion of the world's first panel reviewed Life Cycle Assessment (LCA) study on the "cradle to grave" production of 1 MT of refined palm oil, various areas were identified within our production chain, which could mitigate GHG emissions.

For example, the world's first comprehensive LCA in accordance with ISO 14040 and 14044 International Standards on palm oil was finalized in 2008 and subsequently underwent a critical panel review.

Further annual updates to this LCA were carried out by 2.0-LCA Consultant Dr. Jannick Schmidt from Aalborg, Denmark until the latest update undertaken in, the period January to February 2019 thereby providing management with a detailed and clear overview of the development in the Company's efforts to reduce its carbon footprint since 2014.

The updated LCA has indeed helped to identify additional areas in need of further improvement within our Group. Our Company continues to remain at the very forefront in terms of implementing GHG reducing projects within the Plantation Industry which will supersede the Kyoto Protocol's ambitions of reducing GHG emissions in industrialized countries by at least 5% below the 1990 levels in the commitment period 2008-2012.

Time series of GHG emissions from palm oil at United Plantations Berhad

Below, time series of GHG emissions from palm oil at UP are presented. The time series for NBD palm oil at UP show reductions at 46% (without iLUC) and 40% (with iLUC) from 2004 to 2018. When including nature conservation, the reduction is 54%.

Target 2025

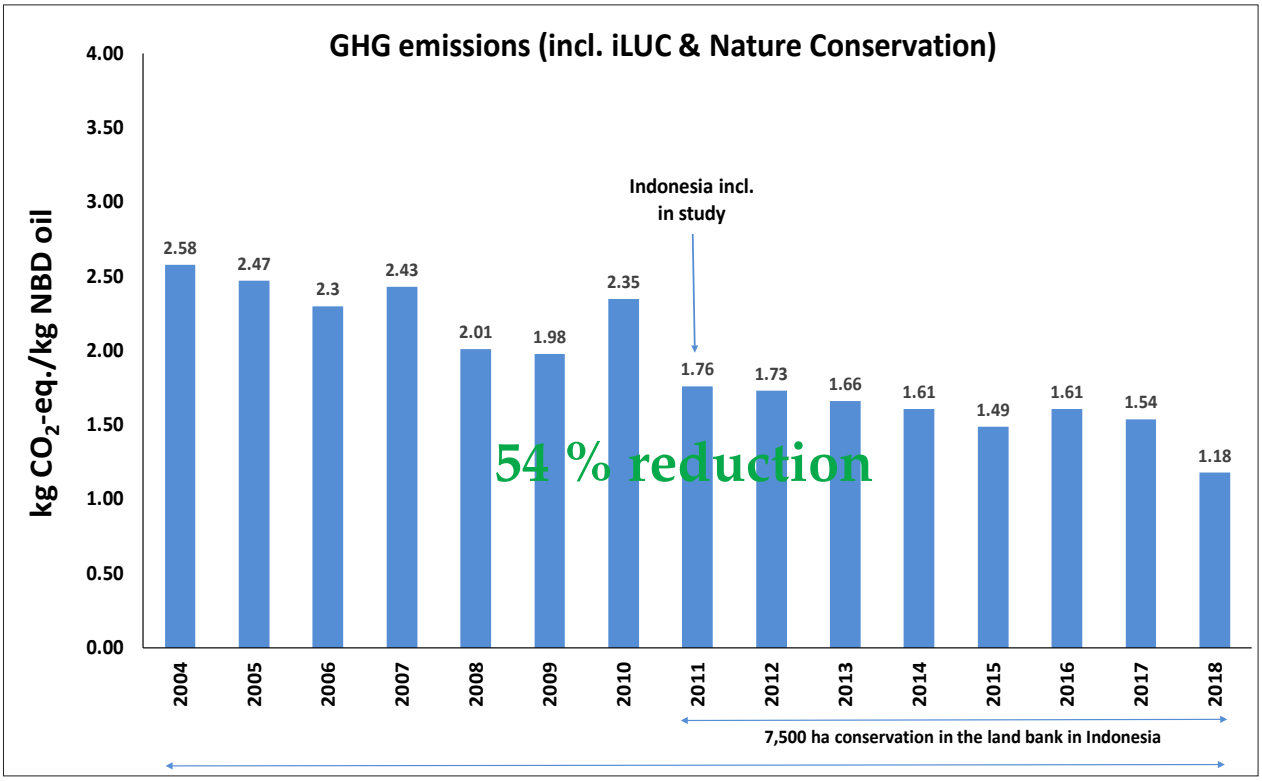
With more initiatives and further investments between 2019-2025, our internal goal is to reduce UP's Carbon Footprint per MT of refined palm oil produced by 60% before the end of 2025 when compared with previous 2004 levels (with iLUC and nature conservation).

Emissions Reductions & Biogas Plants

(GRI 302-3, GRI 302-4)

Since 2005, significant investments have been made in promoting green energy starting with the initial Biomass Reciprocating Boiler cum Power Plant and the first Biogas Plants built and commissioned in 2006.

These projects combined have since helped to significantly reduce our emissions of CO_2 by 70% and CH_4 by 80% at the respective operating units thereby paving the way for additional green investments.



Time-series for NBD Palm Oil at United Plantations Berhad (with iLUC and nature conservation) for year 2004-2018

Indonesian Palm Oil Mill and Biogas Plant (GRI 302-3)

To further reaffirm our commitment towards reducing our GHG emissions, our 4th Biogas Plant, the first of its kind in Central Kalimantan was commissioned in June 2013 at our Company's Palm Oil Mill in Indonesia.

The fifth and final biogas plant was commissioned in 2018 and this has resulted in all mills in our Group having methane capture facilities in the form of Biogas plants.

United Plantations Biogas to Grid Project

Since the UIE biogas plant began operation in 2010, the biogas generated at the mill was either flared or used as a substitute fuel in the mill boiler.

In order to further improve our carbon footprint and to better utilise this resource, a Power Purchase Agreement was signed in December 2015 between TNB and UP, whereby UIE has been given the right to generate electricity and sell electricity back to the National grid.

In this connection, the biogas generated from the biogas plant (capacity 600m^3/hour) is scrubbed to remove the hydrogen sulphide and then used as fuel to generate electricity via a newly installed 1.2MW Biogas Engine, minimising the need for the closed flaring operation and utilising the biogas to offset fossil fuel consumption by generating electricity.

The final approval from the Energy Commission was obtained in October 2016, the electrical protection system was commissioned on 10th November 2016 and supply to the grid commenced in November 2016. The quantum of renewable energy generated in 2018 was however lower than the previous year as a result of problems with the bacteria flora which was later resolved.

Biomass Reciprocating Boiler

The first Biomass Reciprocating Boiler (BRB1) was successfully commissioned in 2006 and supplied green steam to Jendarata Palm Oil Mill as well as the Unitata Refinery, thus playing a crucial role in reducing the fossil fuel consumption at the refinery.

Since then the company has built another 7 biomas reciprocating boilers and commissioned 6 of them with the last one at UIE(M) scheduled for commissioning in the month of March 2019.

All the biomass boilers are equipped with the VORSEP dust particle minimizing system, and an automatic fuel feeding system with greater energy efficiency and a lower labour requirement.

The new biomass Reciprocating Boiler at the Optimill commissioned in November 2017.

Isokinetic Monitoring of Gaseous Emissions from the Palm Oil Mills (GRI 305-7)

In conformance to the Department of Environment's stipulations as well as to monitor the quality of our gaseous emissions, flue gas compositions were regularly checked by certified assessors throughout 2018. The average dust concentration in the flue gases of four palm oil mills in UP's Malaysian Operations and the Indonesian mill without the VORSEP System were as tabulated.

In all cases the average dust concentrations were below the limit of 0.4g/Nm^3 set by the Department of Environment as per the Environment Quality Act, 1978 in Malaysia and the 0.3g/Nm^3 set by the Peraturan Menteri Negara Lingkungan Hidup No. 07 Tahun 2007 in Indonesia.

Palm Oil Mill	Average Dust Concentration (g/Nm^3)
Jendarata BRB 1 and 2	0.191
Ulu Bernam Boiler 2	0.129
Ulu Basir Boiler 4	0.121
UIE Boiler 1 & 3	0.131
Lada Boiler 1 & 2	0.153

VORSEP Dust Collector System at Ulu Basir Mill and Jendarata Mill

The VORSEP dust collector system was installed on our Biomass Reciprocating boiler at Ulu Basir Palm Oil Mill replacing the old conventional multi-cyclone dust collector system.

This unit was commissioned in the beginning of June 2015 whilst the unit at Jendarata Palm Oil Mill was commissioned in September 2017.

These units were installed primarily to meet the DOE's Environmental Quality Act (Clean Air Regulation) 2014 among others requires a cleaner emission standard from the boiler with the following conditions: -

i) The dust concentration emitted from the stack should not be more than 0.150g/Nm^3

ii) The smoke should not exceed shade No. 1 on the Ringlemann chart and should be less than 20% opacity

Today all of UP's palm oil mills have introduced the VORSEP dust collector system. However only 3 of UP's 4 Malaysian mills have commissioned the VORSEP system with the UIE(M) only expecting to commission the VORSEP system by April 2019.

Production and Level of Utilisation of Oil Palm Biomass Residues in UP in 2018

(Dry Matter Basis-Malaysian Operations)

Biomass	Quantity Produced (MT)	Quantity Utilised (MT)	% Utilisation	Method of Utilisation
Trunks and fronds at replanting	152,954	152,954	100	Mulch
Pruned fronds	294,091	294,091	100	Mulch and erosion mitigation
Spent male flowers	28,278	28,278	100	Organic matter recycled on land
Fibre	68,928	68,928	100	Fuel & mulch in nursery
Shell	38,282	38,282	100	Fuel & mulch for polybag seedlings
POME	26,473	24,487	92	Biogas generation, nutrient source, field irrigation and base for organic fertiliser production
EFB	78,089	78,089	100	Mulch and Fuel
Total	687,095	685,109	-	-
		Level of utilisation =99.7%		

In 2018, a total of 687,095 MT of biomass residues were generated through the various field and mill operations of the Company's Malaysian operations. From these a very high ratio of 99.7% of the total biomass generated, or 685,109 MT were utilised with most of the residues recycled as organic matter back to the fields, used as organic mulch in the nursery or as fuel source, thereby enriching our soils and displacing the use of fossil fuels whilst adding value to the biomass generated.

To further enhance biomass utilisation, another three units of Biomass Reciprocating Boilers were installed and commissioned at our UIE palm oil mill, and the Optimill in 2018.

(Dry Matter Basis-Indonesian Operations: Lada and Runtu Estates)

Biomass	Quantity Produced (MT)	Quantity Utilised (MT)	% Utilisation	Method of Utilisation
Trunks and fronds at replanting	-	-	-	-
Pruned fronds	91,957	91,957	100	Mulch and erosion mitigation
Spent male flowers	8,842	8,842	100	Organic matter recycled on land
Fibre	24,385	24,385	100	Fuel & mulch in nursery
Shell	15,456	15,456	100	Fuel & mulch for polybag seedlings
POME	7,231	6,689	93	Biogas generation, nutrient source, field irrigation
EFB	29,544	29,544	100	Mulch and Fuel
Total	177,415	176,873	-	-
		Level of utilisation =99.7%		

Our Indonesian operations generated a total of 177,415 MT of biomass dry matter in 2018. Even though the quantum is lesser than what is generated in Malaysia, a very high proportion of these biomass (176,873 MT or 99.7%) was utilised through recycling in the field and as an energy source with all the added benefits to the environment.

Fertilizer Equivalent and Monetary Value of Oil Palm Biomass Residues Recycled on Land in UP in 2018

(Malaysian Operations)

Biomass Residues	Method of Utilisation	Quantity Utilised on Dry Basis (MT)	Fertiliser Equivalent (MT)			
			Urea	Rock Phosphate	Muriate of Potash	Kieserite
Trunks & fronds at replanting	Mulch	152,954	1,912	642	2,460	1,173
Pruned fronds	Mulch	294,091	6,630	2,157	5,607	3,671
Spent male flowers	Organic Matter	28,278	910	602	1,673	868
EFB	Mulch	64,561	1,123	473	3,120	717
Digested POME	Biogas generation & Irrigation	24,487	852	539	1,339	980
Total (MT)		564,371	11,427	4,413	14,199	7,409
Monetary value (RM)			13,482,814	1,390,274	15,974,512	4,667,306
Total monetary value RM 35,514,906						

(Indonesian Operations - Lada and Runtu estates)

Biomass Residues	Method of Utilisation	Quantity Utilised on Dry Basis (MT)	Fertiliser Equivalent (MT)			
			Urea	Rock Phosphate	Muriate of Potash	Kieserite
Trunks & fronds at replanting	Mulch	-	-	-	-	-
Pruned fronds	Mulch	91,957	2,073	674	1,753	1,148
Spent male flowers	Organic Matter	8,842	284	188	523	271
EFB	Mulch	28,487	495	209	1,376	317
Digested POME	Biogas generation & Irrigation	6,689	233	147	366	268
Total (MT)		135,975	3,085	1,218	4,018	2,004
Monetary value (RM)			4,029,803	670,314	5,301,091	1,727,872
Total monetary value RM 11,729,080						

With our commitment to sustainability and good agricultural practices, the recycling of field and mill biomass residues back to the oil palm land remains a cornerstone in UP. These measures have been shown to maintain and even improve soil fertility in the long term and enhance palm growth and oil yield.

In 2018, the total organic matter recycled on land in UP amounted to 564,371 MT of dry matter which is equivalent to 327,335 MT of carbon. At this rate, we are returning close to 17 MT of organic matter or around 10 MT of carbon to each hectare of land, over the period of a year, thereby helping to replenish the soil carbon stock with a significant impact on soil health.

Upon mineralisation, the organic residues release substantial quantities of previously locked plant nutrients to the soil which is available for palm uptake.

The fertiliser equivalent of the material recycled on land is of the order of 37,448 MT of NPKMg fertiliser which in itself has a monetary worth of RM35.51 million at the 2018 fertiliser prices.

For our Indonesian operations, a total of 135,975 MT of biomass was recycled onto plantations land. This is equivalent to adding 78,866 MT of organic carbon to enrich the land which on a hectare basis is akin to returning 16 MT of organic matter (or over 9 MT organic carbon) to the land.

On the more sandy soils in Indonesia such inputs will have a significant influence on improving long term soil health. The nutrient content in these recycled biomass is equivalent to 10,325 MT of inorganic NPKMg fertilisers, with a value equivalent to RM11.73 million at 2018 prices.

Biogas Engines at the Optimill supplying electricity to the UniFuji Refinery.

The Optimill and Unifuji project encompassing an example of the "circular economy". An enormous effort was undertaken by many to complete this state of the art project.

