



We are committed to the SDGs!

Sustainability Report 2019

We are committed to the SDGs!

SUSTAINABLE DEVELOPMENT GOALS

世界を変えるための17の目標

1 貧困をなくそう 	2 飢餓をゼロに 	3 すべての人に健康と福祉を 	4 質の高い教育をみんなに 	5 ジェンダー平等を実現しよう 	6 安全な水とトイレを世界中に 
7 エネルギーをみんなにそしてクリーンに 	8 働きがいも経済成長も 	9 産業と技術革新の基盤をつくろう 	10 人や国の不平等をなくそう 	11 住み続けられるまちづくりを 	12 つくる責任 つかう責任 
13 気候変動に具体的な対策を 	14 海の豊かさを守ろう 	15 陸の豊かさも守ろう 	16 平和と公正をすべての人に 	17 パートナーシップで目標を達成しよう 	SUSTAINABLE DEVELOPMENT GOALS 2030年に向けて世界が合意した「持続可能な開発目標」です

いのちをつなぐ

SARAYA <https://worldwide.saraya.com/>

Foreword

“We are determined to take the bold and transformative steps which are urgently needed to shift the world on to a sustainable and resilient path.” This is quoted from “Transforming our world: the Agenda for Sustainable Development”. Saraya invented and supplied hand disinfectant liquid soap and its dispenser, and promoted hand hygiene at many workplaces, schools and public facilities in post WW II Japan when sanitation systems were still poor and hygiene practices were insufficient – the same issues that many developing countries such as Sub-Saharan Africa are still facing today.

In Target 3.1 through to Target 3.3 of SDG 3, it is believed that hand hygiene is the single most important means of preventing infection, and a fundamental element of good infection control. Saraya has vast knowledge, experience and resources with respect to infection prevention and control, and has been utilizing them to promote hand hygiene through business activity and corporate social responsibility in the East African region. This applies especially to Uganda where its work started.

This report covers eleven goals