The Optimill Project

In 2015 the Board of UP decided to build a new Palm Oil Mill, called the "Optimill", with the most modern equipment and technologies available in the industry and incorporating this into a layout that would not only mirror the Danish Dairy Industry standards but also be a perfect example of the circular economy.

By choosing the right location and capacity for the Optimill it has enabled UP to close two of its older mills and process the crop from approximately 18,000Ha of UP's land. In addition, it was agreed that UP should explore the opportunities to utilize the enormous amount of biomass that would be available from the new Mill. This amongst others would include an adjacent Biogas Plant thereby closing the loop and mitigating greenhouse gas emissions considerably as is the case at all of UP's other Palm Oil Mills.

The Optimill, being the biggest engineering project undertaken in UP's 113 year history was completed on the 29th November 2017.

The UniFuji Project

With the large amounts of renewable energy available from the Optimill, UP managed to pursue a collaboration with the Japanese Company, Fuji Oil as they had been looking to expand their refining business to produce value added palm fractions made from RSPO certified plantations. The common objective was to do this without the use of fossil fuels as well as complying with the highest possible food safety and quality standards in the world.

The UniFuji Refinery project, which is a 50:50 JV between UP and Fuji Oil, was therefore conceptually agreed upon in 2016 after which the initial foundation works and site preparations began.

During the second half of 2018, the JV materialized into a super modern and efficient integrated refinery setup including a solvent fractionation plant in the Ulu Bernam Area of Lower Perak providing employment for about 60 people.

The state-of-the-art factory is a result of two companies coming together with a shared goal of producing value added palm components based solely on UP's certified sustainable and traceable palm oil and Fuji's expertise on technical capabilities.

With the completed projects depicted in the picture above, UP and Fuji Oil have taken a giant leap forward in terms of encompassing and amalgamating the most modern equipment and technologies available in the industry and marrying this into a layout which today is a perfect example of what the circular economy can look like.

The Projects are testimony to the fact that no one in the top is stronger than the pyramid of people who support them. Both UP's and Fuji´s appreciation goes out to the team involved for their admirable dedication and commitment which exemplifies the spirit of being "second to none".










Development stages of the Optimill and Unifuji project.

Inauguration of The Optimill and UniFuji Refinery

On 17 January 2019, the Optimill as well as the Unifuji Refinery project were officially inaugurated by our gracious guest of honour His Majesty Sultan Nazrin Muizzuddin Shah, Deputy Yang Di-Pertuan Agung and Duli Yang Maha Mulia Raja Permaisuri Perak Darul Ridzuan Tuanku Zara Salim.

Various pictures taken on the 17 January 2019 providing a lasting memory on a most eventful day.

His Majesty Sultan Nazrin Muizzuddin Shah, Deputy Yang Di-Pertuan Agung, the Mentri Besar of Perak, Dato' Seri Ahmad Faizal bin Azumu and YB Teresa Kok being briefed on the project by Dato' Carl Bek- Nielsen.

Members of the TEAM in commemoration of a grand and memorable opening ceremony on 17 January 2019.

UNITED PLANTATIONS BHD. **UNIFUJI SDN. BHD.** **FUJI OIL HOLDINGS INC.**

The EXCOM Members, Mr. Martin Bek-Nielsen, Dato' Carl Bek-Nielsen and Mr. Loh Hang Pai flanked by the President Director Mr. Muhammad Ratha , Manager of Lada Estate, Mr. Ramadevan on a field visit in Janaury 2019.

10. Water Impacts

Relates to UP's measure to preserve and protect waterways and manage the use of water throughout our organisation

Introduction

Plants obtain almost all the water they require from the soil. Of the enormous quantities taken up, only a fraction of one percent is retained in the plant tissues. Yet this minute fraction is all important for growth. Water is required for a number of physiological functions, including manufacture of carbohydrates, maintenance of hydration of the protoplast and for the transport of nutrients.

Today's water management challenges and tomorrow's differ greatly from those of the last decades. A growing number of poor people and continued environmental degradation imply that the finite natural resources available to humans and ecosystems will not support business as usual for much longer. Thinking differently of water is a requirement if we want to reverse these trends and achieve our triple goal of food security, poverty reduction and conserving environmental integrity.

Farming feeds the world, but it depends on vital resources such as water. Irrigation for agriculture consumes 2/3 of the world's fresh water but non-irrigated agriculture today produces about 60% of the world's food.

Experts have concluded that agricultural output will need to double by 2050 to feed a growing world. We will, in other words, not only need to produce more from each hectare of land but also get more from each drop of water.

United Plantations fully appreciates that much more can be done in terms of water productivity.

In order to maximize the available water resources, United Plantations has, since 1913, gone to great length to construct an extensive system of watergates, bunds, weirs, canals and drains hereby enabling us to harvest and optimize the usage of rain water.

In addition, leguminous cover crops are established in all our immature plantings to conserve moisture.

In this context, it is important to mention that except for the nursery areas, none of United Plantations' planted areas under oil palms or coconuts are irrigated. All our areas are under rain-fed agriculture, thus making use of whatever water comes naturally from above. We are continuously working to mitigate our water footprint related to mill waste, maintaining buffers along natural waterways, harvesting rainwater, frugal domestic water usage and judicious use of pesticides and weedicides.

The consumptive use of water (evapotranspiration) of our crops ranges from 120-150 mm per month. To meet these requirements, the monthly rainfall should equal or preferably exceed this figure, failing which moisture stress would occur. The rainfall in the UP Group ranges from 1,600 to 2,500 mm per year, with the average being 2,000 mm. Monthly distribution is reasonably uniform, but drought does occur when some estates receive less than 100 mm of rainfall over 2-4 months as experienced in 2015. Weirs have been constructed across the collection drains to harvest rainfall and hold back water to raise the water table.

Hydrology and Limnology

Clean water is critical to sustain all kinds of life form on Earth. In rural Indonesia thousands of local residents are dependent on water supplies from lakes and rivers.

Maintaining a clean and uninterrupted supply of water constitutes one of the most critical components in sustainable palm oil production.

The Biodiversity team has developed a "Hydrology map" and identified a number of permanent sites for sampling water quality. Using state-of-the-art equipment, the team measures and records organic, inorganic and physical pollution parameters in the field.

Potential trace elements and toxins are measured with a spectrophotometer in the laboratory. In the event of a sudden deterioration in water quality, the team will identify the source of pollution and initiate a process to rectify the problem.

The water reservoir at Jendarata Estate.

An effective drip irrigation system at Ulu Bernam nursery.

A large water pump to help mitigate periodic flooding at Runtu Estate, Kalimantan.

This includes identifying any unusual organic contamination, usually due to empty fruit bunches that have mistakenly slid into a stream or if an unusual high level of inorganic contamination is detected, it is usually a result of excessive wash-out of fertilizer.

Such information is communicated to the respective estate manager, allowing them to rectify a potential problem within a very short time period.

In our pursuit to conserve this depleting precious gift, every effort is being done to educate our residents to be frugal on its usage. Old water pipes, water tanks, faulty taps are being replaced from time to time to arrest leakages.

We aim to reduce the consumption in the coming years with more awareness programmes.

Erosion Monitoring Plots

To better understand the dynamics of soil, water and nutrient loss that can occur on our property, several erosion monitoring plots measuring 6m X 20m were set up in one of our estates on slightly sloping land under mature oil palm.

Thereafter the amount of soil loss, surface runoff and nutrient losses in each of these fractions are being closely monitored to determine the major routes of soil, water and nutrient loss.

Such studies illuminate the areas of major nutrient loss is through surface run-off for which mitigating measures can be developed to minimise the depletion of these vital natural resources.

Laboratory assistant conducting analysis at our PT SSS chemistry laboratory.

Per Capita Domestic Water Consumption Per Day

	2018	2017	2016
Malaysian operations (gallons)	69	58	61
Indonesian operations (gallons)*	76	66	NA

**2014-2016 flowmeters were progressively installed in our Indonesian operations (Lada and Runtu Estates) as the housing complex was being expanded.*

11. Peat Development

The Group has committed to no new development on peatland regardless of depth since 2010. However, the management plans are in place and being implemented on existing plantations on peat

Water Management

Water management is particularly important on the acid sulphate and peat soils. These soils are fragile and if over drained, they will rapidly deteriorate. On the acid sulphate soils, the water level should be maintained up to the jarosite layer, submerging the pyrite (FeS_2) and preventing it from oxidizing to sulphuric acid, which can cause a steep drop in the pH.

Weirs for Moisture Conservation

To conserve moisture during dry periods, a series of weirs are constructed across the collection drains to hold back water and raise the water-table to within 50-75 cm from the surface. The weirs are made of wood, concrete or they can simply be sandbags. The concrete structures are either built on site or they are precast and placed into position.

To regulate the height of the water table, wooden planks are slotted into the desired level. Except for periodic flushing of acidic water during the rainy seasons, the blocks are maintained at the predetermined level at all times. The density of weirs varies with the soil type, slope, rainfall and cropping system. On the average, one weir is provided for every 40 to 60 hectares or every 600-1,000m along the collection drain. Assisted by the water gates at the discharge ends of the main drains, the weirs are very effective in minimizing the adverse effects of the moisture stress. United Plantations has recently engaged an external consultant to undertake a peat drainability study in our Malaysian operations to better understand the hydrological characteristics of our peat areas.

Monitoring of meteorological parameters

Weather stations have been setup at strategically important locations throughout our Group. These provide a large amount of micro-climate information critical to, particularly, make accurate fire-risk predictions. Being able to predict the risk of fire allows the management in each estate to implement proactive measures, to prevent and minimize the risk of fire, as well as to be on high alert with firefighting equipment, in case of fire outbreak.

Effects of Moisture Stress

Moisture stress causes reduction in cell division and cell elongation – two important growth processes. Its effect on oil palm and coconuts is summarized in the table given.

Water tanks are supplied for harvesting rain water.

Rain Harvesting (GRI 303-3)

As part of our effort to conserve water resources and minimise wastages we have embarked on a programme to fit workers' housing with tanks to store harvested rain water which is especially beneficial during periods of prolonged dry weather

Mill Water Consumption Rate

Water consumption rate in our Indonesian operation has improved over the recent years whereas the mill water consumption rate in our Malaysian operations has also improved with the phasing out of the older mill and the commissioning of the new Optimill.

Mill water consumption rate in processing fresh fruit bunches (MT water/MT FFB processed)

	2018	2017	2016
Malaysia	1.5	1.8	1.7
Indonesia	1.2	1.4	1.3

Effects of Moisture Stress on Oil Palm and Coconut

Oil Palm	i	Accumulation of unopened spears
	ii	Reduced leaf production
	iii	Drying and snapping of leaves
	iv	Abortion of inflorescence
	v	Affects sex differentiation favouring male flower production
	vi	Reduced oil/bunch yield
Coconuts	i	Premature nut fall
	ii	Reduced nut yield
	iii	Reduced nut size
	iv	Reduced copra/nut

12. Pesticides and Chemical Usage
(GRI 301-1)

Conducting our operations under the best principles of agriculture, and to reduce chemical and pesticides usage thereby minimising the impact to the natural environment

UP has a strong commitment to Integrated Pest Management (IPM), and in line with the Principles and Criteria of the RSPO we are continuously working on reducing the usage of pesticides. Our employees' safety is a top priority and in this connection all sprayers are trained extensively and are required to use full Personal Protective Equipment.

According to CropLife International, a global federation representing the plant science industry, 42% of crop production throughout the world is lost as a result of insects, plant diseases and weeds every year. In the tropics crop losses can reach as high as 75%.

Careful use of pesticides can deliver substantial benefits for our society through increasing the availability of good quality and more affordable priced food products. However, pesticides are inherently dangerous and it is in everyone's interest to minimize the risk they pose to people and the environment.

Integrated Pest Management (IPM)

IPM, means a pest management system that in the context of the associated environment and the population dynamics of the pest species, utilizes all suitable techniques and methods in as compatible a manner as possible and maintains the pest population at levels below those causing economically unacceptable damage or loss.

Source: FAO

Our commitment towards continuous improvements has resulted in minimizing the usage of pesticides in relation to other major oil seed crops, primarily through Good Agricultural Practices and improvement in planting materials. Today, UP's use of pesticide is 4-6 times lower per tonne of oil produced compared to Rapeseed farmers and about 32 - 44 times lower compared to Soybean farmers.

Establishing Beneficial Flowering Plants

To date a total of 262,905 broadleaf flowering plants have been planted in our Malaysian and Indonesian plantations to encourage parasite and predator activities which is a vital cog of our IPM programme.

There has been a steady increase in the number of beneficial plants which were planted in our Malaysian and Indonesian properties over the last few years.

However due to replanting activities in most of the Malaysian estates as well as the loss of beneficial plants to flood, beneficial plants numbers have been set back for some years although numbers are expected to further rise in the coming years.

	Malaysia	*Indonesia*
Cassia cobanensis	- *43,219 planted*	- *14,712 planted*
Tunera subulata/ulmifolia	- *97,756 planted*	- *76,866 planted*
Antignon leptosus	- *13,986 planted*	- *77 planted*
Carambola sp	- *3,892 planted*	-
Others	- *3,763 planted*	- *8,634 planted*
Total	*162,616 planted*	*100,289 planted*

Surveillance and Monitoring of Pest Outbreaks

The key to minimizing both the economic impact of pest and environmental impacts from excessive use of pesticides is by regular surveillance and monitoring.

Treatment is only carried out when the damage exceeds established critical thresholds. Several census gangs are deployed on each estate to survey the extent of pest infestation.

This is coupled with regular aerial reconnaissance in order to track and pre-empt pest build-up thereby more effectively treating potential outbreaks.

United Plantations Palm Oil (Malaysian Operations*)				Soybean**	Sunflower**	Rapeseed**
	2018	2017	2016			
Pesticides / Herbicides (kg per MT oil)	0.702	0.66	0.83	29	28	3.73

**Includes palm oil + palm kernel oil (UP, 2016-2018 - Malaysian operations)*
*** Data from FAO, 1996 - Pesticide data for rapeseed updated in 2010*

United Plantations Palm Oil (Indonesian Operations*)				Soybean**	Sunflower**	Rapeseed**
	2018	2017	2016			
Pesticides / Herbicides (kg per MT oil)	0.12	0.14	0.18	29	28	3.73

**Includes palm oil + palm kernel oil (UP, 2016-2018 - Indonesian operations: Lada and Runtu Estates)*
*** Data from FAO, 1996 - Pesticide data for rapeseed updated in 2010*

Rhinoceros beetle grubs thriving on rotting organic matter.

A rhinoceros beetle adult attracted to an oil palm seedling

Use of biological pesticides and pheromones

First line treatment against leaf pests i.e. Nettle Caterpillar and Bagworm is by biological treatment in the form of *Bacillus thuringiensis*. The use of pheromones to trap Rhinoceros Beetles thus reducing the dependency on chemical pesticides is also encouraged on all estates.

Besides trapping out the beetles, pheromone traps also provide management with statistical information of the severity of the beetle problem and supplements the chemical spraying operations to minimise beetle damage.

Overpopulation of rats, beetles and various kinds of weeds can have profound negative impact on production and yield. UP Group attempts to minimize the usage of chemical control-agents where possible, and the BioD undertakes a number of research projects to maximise the usage of biological control agents where possible.

For example, leopard cat (*Prionailurus bengalensis*) is one of the key-predators of rats and other small rodents, and preliminary studies on the effect of these cats as rat-controllers in a plantation landscape is ongoing.

The results have been very promising, and UP's biodiversity team is currently exploring ways to enrich the habitat conditions for leopard cats, to maximise the population density and thereby reduce the effect of rat damage.

Apart from leopard cats, the team also records ecological parameters along with the effect on rat populations of other predators such as barn owls (*Tyto alba*), spitting cobra (*Naja sumatrana*) and water monitor lizards (*Varanus v. salvator*).

Mr. Shimizu (left) the CEO of Fuji Oil and Mr. Mikey (2nd) from the right being shown how Integrated Pest Management is applied in the use of pheromone traps on Jendarata Estate.

The following pages provide an overview of some of the methods to reduce pesticide usage as well as ongoing research within our biodiversity team and UPRD:

5-Step Integrated Pest Management Programme approach taken to contain and/or control Bagworm outbreak thus limiting the usage of monocrotophos:

1) Integrated Pest Management
E.g. planting of beneficial plants to enhance the natural parasitic and predator activities against bagworm.To date more than 262,905 beneficial broadleaf flowering plants have been planted in both Malaysia and Indonesia.

2) On-going Monitoring
Census gangs deployed on each estate who take random frond samples in a pre-determined pattern throughout each estate. These fronds are subjected to insect counts and damage assessments by trained personnel.

3) Aerial Surveillance
Regular aerial reconnaissance is carried out to better detect, pre-empt and treat potential outbreaks.

4) Use of biological control agents
E.g. Bacillus thuringiensis as the first line of treatment against an outbreak.

5) Final Resort
As a final resort and only when Steps 1 to 4 have proven to be futile in containing or controlling the natural equilibrium between pest and beneficial predator, our trained personnel intervenes with the specific treatment of trunk injection using monocrotophos.

Mowing of Harvesters' Paths

Blanket weeding is discouraged, soft weeds with shallow root system which do not grow to excessive heights are encouraged outside the weeded palm circle. Harvesters' paths are mowed. This practice maintains a flora which is favourable to natural enemies of crop pests and reduces soil loss.

Use of Safer Class 3 & 4 pesticides wherever possible

In line with the RSPO's continuous improvements initiative the Company's Group Sustainability Committee monitors and reviews the pesticide usage, exploring avenues to reduce overall pesticide usage as well as evaluating alternative safer pesticides. In this context, UP has since February 2008 been working towards minimizing the usage of Paraquat, which has been documented in the annual RSPO Surveillance Audits.

In May 2010, Management took the decision to voluntarily phase out the usage of Paraquat, a goal which was realized with effect from October 2010.

Monocrotophos

Monocrotophos is a class 1B insecticide which is permitted in Malaysia for trunk injection of palms affected by bagworm. Foliar application usage was banned by the Malaysian Government in 1996. Efforts to source and evaluate alternatives for the Class 1B insecticide, monocrotophos, have been ongoing since 2006 and are still being pursued together with several multinational chemical companies, amongst others Bayer and BASF (Germany), Syngenta (Switzerland), Cheminova (Denmark) and Sumitomo (Japan) and Rainbow Agrosciences (China).

So far, we have not been able to meet our internal goals of phasing out monocrotophos as the agrochemical industry has not been able to identify an effective and suitable alternative that is able to effectively control bagworm. This conclusion is shared by all the leading multinational chemical producers present in Malaysia.

Monocrotophos will therefore still be used in very limited quantities for trunk injection only and solely as a last resort in the company's 5-Step Integrated Pest Management Programme when all other attempts to contain or control

Spreaders are used to apply fertilisers evenly and in a cost effective manner.

Palms defoliated by bagworm outbreak.

A widely planted beneficial plant – Antigonon leptosus.

Sycanus predating on a leaf eating caterpillar.

a bagworm outbreak have been exhausted. This is in full compliance with all relevant rules and regulations in Malaysia as well as with the RSPO Principles & Criteria.

In 2018, monocrotophos usage was halved from the previous year due to improved pest situation in our Malaysian estates. Prior to this outbreak the Company has successfully reduced its use of monocrotophos as an active ingredient basis by approximately 53% since 2006.

Much progress and efforts are being made to continue this positive trend. In this connection, the collaboration with the Centre of Agriculture Biosciences International (CABI) in relation to management of bagworm in oil palm through an integrated ecological approach with biological control agents such as predators and other entomopathogens was formalized in 2011 for a two-year study

The objective of the study is to develop an effective strategy to manage bagworm pests through the mass breeding and release of biological control agents such as predators complemented with the application of entomopathogens in affected fields. Arising from this collaboration, efforts to rear and propagate a number of predator species in a purpose-built insectary since 2012 are continuing.

The eventual benefit of this endeavour may lead to sustainable bagworm control requiring minimal intervention with chemical insecticides.

Bagworm is an endemic pest in Lower Perak and the Federal Government has gazetted this as a "Dangerous Pest" on 15 November 2013. It is an offence under the Plant Quarantine Act 1976 if this dangerous pest is left without any control and can be fined up to RM10,000.

Outbreaks of bagworms continue to occur in the properties neighbouring UP in the State of Perak, West Malaysia. This is of great concern as it is important that concerted effort by the government authorities, neighbouring smallholders and other plantations are put in place in an attempt to eradicate this serious pest.

UP is working closely together with its neighbours as well as the authorities in the form of the Malaysian Palm Oil Board (MPOB) to achieve positive progress on this concerning issue. UP has extended its service to the neighbouring plantations the use of its airstrips for aerial bagworm control and also taking the plantation managers for aerial reconnaissance flights to monitor the extent of bagworm infestations in the region.

As can be seen in the table below, the quantity of agrochemicals (fertilizer nutrients and pesticide/herbicide) per tonne of oil produced in oil palm cultivation at UP over the last three years remain substantially lower than annual oilseed crops such as soybean, sunflower and rapeseed, a reflection on the resource utilization efficiency of the oil palm crop.

Pesticide usage has seen a slight increase in 2018 due to higher herbicide usage as a result of weather conditions favourable to weed growth.

Agrochemical and Energy Inputs in the Cultivation of Oil Palm and Other Oilseed Crops
(GRI 301-2, GRI 302-1)

Input	Per tonne oil basis					
	Oil Palm*			Soybean**	Sunflower**	Rapeseed**
	2018	2017	2016			
Fertiliser nutrients						
Nitrogen (N-kg)	19	14	20	315	96	99
Phosphate (P_2O_5-kg)	10	11	9	77	72	42
Potash (K_2O-kg)	44	35	47	NA	NA	NA
Magnesium (MgO-kg)	7	6	7	NA	NA	NA
Pesticides/Herbicides (kg)	0.70	0.66	0.83	29	28	3.73
Energy (GJ)	0.76	0.67	0.97	2.90	0.20	0.70

* includes palm oil + palm kernel oil (UP, 2016-2018- Malaysian Operations)
** Data from FAO,1996 - Pesticide data for rapeseed updated in 2010.

Biological Control Agents to Substitute for Chemical Insecticides

Leaf eating pest outbreaks in immature oil palms will need to be treated with insecticides. The use of biological insecticides such as Bacillus thuringiensis is encouraged at this young crop stage to minimise collateral damage on beneficial insects in the field as well as to reduce dependency on chemical insecticides.

Our use of biological insecticides is as recorded below although the quantity used is also dependent on the incidence of pest outbreaks which was less prevalent in 2018 than during 2016.

	2018	2017	2016
Malaysia	288	50	4,250
Indonesia	0	0	0

Quantity (kg) of Bacillus thuringiensis applied in our Malaysian and Indonesian operations

Harnessing advances in pesticide technology to reduce herbicide inputs in mature oil palm

In the wet tropics, weed species rapidly cover the ground and if left unchecked, will encroach into palm circles to compete with the palms for nutrients and water as well as interfere with field operations.

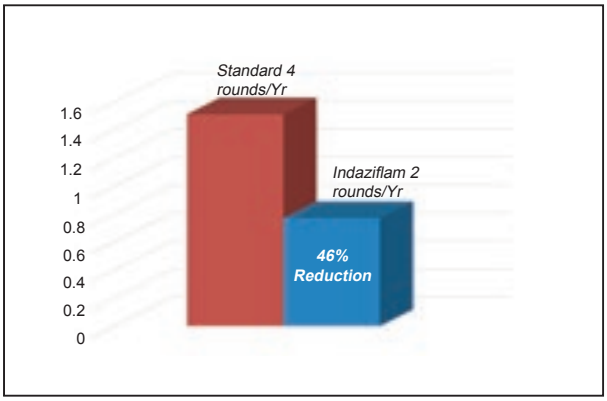
Consequently, herbicides are an important tool to keep the palm circles weed free. Of the total pesticides used in a mature field, herbicides will therefore account for more than half of the total pesticide load.

Thus any improvement in the length of control for weeds will contribute significantly to a reduction in pesticide use for mature palms.

Over the years United Plantations has actively co-operated with leading agrochemical manufacturers to evaluate a range of herbicidal compounds.

Arising from the close collaboration with Bayer CropScience a new compound, Indaziflam, with long lasting weed control was extensively tested in our fields and was found to be able to slash the number of herbicide rounds from four rounds a year with the standard herbicide mix to two rounds a year with the Indaziflam combination.

This confers the clear benefit of almost halving the herbicide input in a field and greatly improving labour productivity where this approach has been adopted.



Significant reduction of herbicide usage in mature fields with the use of Indaziflam herbicide compared to the standard herbicide combination.

Calibration for Pesticide Application Equipment

The Company engages the services of equipment suppliers to regularly monitor the calibration of the equipment to avoid application error (under and over applications) and safety to operators.

Regular training and refresher courses are implemented, all of which are audited by accredited auditors of the RSPO every year.

Chemical Health Risk Assessment (CHRA)

In line with the Use and Standards of Exposure of Chemicals Hazardous to Health (USECHH) Regulations 2000, UP first appointed a certified assessor to conduct CHRA in 2004, for all chemicals utilized in the respective plantations, oil mills and refinery.

It is being reviewed every 5 years by the assessor as stipulated in the Regulations and annual medical health surveillance is conducted on all spray operators.

As can be seen in table below, the quantity of agrochemicals (fertilizer nutrients and pesticide/ herbicide) per tonne of oil produced in oil palm cultivation at UP over the last three years remain substantially lower than annual oilseed crops such as soybean, sunflower and rapeseed, a reflection on the resource utilization efficiency of the oil palm crop.

Direct fossil fuel consumption in 2018 increased slightly from 2017 due to increased field operations and mill construction activities.

	2018	2017	2016
Malaysia	2.91	2.51	2.46
Indonesia	0.69	0.78	0.86

Reduction of overall herbicide usage (kg a.i./Ha/year) in mature oil palm planting with the introduction of Indaziflam herbicide in 2016 onwards.

Rats eat both palm fruits and male flowers as indicated above. Barn owls are the best partners to oil palm growers due to their ability to adapt well in oil palm plantations, significantly reducing rat population and usage of rodenticides.

Biological pest control of rats

Rats thrive in the oil palm ecosystem with an abundance of food source (palm shoots, fruit mesocarp, kernels, weevil grubs etc.) as well as plentiful harborage amongst the cut frond heaps. The common rat species encountered in an oil palm field are the Malaysian wood rat (*Rattus tiomanicus*), paddy field rat (*Rattus argentiventer*) and the house rats (*Rattus rattus diardii*).

With its prolific reproductive rate, whereby a sexually mature female could conceive multiple times a year and produce an average of 8 pups in each litter, rat populations can mushroom and threaten the oil palm plantings within a short time, given the right conditions.

Various researchers have estimated crop loss caused by rats feeding on fruit mesocarps to be able to reduce oil yield by 5 – 10% (Wood, 1976; Liau, 1990). Badly gnawed male and female inflorescences, as well as young palms killed by rat attacks further contribute to crop loss.

Barn Owls

The Barn owl is a much-loved countryside bird by oil palm planters as it predates on rats, resulting in major reduction of rodent damage. It is also one of the most widely distributed birds in the world.

This bird is the best partner to growers due to its ability to adapt well to oil palm plantations. It survives on a staple diet of 99% rats. It is estimated that a pair of barn owls together with its chicks consume about 800 to 1,000 rats per year.

The barn owls are medium sized (34-36cm) with long legs that have feathers all the way down to their grey toes. The owls have large, round heads without ear tufts and pale heart-shaped facial disc. The owls ingest the rats whole and use their digestive juices to dissolve the nutrients of the fleshy parts. The tougher indigestible parts such as the bones, skulls are regurgitated out.

Barn owl population in tandem with preys' availability can be expanded in the plantation by construction of boxes at vantage points – about 5 meters from the ground and shaded by the palms' canopies.

A zinc baffle or collar should be placed on the pole to prevent snakes etc. from predation of the owl's eggs and new born chicks. These boxes should be inspected regularly and repaired where necessary in order to optimize its' occupancy.

At United Plantations, the barn owl is the first line of defence against this serious pest. Where owls could not cope with the high rat population, first generation rat baits such as warfarin are employed to selectively bring down the population. Warfarin baits are preferred as they are relatively safer to barn owls than second generation rat baits. Based on the low usage of rodenticides in the past years, we can infer that the barn owl programme has been fairly successful in keeping rats under control.

Year	2018	2017	2016
Total Boxes	2,491	2,393	2,284
Total Area Under Owl (Ha)	32,322	31,308	31,040
Box to land ratio in Scheme	12.98	13.08	13.59
% Occupancy in Scheme	54.16	52.57	47.00
Total Planted Area (Ha)	35,813	34,808	36,496
Box to land ratio over Total Planted Area	14.38	14.55	15.98
Rodenticide ai/planted Ha (kg/Ha)	0.0008	0.0007	0.0012

Using leopard cats (Prionailurus bengalensis) as biological pest control of rats in UP Kalimantan estates. Shown here are tagging with radio collar for tracking their ranging behaviour.

Leopard cats

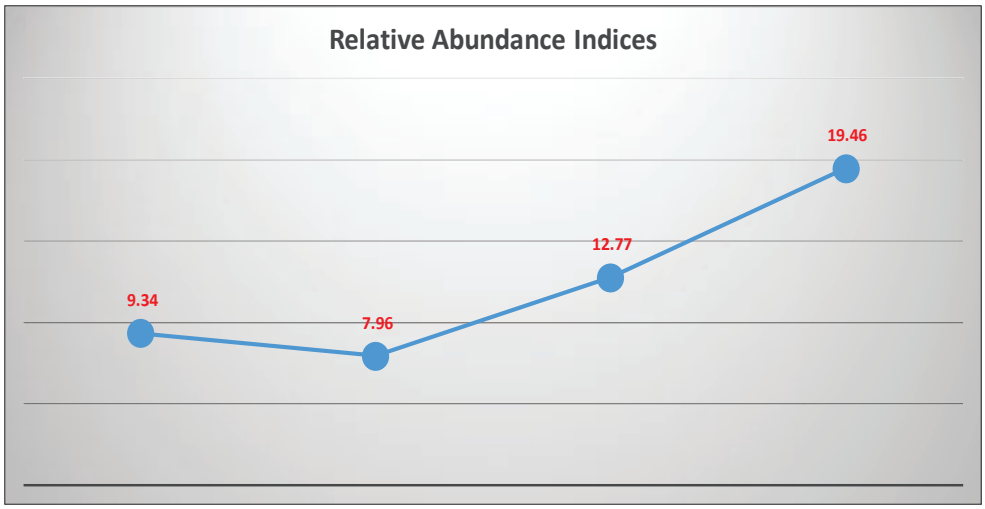
Since its formation in 2011, the BioD in UP/PTSSS has recorded a surprising number of leopard cats, *Prionailurus bengalensis*, in the estates. The species is common throughout Southeast Asia in undisturbed as well as altered habitats. They are common in some oil palm estates; however, little is understood about their role as rat predators in a plantation landscape although studies have shown that rats and mice constitute 93% of the leopard cat's mammalian diet (Rajaratnam et al.,2007). Field observations demonstrate there is a negative relationship between cat numbers and rat population, with high abundance of cats associated with low rat numbers and vice versa (Silmi et al., 2013).

To date, nine individual leopard cats have been collared and continuously tracked for 23 months, during which we collected a total of 1,500 GPS locations. These are used for estimating the respective cats' home-ranges and dispersal patterns.

The cats are strictly nocturnal and prefer to hide and rest in thick bush, primarily consisting of sword-fern (*Nephrolepis sp*) during day-time, but forage both on the ground and in the palm canopy at night. Some preliminary results conclude that leopard cats can feed, reproduce and thrive in a palm oil estate, with a mean home range (95% MCP) for male leopard cats 1.39 km^2 (n = 5; SD = 1.40 km^2) and a mean home range of female cats smaller at 1.26 km^2 (n = 4; SD = 0.36 km^2). In areas where rats constitute the main prey, leopard cats eat an average of 2-3 rats per day. Amphibians, snakes and birds are also on the menu.

With a body weight range of 2.5-4.0 kg leopard cats are expected to consume more food than the much lighter barn owl, a factor which may be favourable in its role as a rat control agent (Silmi et al., 2013).

Our observations reveal that leopard cats can reproduce rapidly with some females giving birth to 4 cubs, with reproduction cycle every five to six months.



Relative abundance is the percent composition of an organism of a particular kind relative to the total number of organisms in the area. The trendline shows the cat abundance increasing in the past three years which indicate that leopard cats adapt well within PT SSS' oil palm plantation habitat.

Conversion to Energy Saving T5 Fluorescent Lamps

As part of our efforts to improve energy efficiency and to reduce wastages, there is an on-going exercise to replace the existing T8 fluorescent lamps with the newer T5 lamps.

Some advantages of the T5 tubes are:

- A 25% gain in luminous efficacy vis a vis T8 lamps
- Light output that is closer to natural light spectrum which is beneficial to human health
- Less heat emitted during operation, with potential saving in air conditioning costs
- Minimal (5%) degradation in lumen output over the life of the lamp as opposed to 20% degradation for the T8 lamps
- Does not require replacing existing fixtures

To date 99% of the T8 lights at the Unitata refinery and another 60% of the lights in several estates which numbered in excess of 4,000 lights have been converted to T5 lighting, resulting in an energy saving of 92.5 kW.

Going forward the Company is also actively exploring other energy efficient measures.

Recycling of pesticide containers and scheduled wastes (GRI 306-2, GRI 306-4)

To avoid contaminating the environment and prevent misuse of pesticide containers and other scheduled wastes we have been collecting and disposing off triple rinsed pesticide containers, spent lubricants, used batteries and spent fuel filters through certified waste managers. The waste managers will either safely recycle these items or dispose of them in accordance with government regulations.

There is no deemed hazardous waste under the terms of the Basel Convention Annex I, II, III, and VIII, that were transported, imported, exported, or treated.

Triple rinsed plastic pesticide containers (MT)

	2018	2017	2016
UPB	29	25	27
PTSSS	1.8	1.9	0.5

Used batteries (pieces)

	2018	2017	2016
UPB	161	263	284
PTSSS	15	9	47

Spent lubricants (lit)

	2018	2017	2016
UPB	46,909	38,441	47,987
PTSSS	3,242	5,775	3,585

Spent fuel filters (pieces)

	2018	2017	2016
UPB	4,021	3,732	4,736
PTSSS	175	508	358

Temporary storage unit for used pesticides containers and schedule waste prior to recycling.

Community

Our business provides livelihood to families, small businesses and organisations in and around the plantations resulting in many people depending on our Group. Maintaining a good relationship with our local communities are therefore a key priority to our organisation.

13.Community Welfare

Our commitment to promoting socio-economic policies and progress in the local communities we operate in

UP has an obligation to monitor and manage any impact our operations might have on these communities and at the same time ensure that our local communities receive financial, social support and benefit by developing the local communities in which we operate by creating jobs, paying taxes and doing business with local enterprises.

Through respect and engagement with the local communities, important and continued integration being a key factor for the plantations' future success.

Social Commitments

Our Company's commitment towards providing and improving social amenities remains very much a hallmark within our Group. Continuous improvements were made during 2018 to maintain the highest possible welfare standards for our workforce and ensure high standard educational facilities for the children. Scholarships are provided to needy children among the Indonesian villages in which we operate.

Infrastructure investment and support

Supporting the surrounding communities in the form of investments in infrastructure projects, participation in cultural and sports events as well as religious ceremonies are important avenues to build up a sense of togetherness between the company and neighbouring communities in Indonesia.

We finance and provide services to improve rural communities' access to services and markets, as well as to create employment. Our initiatives include the construction, maintenance and renovation of roads, bridges, places of worship, and community facilities such as community halls, sports and cultural facilities.

Contributions to Society and the Local Community

Today, our Group has 9 Primary Schools and 7 Kindergartens on its properties which are maintained by the Company, providing education for more than 500 children ranging from age of 5 to 12 years from within and outside the plantations.

Estate Group Hospitals

The Company operates two well-equipped estate group hospitals in Malaysia and Indonesia with trained resident Hospital Assistants supervised by a Medical Doctor.

Regular inspections of the employees' housing are made by the Health Care Team to ensure that sanitation, health and drainage standards are up kept according to the Company's policies.

In addition, we also organize visits by our medical staff to the neighbouring villages for the benefits of the local communities.

Medical services are open to our rural neighbours who in the past lacked access to basic healthcare and immunisation programmes.

We also organize visits by our medical staff to the neighbouring villages for the benefits of the local communities. Medical services are open to our rural neighbours who in the past lacked access to basic healthcare and immunisation programmes.

The clinic providing medical care to our workers and residents on Jendarata Div III and Alfa Bernam as well as Unitata.

Kindergarten children joyfully posing for a photoshoot.

14. Free Prior Informed Consent

(GRI 412-1, GRI 413-1, GRI 413-2)

Our commitment in Indonesia to the principles of Free, Prior and Informed Consent and to adhere to these principles in all our negotiations and interactions with stakeholders

FPIC and Lingkar Komunitas Sawit (LINKS)

In order to fulfil one of the key requirements of the HCV/ HCS studies in relation to the area identified for plasma development, UP has cooperated with LINKS since September 2014 and is fully committed to RSPO New Planting Procedures for Oil Palm.

LINKS is an independent NGO providing social consulting services with the aim of supporting multi-stakeholder efforts in achieving economic and social justice in the palm oil sector of Indonesia.

LINKS completed their consulting services with PTSSS in September 2017 and has done a very good job assisting UP in complying with a proper FPIC process and necessary planning for the Plasma development plans in Kumai.

Engagement, Stakeholder Identification and FPIC Training

Since 2014, LINKS has worked on social research and mapping, information dissemination, conflict mediation and training of FPIC related issues for the local communities, UP's employees and the local government in preparation for our Group's new Plasma development plans.

Of key importance has been the collaboration between UP and the local communities, especially the ex-landowners or tenants and their testators as well as the various stakeholders from the villages in the designated area.

The land tenure study and mapping

The land tenure study, including the mapping of the land, provided important information about the history of the Communities' land tenure. According to the findings of the land tenure study there were 332 family groups of the ex-land owners or tenants and their testators, who used to be the holders of the land of ±2,500 Ha in Kumai Estate.

The land tenure and mapping study revealed information on overlapping claims and individual land owners not willing to participate in the plasma development plans. These areas together with the identified conservation areas have been set aside from the total identified concession of area, leaving approximately 450Ha available for new Plasma development.

The below diagram indicates the various steps to the FPIC process which ultimately will enable the potential establishment of the Plasma plantations.

The above approach have paved the way for a structured plasma process enabling further areas to be developed for the benefit of the local community as described under the plasma development section on page 119.

For further details on the FPIC reports, please refer to http://www.unitedplantations.com/sustainability/community_fpic_external.asp

Various steps to the FPIC process

Going forward it is important for all of the stakeholders involved to comprehend that the whole HCS study including the process of FPIC does not end with the signing of the Plasma Agreement.

The monitoring and evaluation of progress is important and will be carried out routinely in order to identify issues and find solutions together thereby maintaining a good relationship and a successful Plasma collaboration project.

Sustainability development and forest protection can be achieved by effectively implementing the processes summarized in the below diagram. HCV, HCS assessments (HCS Converged Approach) and FPIC processes must be integrated together with the other information specified above in order to develop appropriate development options. (HCS Converged Approach) and FPIC processes must be integrated together with the other information specified above in order to develop appropriate development options.

The diagram below indicates the many important processes and inputs required in order to make an effective land use plan for concession areas.

Balancing the effects of land conversion to oil palm on global climate issues with potential local/regional socio-economic benefits are extremely challenging, given the vastly differing spatial and temporal scales involved and the different metrics used to measure these impacts.

This is only possible by using a comprehensive approach to land development decisions that integrates relevant social, economic and environmental inputs via multi-stakeholders negotiations.

Making the HCV, HCS and FPIC approach a requirement for certification under the RSPO NEXT and the revised RSPO P&C 2018 and as part of purchasing policies of large companies, it is a good move to prevent and minimize deforestation in specific concessions and areas. We subscribe to the above in our new oil palm plantings and aim to fully comply in our sourcing of crop from third parties in the not too distant future. is a good move to prevent and minimize deforestation in specific concessions and areas.

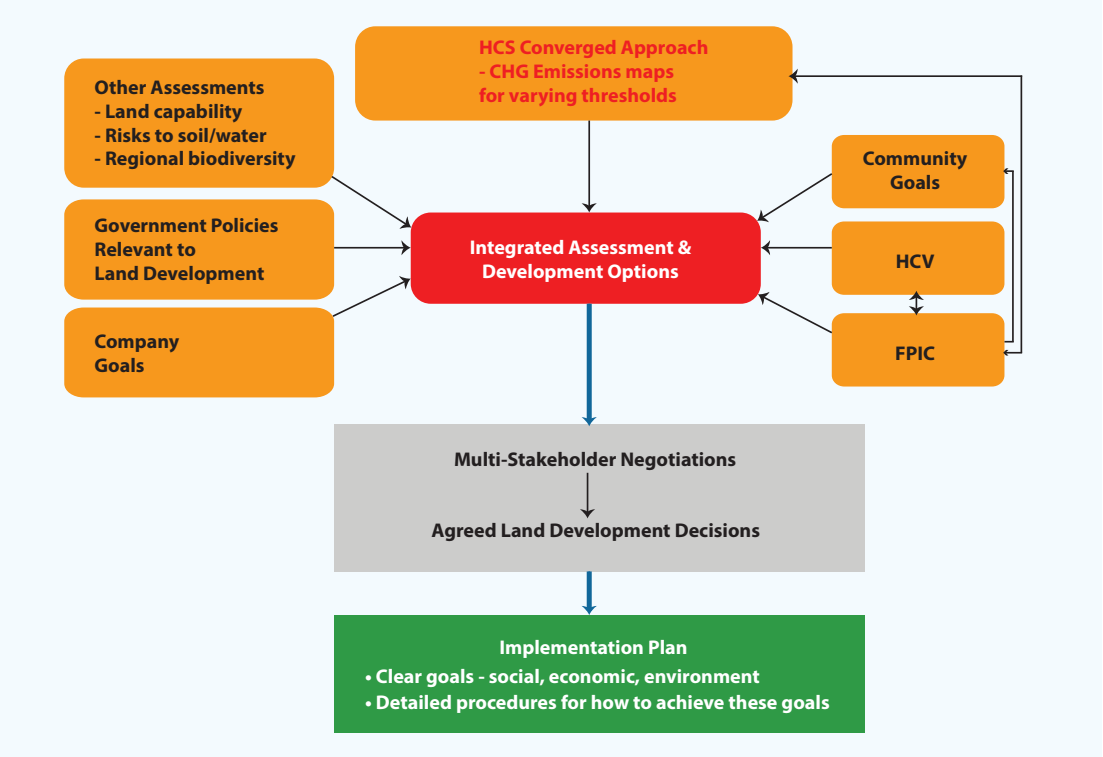
We subscribe to the above in our new oil palm plantings and aim to fully comply in our sourcing of crop from third parties in the not too distant future.

However, it should be acknowledged that unless government support and local people and communities can see their own economic interest and historic entitlements better met through forests set aside and protected for the long term rather than the short-term gain, it will be difficult to prevent deforestation no matter how good intentions companies may have.

Operations with significant actual and potential negative impacts on local communities. (GRI 413-2)

We conduct annually the Environmental Impacts Assessment (EIA) and Social Impacts Assessment (SIA) and the positive impacts are further replicated and enhanced.

The negative impacts such as unpleasant odour from the effluent pond are mitigated by various action plans such as installation of aeration devices and the Biogas Plant. The rehabilitation of riparian is in progress to mitigate water pollution.



A dialogue session on land matters was held on the 10 October 2018, between Mr, Martin Bek-Nielsen, Director of Finance & Marketing together with Prof Dr. Ir. Sigit Hardwinarto, M Agr Direktur Jendral Planology Kehutanan and Tata Lingkungan and Dr. Ir. Bambang Soepijanto Ex- Direktur Jendral Planology Kehutanan dan Tata Lingkungan, and our Management Team at PTSSS, Mr. Muhammad Ratha, President Director and Ibu Dewi Suyatman, Sr. Manager Legal & Corp Affairs.

"Koperasi" for worker's daily provision at PT SSS.

Free program "Posyandu" for pre and post natal care.

CSR project for the "masyarakat."

Scholarships to local students who excelled in their studies.

15. Grievance Resolution

Our obligation to a mutually agreed and documented system to deal with complaints and grievances, which is implemented and accepted by all parties

Land Disputes in Indonesia

In Indonesia land disputes are inevitable and part of managing plantations in the country. To minimize land issues, important free, prior and informed consent sessions with stakeholders are conducted as a vital part of sustainable plantation development.

Land disputes can be based on many different variables and reasons. Some cases are genuine and can be due to historical reasons, bad heritage, misunderstanding and miscommunication, cases of wrongful compensation amounts and frivolous claims.

It is however extremely important that land disputes are taken seriously and are well documented in order to ensure transparency and evidence in connection with various ongoing cases.

UP has been involved with several thousand land deals with the local community and whilst most cases of disputes have been amicably resolved, there still exists unresolved cases that are in the process of being resolved based on facts and full transparency under our Standard Operating Procedure (SOP) for Land Disputes Settlement as per FPIC.

For further details on SOP for Land Dispute Settlement as per FPIC, please refer to http://www.unitedplantations.com/sustainability/pdf/Land%20Dispute%20Resolution%20Flow%20Chart.pdf

Summary of Disputed, Resolved and Settled Cases from 2016 to 2018 (PT SSS)

Year	Resolved/Settled Cases	Estate	Disputed area (Ha)
2016	16	Lada Estate	18.14
2016	2	Runtu Estate	606.50
2016	4	Arut/Kumai Estates	17.05
2017	15	Lada Estate	65.78
2018	2	Lada/Arut Estates	1.33
Total	39		708.80

Date Claim Submitted	Cert/SKT	Name of Claimants	Blk/Flds	Hectarage		Nature/Status of Dispute Status of Docs & Facts	Progress To date
				Docs	Claimant's Demand		
15-Sep-14	Cert	Jaka Suherman	88	30 certs @ 2 Ha	39 TKD (6 people)	Requesting for Plasma. Documents incomplete	Completion Stage • The process of transferring ights at the BPN • Still waiting for the draft release of rights and power from the land owner (cooperative management)

Continuous Stakeholder Engagement

UP has engagements with various stakeholders in and around our areas of operation. Our engagement approach varies from formal to informal.

All enquiries by stakeholders are recorded and monitored in order to resolve any ongoing issues as sustainable development cannot be achieved without engagement with stakeholders.

Grievance Procedure for Stakeholder Issues (GRI 102-53)

Under our RSPO framework, we are obligated to deal with issues openly. RSPO Principle 1 states the need for a commitment to transparency. RSPO Principle 6.3 further states that there is a mutually agreed and documented system for dealing with complaints and grievances, which is implemented and accepted by all parties.

This procedure is given to ensure that local and other interested parties understand the communications and consultation process for raising any issues with UP.

UP accepts its responsibility as a corporate citizen and wants local communities to be aware and involved in the communications and consultation methods it uses, thereby aiming to resolve grievances (including those originating from employees) through a consultative process and realizes that any system must resolve disputes in an effective, timely and appropriate manner that is open and transparent to any affected party.

Recognising the value and importance of communication and consultation in clearing up misunderstanding/ conflicts/grievances or raising any issues with United Plantations Berhad, the following procedure is adopted, in an affective, timely and appropriate manner that is open and transparent to any affected parties.

External Stakeholders

They are Statutory Bodies, Indigenous People, Local Communities, Smallholders, Independent FFB Suppliers, Other Suppliers, Local and National NGOs.

Internal Stakeholders

All employees of United Plantations Berhad and their respective Trade Unions.

Procedure for Handling External Stakeholders' Issues (GRI 102-53)

The Company Secretary of United Plantations Berhad will be responsible for the handling of all enquires and grievances against the Company. The stakeholder may lodge their enquiries/grievances to respective Estate Manager or Head of Department or direct to the Company Secretary. The Company Secretary's address is as follows:-

The Company Secretary
United Plantations Berhad
Jendarata Estate
36009 Teluk Intan
Perak Darul Ridzuan, Malaysia
Tel : 05-6411411; Ext – 215/334
Fax: 05-6411876
Email: up@unitedplantations.com

For further details on our grievance redressal procedure, please refer to http://www.unitedplantations.com/sustainability/community_grievance_redressal.asp

Meeting with local community on allocation of Plasma lot.

16. Plasma Development (for Indonesia)

Our obligation in Indonesia, to help smallholders to develop their land including land preparation, for cultivation of oil palms to uplift the living standards of the local communities

Plasma Schemes / Outgrowers Scheme

The Indonesian Government's objective is to ensure the establishment of Plasma Projects equivalent to 20% of a Company's planted area. At our Indonesian Plantations, we are actively involved with Plasma Scheme which are designed to assist smallholders to become independent plantation growers.

Under the Plasma Scheme, UP helps smallholders to develop their land, including land preparation and for cultivation of oil palms. Once developed, the plantation is managed by the Company for one cycle after which it will be handed over to the smallholder for self-management. During the first cycle, proceeds from the Plasma-areas minus development costs, is paid to the farmers by the Company.

We expect the scheme to provide more opportunities for the smallholders and help alleviate poverty. With this programme, we hope to steer them away from illegal logging as well as slash-and-burn activities that can have a huge negative impact on the environment. In the early years of plantation development, before the oil palm trees reach maturity, the livelihood of smallholders is supported through employment by the Company.

They typically work as employees on our plantations, while they at the same time get an understanding of oil palm cultivation and best management practices. The Company provides the smallholders with sufficient resources and is committed to buy their FFB at government determined rates. To assist them, we provide vital training on plantation management practices and financial arrangements.

UP's commitment to Plasma Project

The Company's internal Plasma team has taken over the responsibility of the various plasma projects from our external plasma consultant Mr. Rudolf Heering who has retired in August 2015. Further progress has been made in 2018 with more than 31.23Ha of new plasma areas having been planted.

To date 1316.36Ha of Plasma have been developed for 804 smallholders and another additional 618.99 hectares is expected to be provided and developed for the communities surrounding the Company's properties during 2019 to 2020. All 804 smallholders are directly supported by the Company. Partnership with the local communities is crucial to achieve success in Indonesia and it is therefore of utmost importance that the local communities also benefit from UP's development.

Smallholders' Field Day

Oil palm smallholders have a critical role in helping us achieve our sustainability goals, they are part of the supply chain providing an estimated 40% of world palm oil production.

The RSPO defines smallholders with less than 50 hectares of cultivated land and are mostly family-run, with some sustenance farming to support basic needs. As part of our Company's involvement, UP continuously engages with smallholders. The recent Smallholder's Field Day was held on 17th November 2018. We invited 150 smallholders from local districts to visit our plantations to get a better understanding of good agricultural practices, sustainability initiatives and environmental protection.

We are pleased to inform that 101 smallholders or equivalent to 67% of the smallholders attended the Smallholders Field Day. The smallholders were given training sessions in safe handling of pesticides with appropriate Personal Protective Equipment (PPE), effective use of pre-emergent herbicides for less chemical usage, integrated pest management (IPM) mechanized harvesting in order to assist them with their agricultural interests. In addition, demonstration on fire combat procedures were carried out to further enhance the awareness of neighbouring smallholders in case of fire incidence and were informed to contact UP for emergency assistance within the close vicinity.

Food Security

To ensure local food security, as part of the FPIC process, participatory Social Impact Assessments (SIA) and participatory land-use planning with local peoples, the full range of food provisioning options are considered. There is transparency of the land allocation process. The intent is to ensure food security and land use choices are considered as part of the formal FPIC process, prior to new developments. For further details on food security, please refer to http://www.unitedplantations.com/sustainability/community_fpic_new_planting.asp

Smallholders' Field Day which was held on 17 November 2018, had participants from local districts visiting our plantation to get a better understanding on good agricultural practices, sustainability initiatives and environmental protection.

The fractionation plant at UniFuji Refinery Complex.

Marketplace
(GRI 102-15, GRI 103-2)

Through investment in our people, technology and focus on our supply chain UP is committed to providing high quality certified sustainable and traceable Palm Oil products and services to customers worldwide. We aim for continuous improvement and work towards building long-term relationships through interaction and discussions about sustainability, global, trends, health and nutrition with customers, suppliers, business partners and other stakeholders in the marketplace.

By interactions with customers and other stakeholders, a deep understanding of this responsibility has been developed and provides a healthy avenue for continuous improvement in quality and food safety by minimizing risks throughout the supply chain. Furthermore, UP has gained much knowledge on market trends and have become more capable of responding to them.

17. Product Quality

Quality is an integral part of UP's corporate culture. It is our strong objective to deliver premium quality products and services that are safe and based on a high level of responsibility

Quality Policy

It is the Policy of UP to produce high quality palm oil, palm kernels, coconuts and their derived products to the total satisfaction of our worldwide valued customers.

Our Quality Philosophy Includes:-

U pholding the name and reputation of UP as a top producer of high quality palm products.

N urturing a diligent work force who takes pride in contributing to the development of the Company.

I nitiating and innovating positive, progressive work ethics, methods and incorporating a winning culture.

T raining of personnel is the key to upgrading our skills and keeping in trend with the marketplace.

E nsuring that only high quality palm products are produced, to the satisfaction of our customers' needs.

D elivering decisive efforts in Research and Development to continuously improve our working methods, efficiency and product quality.

UP recognizes the importance of safeguarding its customers by ensuring the highest standards in quality as well as environmental and social care.

Our quality focus starts from our Research Department and continues through every aspect of our agricultural, milling and downstream activities until the final product is delivered to our customers. The diagrams shown on pages 130 to 132 provide a clear overview of the many steps involved in ensuring palm oil products of high quality.

18. Certifications for Food Safety, Sustainability and Others (GRI 416-1, GRI 417-1)

Our Commitment towards food safety and sustainable and consistent high quality products through relevant international certifications

Unitata Berhad – Quality Policy

Unitata is committed to producing high quality palm oil products which are safe for human consumption and meets the statutory and legal requirements and overall satisfaction of our customers.

As part of our commitment to uphold Unitata's historical standing as a high quality producer, much emphasis is placed on quality assurance throughout the various stages in the refinery.

This is evidenced through our continuous investments in the latest process technology and high-end sophisticated analytical equipment providing accurate and timely controls to ensure customer satisfaction in relation to high quality and food safety.

Edible Oil Refining and Specialty Fats Production

Attention to quality, investment in production facilities and ongoing product development are priorities in order for Unitata to meet challenging and changing customer demands.
In order to cater for the growing demand of high quality products our refinery is equipped with automated manufacturing processes such as Neutralization, Bleaching, Deodorization, Fractionation, Interesterification and packaging of specialty fats and oils.

Through process controls and a disciplined manufacturing culture, we ensure that quality assurance procedures are in place in order to comply with customer requirements.

Consumers today have an increased focus on safety and health as well as producing food through a transparent and traceable supply chain based on optimum processes that focuses on reducing processing aids, water and energy and the overall GHG footprint. Furthermore, it is important for consumers that social care for employees as well as protection of forests, including High Carbon Stock and High Conservation Value areas are associated with the food they choose to buy.

To keep up with increasing demands on traceability in the supply chain, we have obtained numerous local and international certifications as follows: ISO 9001, HACCP, Halal, Kosher, BRC, SEDEX, FDA, RSPO SCCS, GMP, MeSTI and MPCA. In addition to that, Unitata had successfully obtained GMP+B2 Feed Certification Scheme in September 2017 for supply of acid oils into Europe for feed industry. GMP+B2 provides assurance of feed safety in all links of the feed chain.

As a requirement for the above-mentioned certifications, Unitata is audited annually by the various certification bodies and by customers. In 2018, 8 certification audits and 3 customer audits have been conducted. In addition, Unitata has audited and assessed key suppliers of raw materials, packaging, and ingredients. All raw materials, packaging materials and ingredients are certified as food grade.

Unitata's Task Force meeting.

Furthermore, we have established and validated our process controls to consistently minimize the risk of contaminants and meet acceptable food safety standards.

Unitata also stresses on the element of food defence as part of product security. This assures the protection of our products from malicious contamination, adulteration or theft.

All packed products are traceable to the raw materials, additives and packaging materials used via batch and code numbers on the labels. The labels meet the requirements of the Malaysian Food Act and the requirements of the respective export markets.

Relevant food safety training is of high priority for all employees in order to keep abreast with the increasingly demanding food safety requirements.

LOW 3-MCPD, Glycidyl Esters and MOSH & MOAH

3-MCPD and Glycidyl Esters are contaminants formed during the processing (refining) of edible oils and fats and have become a topic of concern for vegetable oil refiners and consumers based on a report published by the European Food Safety Authority (EFSA) in May 2016.

The EFSA Panel on Contaminants in the Food Chain (CONTAM Panel) published the results of its assessment of the safety of 3-MCPD and Glycidyl esters with respect to human health.

Available evidence from animal studies indicates that kidney toxicity is the most critical health effect of 3-MCPD in rats. Using this data, EFSA established a tolerable daily intake (TDI) for 3-MCPD for humans which represents the maximum amount that can be consumed daily over a lifetime without being harmful to health. It includes a very large margin of safety.

The TDI for 3-MCPD has been calculated as 0.8 micrograms per kilogram of body weight per day (µg/kg bw per day.)

With the combination of premium quality fruit bunches derived from our own plantation on UP combined with Unitata's processing know-how, we have been able to produce refined palm oil with levels of 3-MCPD and Glycidyl Esters which for over 20 years have been considerably lower than the industry's norm, including the TDI levels mentioned above.

The decades' old sound practices have to-date built a scaffold for research to intensify focus on mitigating contaminants to near non-detection.

Whilst the majority of refineries as time passed opted for easier and cheaper refining methodologies, Unitata has firmly stood by her charter to place quality above all else and maintained her position as a leader within the refining industry when it comes to sourcing the highest possible quality of palm components.

The company's decision to invest in a modern laboratory, the Nair's Wing, was an integral part in securing the background knowledge for mitigation work. In June 2016 collaboration work was initiated by the American Oil Chemist Society in developing statistical measurements for a new analytical method called AOCS Cd30-15: Analysis of 2-and 3-MCPD Fatty Acid Esters and Glycidyl Fatty Acid Esters in Oil-Based Emulsions.

Unitata was one of the 17 internationally recognized laboratories, after a screening process, to participate in this collaboration. The new method has been endorsed and included in the AOCS compendium of Official Methods in July 2107.

As part of establishing credence on the accuracy and precision over the analytical protocols the laboratory voluntarily and successfully participated in proficiency Performance Assessment Scheme (FAPAS) held in September 2017.

During 2018 further improvements and fine tuning of the Laboratory equipment has taken place and enabled an even greater level of quality assessment.

MOSH & MOAH

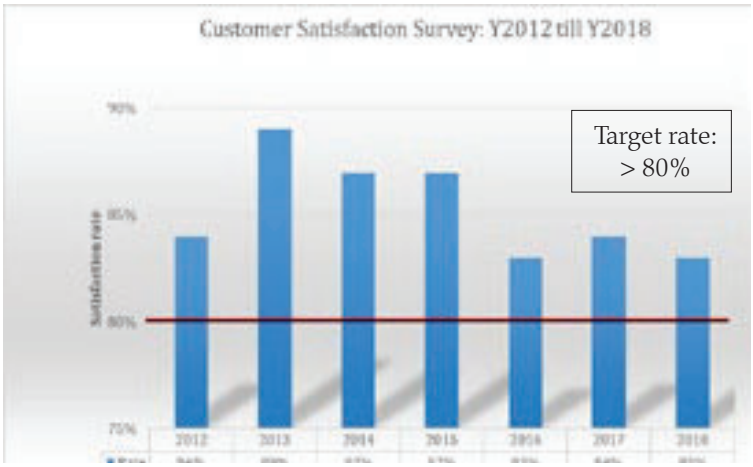
Of nearly equal repute in being a contaminant to final oils and fats is the new and emerging contaminant called Mineral Oil Hydrocarbons (MOH). It encompasses two main sub groups namely saturated hydrocarbons, MOSH and aromatic hydrocarbons, MOAH. The two are generally present at a ratio of 80/20 with MOAH trailing behind MOSH.

MOSH is believed to accumulate in human tissues and cause adverse effects to the liver while MOAH, the greater menace of the two, is reported to be genotoxic carcinogens - causing damage to the DNA leading to cancer. Hitherto, there has been no binding threshold limits set by the EU legislature save for Germany, who is leading the way in drafting out their own national plan.

Regulations from member states such as Germany quite often end up being adopted by the greater Europe – a trend which we have seen in the past. Currently, customers favour suppliers whose thresholds, through consensus, are guided by the rule as low as reasonably achievable, ALARA.

While not compelled by legislation it remains chiefly fiduciary to be prepared for the future challenge. In this respect a task force on MOSH/MOAH chaired by the CED was set up in 2018 to undertake the study of this subject in view of meeting the ALARA levels. Since then, baseline occurrence of the contaminants has been drawn and ensuing mitigation efforts have been carried out both through the mill and the refinery. The committee continues to meet on a quarterly basis to monitor the levels within the group.

As a result of our stringent quality controls and assessments, UP and Unitata are able to meet stringent customer demand for oils used in the production of infant formulas. We are committed to further reduce the levels of these contaminant to the benefit of the customers globally.



Customer Satisfaction (GRI 102-43, GRI 102-44)

At Unitata, the annual customer satisfaction survey is used to measure how our finished products meet our customer's expectations. This annual survey is an important measure in relation to our continuous improvement attitude and provides us with an important understanding of our service and collaboration with our customers based on their valuable feedback.

The survey focuses on three key areas which are:

(i) Quality of Product
(ii) Quality of Service
(iii) Delivery timeliness

The results are analyzed and tabulated in an appropriate graphical form for presentation at the management review meetings as well as during the various certification audits throughout the year.

Besides that, Unitata also adopts an on-going communication method with the existing customer to keep them engaged with their products. Regular communication with customers enables Unitata to develop products and provide the necessary service to ensure a continuous customer satisfaction which cannot be taken for granted in the competitive business of refining.

Non-compliance with regulations concerning product labelling. (GRI 417-2)

Unitata had received a cargo detention notice from the US FDA authority in March 2017 for supply of our packed products due to insufficient nutritional information on product labelling. Necessary changes to the nutritional information on our product labelling was made based on FDA recommendations to ensure that future exports are in full compliance with the FDA regulations. Since then, there have been no further issues in terms of export of our packed products into USA.

Meeting key customers globally is an important part of UP's downstream business.

19. Sustainability and Traceable Supply Chains

Our Commitment to ensure that the certified sustainable palm oil and palm kernel oil used in the production of finished goods actually came from sustainable sources

The interest for certified sustainable and segregated palm oil is increasing as many global brand manufacturers have committed to only use RSPO certified and segregated palm oil solutions.

This development combined with new labelling rules introduced in Europe effective December 2014 has increased demand further.

Traceability at UP

One of Unitata's key commitments to its customers is to ensure that our finished products can be traced back to its origins, namely palm oil mills and further to the plantation level.

The purpose is to ensure greater transparency in our supply chain. Unitata is currently in a favourable position to meet this growing demand due to the direct link with UP's supply of RSPO certified sustainable and segregated palm oil traceable back to the plantations.

The tables to the right indicate that crop processed in all our mills in Malaysia and Indonesia can be traced back to the plantations.

Today 100% of UP's total production of CPO is traceable back to the plantations.

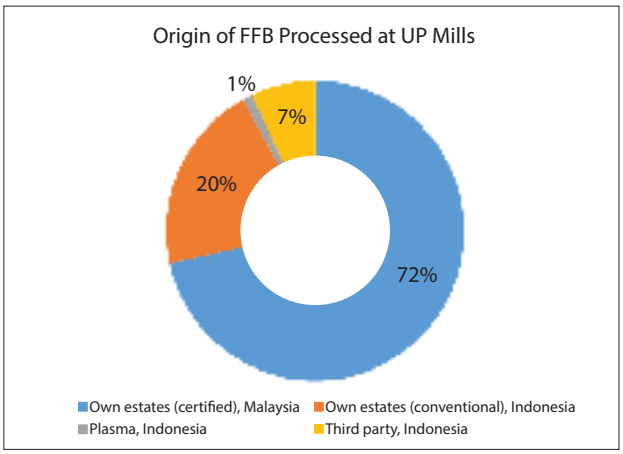
In Malaysia, all CPO used at our Refineries can be traced back to the mills and plantations. CPO produced in Indonesia is sold to neighbouring refineries as we don't have any downstream operations in the country.

All UP's PK can be traced back to the plantations, however, as the PK produced by UP is insufficient to cater for the needs of our refinery's use of crude palm kernel oil, we currently source significant volumes which we are only able to trace back to the mills.

Going forward, we will be working with third party suppliers to increase the percentage of crude palm kernel oil that can be traced back to the plantations in line with increased customer demand for traceability.

Our assurance for the level of traceability is based on our ability to identify the parent company, the mill name, mill coordinates, mill certification status from suppliers and plantations from where the crop (FFB) is produced.

United Plantations is committed to moving towards full segregation and traceable supply chain models and is therefore slowly reducing mass balance and Greenpalm solutions.



(a) Upstream Operations (United Plantations)

List of Mills	Traceable to Plantations	
	Own Crop (FFB)	Outside Crop (FFB)
Jendarata	100%	Nil
Ulu Basir	100%	Nil
Ulu Bernam	100%	Nil
UIE	100%	Nil
PTSSS	100%	100%

(b) Downstream Operations (Unitata)

Refinery	Raw material	Traceable to Mill	Traceable to Plantations
Unitata	CPO	100%	100%

All CPO produced in Malaysia is RSPO certified and segregated. In Indonesia, we have undergone RSPO certification for part of our plantations (with HGU certificates) and have received RSPO certification for these areas in 2018.

Full certification and production of RSPO certified and segregated palm oil traceable to the mill and plantations is expected to be reached in 2020 for all our plantations areas in line with receiving the final land titles (HGU certificates) for all our Indonesian properties.

In this connection, we are increasing awareness by retraining and audits within all operational areas of our group. The results of these measures will be monitored and incorporated in our efforts for continuous improvements, and highlighted in our future reports.

The weighbridge at the UniFuji Refinery.

Supply Chain Certification

In 2008, before RSPO Supply Chain Certification was introduced, Unitata was the first Company to ship refined RSPO certified segregated palm oil to customers worldwide which was verified by independent surveyors.

In December 2010, Unitata received its Supply Chain Certification and have since been able to handle and deliver first class sustainably certified and segregated palm and palm kernel oil solutions to customers worldwide based on the RSPO supply chain traceability system.

The RSPO cooperates with the traceability service provider, UTZ who through the RSPO Palm Trace system ensures that the necessary traceability is in place in order for proper certification of palm and palm kernel oil that is used in the refining process.

The supply chain certification is the buyers' and consumers' guarantee that the palm oil or palm kernel oil used in the production of finished goods actually comes from the claimed RSPO source.

This requires records to be kept to demonstrate the volume of CPO or CPKO sold as sustainable oil does not exceed the amount produced by the upstream RSPO certified mills.

Unitata had their first verification audit by one of their key customers for supply of RSPO certified material in November 2017.

The audit was conducted independently by a third party auditor appointed by the customer . It was a full traceability audit on the origin of materials supplied by Unitata Bhd.

It was a successful audit and the auditor concluded that the material sourced by the customer is 100% traceable throughout the supply chain.

A well laid out warehouse for packed products at Unitata.

20. Evaluation of Supplier/Contractors' Sustainability Commitment

(GRI 308-1, GRI 407-1, GRI 408-1, GRI 409-1, GRI 412-3, GRI 414-1)

As an important step towards improving our sustainability within economic, environmental and social areas of our business, we have invited our suppliers and contractors to join us along the journey. Prior to any formal engagement with suppliers or contractors within our Group, a screening process by distributing a self-assessment questionnaire against social and environment aspect is carried out.

Our aim is to improve sustainability in our supply chain and ensure our suppliers and contractors collaborate with us in the compliance of company policy as well as legal requirements. The scope of self-assessment includes:

a) Safety and Health (Major)

b) No child labor (Major)

c) Protect from any forms of discrimination (Major)

d) Equal remuneration (Major)

e) Fair employment contract as per legislation (Major)

f) Fire safety plan (Minor)

g) Business conduct (Major)

h) Energy consumption (Minor)

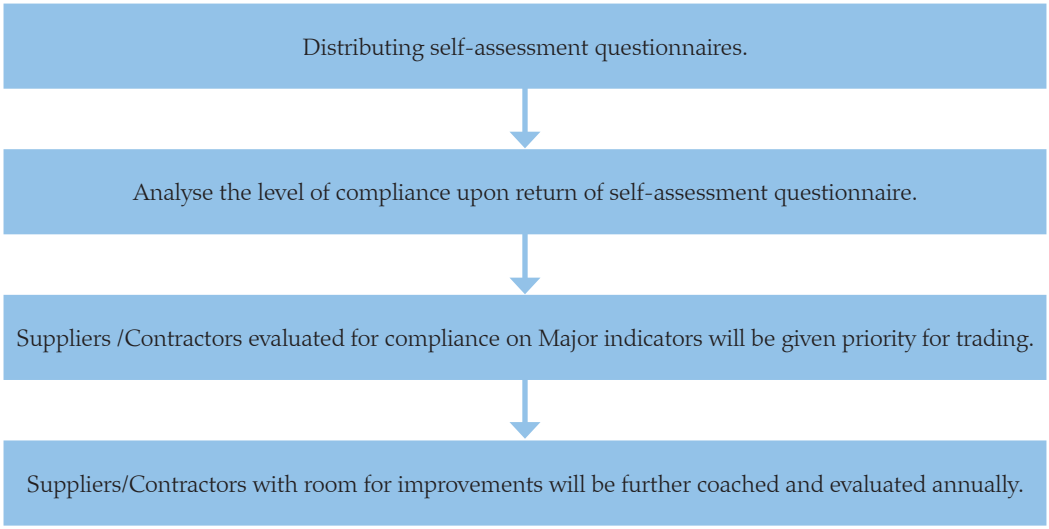
i) Zero burning (Major)

j) No deforestation (Major)

k) Reduction in GHG (Minor)

l) No new development in HCV/HCS/Peat areas (Major)

The process to prioritize and assess our suppliers and contractors as flowchart below:



Suppliers and Contractors Assessed – United Plantations Bhd	
Number of key suppliers	45
Number of key suppliers assessed	35
Percentage of key suppliers assessed (%)	77.78
Number of key contractors	140
Number of key contractors assessed	110
Percentage of key contractors assessed (%)	78.57

*Up to October 2018.

Please log into the link below to view the Assessment Questionnaire:
http://www.unitedplantations.com/sustainability/marketplace_assessment.asp

21. Commodity Prices

Prices of commodities are mainly the result of future expectations of Supply and Demand. Managing fluctuating commodity prices based on Board policies is an important part of our business in order to protect shareholder value

22. Currency Fluctuation

Managing adverse foreign exchange fluctuations based on Board policies is an important part of our business in order to in order to protect shareholder value

Malaysia produces about a third of all palm oil in the world. Total palm oil production in Malaysia for 2018 was 19.52 million tons with around 15% of the palm oil being consumed directly in the country.

Because Malaysia is so dependent on exports, palm oil prices in Malaysia are very much driven by international supply and demand.

Palm oil is traded in three forms: the physical market, the futures market and the paper market. Palm oil prices in the physical, futures and paper market are different because of transparency, liquidity and ease of execution.

Numerous variables impact the prices of commodities as indicated below. As this is an area of high risk, much focus is being directed towards safeguarding the exposure to our business in connection with fluctuations in Commodity Prices.

Risks are an inevitable part of Unitata's business where price risk is considered to be of major significance. In connection with price risk, both outright prices and market structure (inverse/carry) are risks which need to be monitored, mapped and most importantly, dealt with. The Group uses the physical market, the futures market and the paper market to manage some of the transaction exposure.

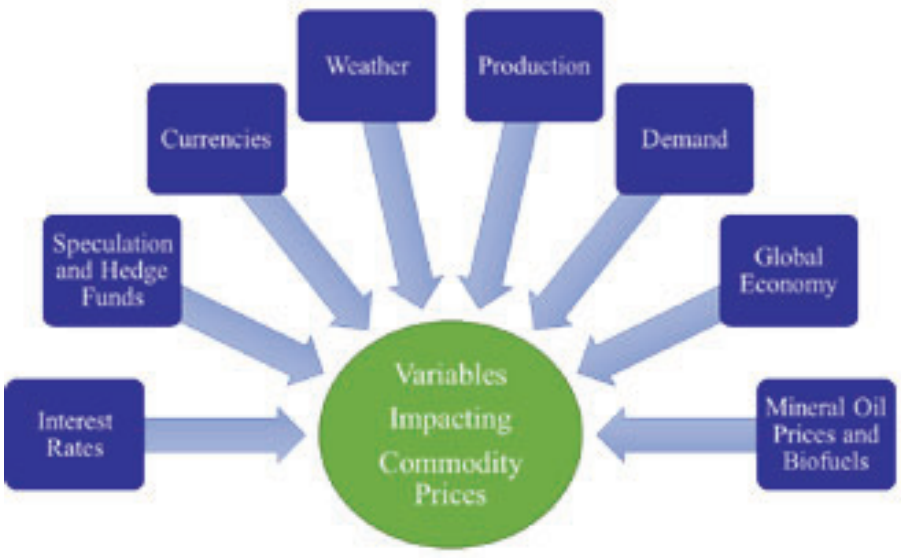
However, strict control and monitoring procedures include, amongst others, setting of trading limits approved by the Board and monitored closely by the Audit Committee through management reporting and both Internal and External Audits conducted frequently.

For the export-oriented Refining Industry In which Unitata operates, a weak Malaysian Ringgit against the USD has been an advantage as most of our costs are denominated in Ringgit whilst our sales prices are denominated in USD. More Ringgit per USD has therefore benefited Unitata when USD sales have taken place.

With margin pressure in the Malaysian Refining Industry due to the fierce competition specifically from Indonesia, it is extremely important that currency fluctuations are managed in order to safeguard profits and minimize risks.

In the same manner as with commodities, the Group uses forward currency hedges to manage some of the transactions exposure.

Control and monitoring procedures are similar to what is done under commodities and is elaborated further under the section "Statement on Risk Management and Internal control" on pages 149 to 151.



Bottling of Nutrolein Golden Palm Oil under stringent hygienic conditions at our filling plant at Unitata.

Commitment to quality

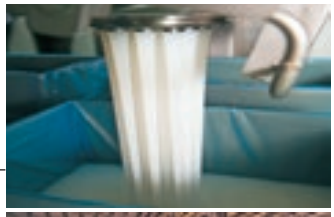
Good agricultural practices

Seed Production	Research and Development	
Nursery	Nurturing the palms in the initial year	
Land Preparation & Planting	Selecting the best palms for planting	
Immature Palm Upkeep & Maintenance	Cover crop establishment fixating Nitrogen, suppressing weeds, keeping the soil moist and reducing erosion during the first 3 years before maturity	
Mature Palm Upkeep & Maintenance	Optimizing field practices ensuring high yields	
Harvesting of Fresh Fruit Bunches (FFB)	Harvesting of Fresh Fruit Bunches (FFB), ensuring timely harvesting every two weeks	
Transport of FFB to the Palm Oil Mill	Quick evacuation of FFB after harvesting ensures the best raw materials for further processing at the palm oil mills.	

Quick evacuation and processing at the palm oil mill

FFB transportation to the Palm Oil Mill	540 kms of Light Rail System ensuring quick transportation and good quality FFB, minimizing the environmental impact whilst being cost effective.	
Milling Operation	FFB are weighed before further processing	
Sterilizers	Quick processing ensures high quality crude palm oil. Railway wagons with FFB enter directly into sterilizers	
Screw Press station	Screw press station separates crude palm oil from cooked fruitlets, leaving shell, kernel and fibre	
Purifying station	Purifying station ensures final step of crude palm oil production removing remaining residue and moisture	
Storage Tanks	High quality crude palm oil is stored before being pumped to Unitata Refinery	
Crude palm Oil arrives via pipelines to Unitata Refinery	Receiving high quality crude palm oil is a vital part of being able to supply high quality end products to customers worldwide.	

Food safety and quality focus at the refinery

Receiving high quality raw materials	High grade quality raw materials are checked on arrival and pumped into designated and secured storage tanks for further processing	
Pre-refining high quality raw materials	Raw materials are prepared for further processing by removing impurities and contaminants	
Processing and final refining	Pre-refined oils undergo various processing stages, and are finally refined to produce tailor made high quality products to meet customer requirements	
Storing of processed and refined oils	Processed and refined oils are stored in secured and designated tanks and are checked for final quality	
Filling and packing of processed and refined oils	Processed and refined oils are blended into specialty fats and filled in our automated filling lines under strictly controlled hygienic conditions.	
Storing of packed products prior to delivery	Packed products are securely stored in designated warehouses which are under a controlled environment	
Delivering bulk and packed products to customers	Processed and refined oils are delivered in road tankers, ISO tanks and flexi-tanks to local and export markets	
	Packed products of various packaging are delivered via trucks and containers to local and export markets	

Global Reporting Initiative (GRI) Content Index

(GRI 102-55)

This report has been prepared in accordance with the GRI Standards: Core option. The following summary table details the location of specific disclosures throughout the report.

GRI Standards	Description	Reference Section / Reasons for Omission	Page Number
		GRI 102: General Disclosures	
1. Organizational Profile			
102-1	Name of the organisation	Front Cover	Front Cover
102-2	Activities, brands, products and services	Report of the Directors	3, 6, 8
102-3	Location of headquarters	Corporate Information	4
102-4	Location of operations	Locations of Estates, Factories and Holdings Planted areas – 31st December 2018	Last page (Map)
102-5	Ownership and legal form	Corporate Information – Notes to the Financial Statements	174
102-6	Markets served	Geographical Segments – Notes to the Financial Statements	220
102-7	Scale of the organisation	Notes to the Financial Statements	174
102-8	Information on employees and other workers	Employees	56
102-9	Supply chain	UP & Sustainability Certifications Marketplace	51 121
102-10	Significant changes to the organization and its supply chain	There were no changes during the reporting period regarding size, structure, ownership or supply chain. However, changes in the senior management team are featured in Executive Committee and Senior Management.	5
102-11	Precautionary Principle or approach	Statement on Corporate Governance	142
102-12	External initiatives	UP & Sustainability Certifications Environment	51 69
102-13	Memberships of associations	UP & Sustainability Certifications Environment In addition to the above, UP has memberships in Malaysian Palm Oil Association ("MPOA"), Palm Oil Refiners Association of Malaysia ("PORAM")	51 69
2. Strategy			
102-14	Statement from senior decision-maker	Message from the CED	31
102-15	Key impacts, risks, and opportunities	Engaging Our Stakeholders Materiality Employees Environment Community Marketplace	41 43 56 69 112 121
3. Ethics and Integrity			
102-16	Values, principles, standards, and norms of behaviour	Statement on Corporate Governance Employees (Whistle blower Policy)	142 55
102-17	Mechanisms for advice and concerns about ethics	Employees (Whistle blower Policy)	55
4. Governance			
102-18	Governance structure	Corporate Governance Overview Statement Governance Structure	142 38
102-19	Delegating authority	Governance Structure	38
102-20	Executive-level responsibility for economic, environmental, and social topics	Governance Structure	38
102-21	Consulting stakeholders on economic, environmental, and social topics	Stakeholders Engagement	41
102-22	Composition of the highest governance body and its committees	Governance Structure	38
102-23	Chair of the highest governance body	Corporate Governance Overview Statement Chair of the highest governance body is the Chairman of the Board, who is independent and non-executive	142
102-24	Nominating and selecting the highest governance body	Nomination Committee – Corporate Governance Overview Statement	142
102-25	Conflicts of interest	Corporate Governance Overview Statement	142
102-26	Role of highest governance body in setting purpose, values, and strategy	Corporate Governance Overview Statement	142

GRI Standards	Description	Reference Section	Page Number
		GRI 102: General Disclosures (Contd.)	
4. Governance			
102-27	Collective knowledge of highest governance body	Corporate Governance Overview Statement Governance Structure	132 38
102-28	Evaluating the highest governance body's performance	Corporate Governance Overview Statement Statement on Risk Management and Internal Control Audit Committee Report	142 149
102-29	Identifying and managing economic, environmental, and social impacts	Governance Structure	38
102-30	Effectiveness of risk management processes	Corporate Governance Overview Statement	142
102-31	Review of economic, environmental, and social topics	Corporate Governance Overview Statement Governance Structure	142 38
102-32	Highest governance body's role in sustainability reporting	Governance Structure	38
102-33	Communicating critical concerns	Governance Structure	38
102-34	Nature and total number of critical concerns	Governance Structure	38
102-35	Remuneration policies	Remuneration Committee - Statement on Corporate Governance	143
102-36	Process for determining remuneration	Remuneration Committee - Statement on Corporate Governance	143
102-37	Stakeholders' involvement in remuneration	Remuneration Committee - Statement on Corporate Governance	143
102-38	Annual total compensation ratio	Confidentiality constraints	
102-39	Percentage increase in annual total compensation ratio	Confidentiality constraints	
6. Reporting Practice			
102-40	List of stakeholder groups	Stakeholders Engagement	41
102-41	Collective bargaining agreements	Employees	56
102-42	Identifying and selecting stakeholders	Stakeholders Engagement	41
102-43	Approach to stakeholder engagement	Stakeholders Engagement	41
102-44	Key topics and concerns raised	Stakeholders Engagement Employees Environment Community Marketplace	41 56 69 112 121
6. Reporting Practice			
102-45	Entities included in the consolidated financial statements	Financial Statements	159-235
102-46	Defining report content and topic Boundaries	About This Report Stakeholders Engagement Materiality	30 41 43
102-47	List of material topics	Materiality	43
102-48	Restatements of information	There is no restatement of information.	
102-49	Changes in reporting	No significant changes	
102-50	Reporting period	About This Report	30
102-51	Date of most recent report	Annual Report 2017	
102-52	Reporting cycle	About This Report	30
102-53	Contact point for questions regarding the report	Procedure for Handling External Stakeholders Issues	118
102-54	Claims of reporting in accordance with the GRI Standards	Global Reporting Initiative Index	133
102-55	GRI content index	Global Reporting Initiative Index	133
102-56	External assurance	About This Report	30
		GRI 103: Management Approach	
103-1	Explanation of the material topic and its Boundary	Materiality	43
103-2	The management approach and its components	Corporate Governance Overview Statement Materiality Employees Environment Community Marketplace	142 43 56 69 112 121
103-3	Evaluation of the management approach	Materiality Employees Environment Community Marketplace	43 56 69 112 121

GRI Standards	Description	Reference Section	Page Number
	GRI 201: Economic Performance		
201-1	Direct economic value generated and distributed	Financial Statements and Notes to the Financial Statement	159-235
201-2	Financial implications and other risks and opportunities due to climate change	Confidentiality constraints	
201-3	Defined benefit plan obligations and other retirement plans	Financial Statements	
201-4	Financial assistance received from government	Confidentiality constraints	
	GRI 202: Market Presence		
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Employees (Paying Fair wages and Employees Benefits)	56
202-2	Proportion of senior management hired from the local community	Employees Our policy is to hire employees with attitudes and skills enabling them to develop a long-term relationship, with no discrimination towards the employee's race, colour, religion, gender, national origin, ancestry, disability, marital status and sexual orientation.	56
	GRI 203: Indirect Economic Impacts		
203-1	Infrastructure investments and services supported	Employees Community	56 112
203-2	Significant indirect economic impacts	Information unavailable	
	GRI 204: Procurement Practices		
204-1	Proportion of spending on local suppliers	We endeavour to support local suppliers in the countries we operate in, which is Malaysia and Indonesia.	
	GRI 205: Anti-corruption		
205-1	Operations assessed for risks related to corruption	Information unavailable	
205-2	Communication and training about anti-corruption policies and procedures	Code of Ethics and Business Conduct	55
205-3	Confirmed incidents of corruption and actions taken	Information unavailable	
	GRI 206: Anti-competitive Behaviour		
206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	Information unavailable	
	GRI 301: Materials		
301-1	Materials used by weight or volume	Agrochemical and Energy Inputs in the Cultivation of Oil Palm and Other Oilseed Crops - Environment	104
301-2	Recycled input materials used	Production and Level of Utilisation of Oil Palm Biomass Residues - Environment	94
301-3	Reclaimed products and their packaging materials	Information unavailable	
	GRI 302: Energy		
302-1	Energy consumption within the organization	GHG emissions, discharges and waste management	88
302-2	Energy consumption outside of the organization	GHG emissions, discharges and waste management	88
302-3	Energy intensity	Emission reductions and Biogas plants	91
302-4	Reduction of energy consumption	GHG emissions, discharges and waste management	88
302-5	Reduction in energy requirements of products and services	Information unavailable	
	GRI 303: Water		
303-1	Water withdrawal by source	Information unavailable	
303-2	Water sources signifcantly affected by withdrawal of water	Information unavailable	
303-3	Water recycled and reused	Rain Harvesting	103
	GRI 304: Biodiversity		
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Adjacent Protected & Conservation Areas - Environment	71
304-2	Significant impacts of activities, products, and services on biodiversity	Biodiversity & Conservation	70
304-3	Habitats protected or restored	Biodiversity & Conservation	70
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	Biodiversity & Conservation	70
	GRI 305: Emissions		
305-1	Direct (Scope 1) GHG emissions	Life Cycle Assessment	90
305-2	Energy indirect (Scope 2) GHG emissions	Life Cycle Assessment	90
305-3	Other indirect (Scope 3) GHG emissions	Life Cycle Assessment	90
305-4	GHG emissions intensity	Life Cycle Assessment	90

GRI Standards	Description	Reference Section	Page Number
	GRI 305: Emissions		
305-5	Reduction of GHG emissions	Life Cycle Assessment, Emissions Reductions & Biogas Plant	90
305-6	Emissions of ozone-depleting substances (ODS)	Not applicable	
305-7	Nitrogen oxides (NOX), sulphur oxides (SOX), and other significant air emissions	Isokinetic Monitoring of Gaseous Emissions from the Palm Oil Mills, VORSEP Dust Collector System	93
	GRI 306: Effluents and Waste		
306-1	Water discharge by quality and destination	GHG emissions, discharges and waste management	88
306-2	Waste by type and disposal method	Recycling of Pesticide Containers and Scheduled Wastes - Environment	111
306-3	Significant spills	Information unavailable	
306-4	Transport of hazardous waste	Recycling of Pesticide Containers and Scheduled Wastes - Environment	111
306-5	Water bodies affected by water discharges and/or runoff	Information unavailable	
	GRI 307: Environmental Compliance		
307-1	Non-compliance with environmental laws and regulations	None. LCA	
	GRI 308: Supplier Environmental Assessment		
308-1	New suppliers that were screened using environmental criteria	Evaluation of Suppliers/Contractors' Sustainability Commitment - Marketplace	127
308-2	Negative environmental impacts in the supply chain and actions taken	Information unavailable	
	GRI 401: Employment		
401-1	New employee hires and employee turnover	Employees – Group Employees 2016-2018. UP Group Employees	56
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Human and Workers' Rights - Employees	57
401-3	Parental leave	Information unavailable	
	GRI 402: Labor/Management Relations		
402-1	Minimum notice periods regarding operational changes	Human and Workers' Rights - Employees	57
	GRI 403: Occupational Health and Safety		
403-1	Workers representation in formal joint management–worker health and safety committees	Freedom to Join Unions - Employees	59
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Fatal Accident & Lost Time Injury Frequency – Occupational Safety & Health – Employees	66
403-3	Workers with high incidence or high risk of diseases related to their occupation	Lost Time Injury Frequency Rate - Employees	67
403-4	Health and safety topics covered in formal agreements with trade unions	Occupational Safety & Health Policy - Employees	66
	GRI 404: Training and Education		
404-1	Average hours of training per year per employee	Training and Development of Employees – Employees	65
404-2	Programs for upgrading employee skills and transition assistance programs	Training and Development of Employees – Employees	65
404-3	Percentage of employees receiving regular performance and career development reviews	Information unavailable	
	GRI 405: Diversity and Equal Opportunity		
405-1	Diversity of governance bodies and employees	Equal Treatment - Employees	55
405-2	Ratio of basic salary and remuneration of women to men	Equal Treatment - Employees Average Earning - Employees	55 58
	GRI 406: Non-discrimination		
406-1	Incidents of discrimination and corrective actions taken	Equal Treatment - Employees	55
	GRI 407: Freedom of Association and Collective Bargaining		
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Evaluation of Suppliers/Contractors' Sustainability Commitment - Marketplace	127
	GRI 408: Child Labor		
408-1	Operations and suppliers at significant risk for incidents of child labor	Evaluation of Suppliers/Contractors' Sustainability Commitment - Marketplace	127
	GRI 409: Forced or Compulsory Labor		
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Evaluation of Suppliers/Contractors' Sustainability Commitment - Marketplace	127

GRI Standards	Description	Reference Section	Page Number
	GRI 410: Security Practices		
410-1	Security personnel trained in human rights policies or procedures	Training Hours - Employees	65
	GRI 411: Rights of Indigenous Peoples		
411-1	Incidents of violations involving rights of indigenous peoples	Information unavailable	
	GRI 412: Human Rights Assessment		
412-1	Operations that have been subject to human rights reviews or impact assessments	FPIC - Community	114
412-2	Employee training on human rights policies or procedures	Training and Development of Employees	65
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	Evaluation of suppliers/contractors sustainability commitments-marketplace	
	GRI 413: Local Communities		
413-1	Operations with local community engagement, impact assessments, and development programs	FPIC, Land Dispute - Community	114, 117
413-2	Operations with significant actual and potential negative impacts on local communities	FPIC - Community	114
	GRI 414: Supplier Social Assessment		
414-1	New suppliers that were screened using social criteria	Evaluation of Suppliers/Contractors' Sustainability Commitment - Marketplace	127
414-2	Negative social impacts in the supply chain and actions taken	Information unavailable	
	GRI 415: Public Policy		
415-1	Political contributions	Confidentiality constraints	
	GRI 416: Customer Health and Safety		
416-1	Assessment of the health and safety impacts of product and service categories	At Unitata, all products are significantly important and may give health and safety producing ingredients to food producers	127
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Information unavailable	
	GRI 417: Marketing and Labelling		
417-1	Requirements for product and service information and labelling	Certification for Food Safety, Sustainability and Others - Marketplace	121
	GRI 417: Marketing and Labelling		
417-2	Incidents of non-compliance concerning product and service information and labelling	Certification for Food Safety, Sustainability and Others - Marketplace	121
417-3	Incidents of non-compliance concerning marketing communications	Information unavailable	
	GRI 418: Customer Privacy		
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Personal Data Protection	55
	GRI 419: Socioeconomic Compliance		
419-1	Non-compliance with laws and regulations in the social and economic area	Information unavailable	

Glossary

Biodiversity (BioD)	The diversity (number and variety of species) of plant and animal life within a region.
Biological oxygen demand (BOD)	The amount of oxygen used when organic matter undergoes decomposition by micro- organisms. Testing for BOD is done to assess the amount of organic matter in water.
Carbon Footprint	A measure of the total amount of greenhouse gases, including carbon dioxide, methane and nitrous oxides, emitted directly or indirectly by an organisation, event, product or person.
Child Labour	According to the International Labour Organization (ILO) core labour standards, minimum age should not be less than 16 years old.
CO_2 Equivalents	Carbon dioxide equivalents (CO_2eq) provide a universal standard of measurement against which the impacts of releasing (or avoiding the release of) different greenhouse gases can be evaluated.
Crude Palm Oil (CPO)	Oil produced from oil palm fruits in milling process.
Creating Shared Value (CSV)	A responsibility to manage our resources resourcefully and engage in activities that optimize return for shareholders and the society we operate in.
Deforestation	Defined by UP as direct human-induced conversion of forest to non-forests, with an exception for small scale low intensity subsistence conversion by indigenous peoples and forest dependent traditional communities (consistent with RSPO P & C as well as Indonesian laws, Environmental Impact Assessments (EIA) and High Conservation Value Assessment (HCV).
Effluents	Water discharged from one source into separate body of water, such as mill process water.
Employees	Our Employees are our core assets and human capital management is considered an integral and vital part of our operations.
Environment	UP's commitment in constantly striving towards reducing variables that impact the environment negatively.
Forced Labour	A person who is coerced to work under the threat of violence, intimidation, or undue stress of penalty.
Free, Prior and Informed Consent (FPIC)	The principle that a community has the right to give or withhold its consent to proposed projects that may affect the lands they customarily own, occupy or otherwise use.
Fresh fruit Bunches (FFB)	Bunch harvested from the oil palm tree. The weight of the fruit bunch ranges between 10 kg to 40 kg depends on the size and age.
Global Reporting initiative (GRI)	A multi-stakeholder standard for sustainability reporting, providing guidance on determining report content and indicators.
Greenhouse Gas (GHG) emissions	Greenhouse gas or carbon emissions are gasses in an atmosphere that absorb and emit radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. The primary greenhouse gases in the Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.
GreenPalm	Is a certificate trading system that allows manufacturers and retailers to purchase GreenPalm certificates from an RSPO certified palm oil growers to offset each tonne of palm oil and palm kernel oil they use. A book-and-claim supply chain system.
High Conservations Value (HCV)	The concept of High Conservation Value Forests (HCVF) was first developed by the Forest Stewardship Council (FSC) in 1999 as their ninth principle. The FSC defined HCVF as forests of outstanding and critical importance due to their environmental, socio-economic and cultural biodiversity and landscape value.
High carbon stock (HCS)	The HCS Approach is a methodology to avoid deforestation in land development. The approach stratifies the vegetation on an area of land into different classes using analyses of satellite images and field plot measurements. Each vegetation class is validated through calibrating it with carbon stock estimates in the above-ground tree biomass.
Hak Guna Usaha(HGU)	The right to enjoy immovable property of another person with the obligation to pay the annual income to the landowner.
ILO (International Labour Organisation)	Is a tripartite world body representative of labour, management and government, and is an agency of the United Nations. It disseminates labour information and sets minimum international labour standards called"conventions", offered to member nations for adoption.
Integrated Pest management (IPM)	A pest management system that in context of the associated environment and the population dynamics of the pest species utilizes all suitable techniques and methods in as compatible a manner as possible and maintains the pest population at levels below those causing economically unacceptable damage and loss.
IUCN Red List	Based in Switzerland, the International Union for Conservation of Nature and Natural Resources (also known as The World Conservation Union) is an organisation involved in the preservation of natural resources. IUCN publishes the Red Data Book, which lists the endangered species of every nation.
Identity Preserved/ IP	Certified sustainable palm oil is physically separated from other certified and non-certified palm oil throughout the supply chain, i.e from the RSPO mill through to the end-user.
Oil Extraction Rate	The amount of oil extracted from oil palm fruit at a mill. Crude palm oil (CPO) is extracted from the flesh; palm kernel oil (PKO) from the nut.
Mass Balance	Certified sustainable palm oil and non-certified palm oil is mixed to avoid the cost of keeping the two quantities controlled. The mass balance system is constructed in such a way that volumes of RSPO certified products shipped will never exceed volumes received by the end-user.
Mature Oil Palm	After planting, the oil palm tree is classified as immature until fresh fruit bunches are produced, which is approximately 30 months later, whereupon the oil palm tree is classified as mature.
Non-governmental organisation (NGO)	Is used in this report to refer to grassroots and campaigning organisations focused on environmental or social issues.
Palm oil Mill effluent (POME)	By-product of processed fresh fruit bunch (FFB).
Peat	Peat is an accumulation of partially decayed vegetation matter. Peat forms in wetlands or peat lands, variously called bogs, moors, muskegs, pocosins, mires, and peat swamp forests.
Plasma schemes	A programme initiated by the Indonesian government to encourage the development of smallholders' plantations with the assistance and cooperation of plantation companies (the nucleus) which assist and support the surrounding community plantations (the plasma).
Palm Kernel (PK)	Seed of the oil palm fruit, which is processed to extract palm kernel oil and other by-products.
Palm Kernel (PK)	Seed of the oil palm fruit, which is processed to extract palm kernel oil and other by-products.
Roundtable on sustainable palm oil (RSPO)	A non-governmental multi-stakeholder organisation based in Kuala Lumpur, Malaysia. The organisation has developed a certification scheme for sustainable palm oil.
Social Impact Assessment	A process of analysing, monitoring and managing the intended and unintended, both positive and negative social consequences of planned interventions (policies, programs, plans, projects) and any social change processes invoked by the interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment.
Segregated/ SG	Certified sustainable palm oil is physically separated from non-certified palm oil throughout the entire supply chain.
Stakeholders	Any group or individual who are affected by or can affect a company's operations.
Sustainability	A term expressing a long-term balance between social, economic and environmental objectives. Often linked to Sustainable Development which is defined as"Development that meets the need of current generations without compromising the needs of future generations"
Traceability	Traceability is the capability to track sustainable palm oil along the entire supply chain.
Toxicity	Toxicity measures the degree to which a substance is harmful to living organisms.

Ripe fresh fruit bunches ready to be harvested.

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Independent Limited Assurance Report

Relating to United Plantations Berhad's Annual Report for the year ended 31 December 2018.

To the Directors of United Plantations Berhad

We, KPMG PLT, have been engaged by United Plantations Berhad ("United Plantations") and are responsible for providing a limited assurance conclusion in respect of the Selected Sustainability Information for the year ended 31 December 2018 to be included in the Annual Report 2018 ("the Report") as identified below ("the Selected Sustainability Information").

Management's Responsibilities

The management of United Plantations ("Management") is responsible for the preparation and presentation of the Selected Sustainability Information in accordance with Management's calculation methodologies and the information and assertions contained within it and for establishing and maintaining appropriate performance management and internal control systems from which the reported performance information is derived.

Management is responsible for preventing and detecting fraud and for identifying and ensuring that United Plantations complies with laws and regulations applicable to its activities.

Management is also responsible for ensuring that staff involved with the preparation and presentation of the description and Report are properly trained, information systems are properly updated and that any changes in reporting encompass all significant business units.

Our Responsibilities

Our responsibility is to carry out a limited assurance engagement and to express a conclusion based on the work performed. We conducted our engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 Assurance Engagements other than Audits or Reviews of Historical Financial Information issued by the International Auditing and Assurance Standards Board. That Standard requires that we plan and perform the engagement to obtain limited assurance about whether the Selected Sustainability Information is free from material misstatement.

Selected Sustainability Information

Selected Sustainability Information includes the following data for the year ended 31 December 2018:

- Total average earnings per worker per month;
- Lost time injury frequency rate;
- Fatal accident rate;
- Fertiliser equivalent and monetary value of oil palm biomass residues recycled on land;
- Production and level of utilisation of oil palm biomass residues;
- Domestic water consumption;
- Mill water consumption in processing fresh fruit bunches (FFB);
- Usage of herbicides and pesticides;
- Local and international certifications; and
- Roundtable on Sustainable Palm Oil ("RSPO") certifications.

The boundary of the Selected Sustainability Information included in the Annual Report 2018 represents the entire United Plantations and its subsidiaries operations, with the exception of Lost Time Injury Frequency Rate and Fatal Accident Rate which covers the Malaysian operations only.

Procedures Performed over Selected Sustainability Information

A limited assurance engagement on the Selected Sustainability Information consists of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other evidence gathering procedures, as appropriate. These procedures include:

- Interviews with Senior Management and relevant staff at corporate and operating sites;
- Inquiries about the design and implementation of the systems and methods used to collect and process the information reported, including the aggregation of source data into the Selected Sustainability Information;
- Visits to 5 operating sites[1], selected on the basis of a risk analysis including the consideration of both quantitative and qualitative criteria; and
- Comparing the information presented in the Selected Sustainability Information to corresponding information in the relevant underlying sources to determine whether all the relevant information has been included in the Selected Sustainability Information and prepared in accordance with Management's calculations methodologies.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement and consequently the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Accordingly, we do not express a reasonable assurance opinion.

Our independence and quality control

We have complied with the independence and other relevant ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

KPMG PLT applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Inherent limitations

Due to the inherent limitations of any internal control structure it is possible that errors or irregularities in the information presented in the Report may occur and not be detected. Our engagement is not designed to detect all weaknesses in the internal controls over the preparation and presentation of the Report, as the engagement has not been performed continuously throughout the period and the procedures performed were undertaken on a test basis.

Our conclusion

Our conclusion has been formed on the basis of, and is subject to, the matters outlined in this Independent Limited Assurance Report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Based on the procedures performed and evidence obtained, as described above, nothing has come to our attention that would lead us to believe that the Selected Sustainability Information included in the Report for the year ended 31 December 2018, is not presented, in all material respects, in accordance with Management's calculation methodologies.

Restriction of use of our Independent Limited Assurance Report

Our Independent Limited Assurance Report should not be regarded as suitable to be used or relied on by any party wishing to acquire rights against us other than United Plantations, for any purpose or in any other context. Any party other than United Plantations who obtains access to our Independent Limited Assurance Report or a copy thereof and chooses to rely on our Independent Limited Assurance Report (or any part thereof) will do so at its own risk. To the fullest extent permitted by law, we do not accept nor assume responsibility and deny any liability to any party other than United Plantations for our work, for this Independent Limited Assurance Report, or for the conclusions we have reached.

Our Independent Limited Assurance Report is released to United Plantations on the basis that it shall not be copied, referred to or disclosed, in whole (save for United Plantation's own internal purposes) or in part, without our prior written consent.

KPMG

KPMG PLT
Petaling Jaya
23 February 2019

[1] UIE Estate, UIE Palm Oil Mill, Ulu Basir Estate, Ulu Basir Palm Oil Mill and Sungei Chawang Estate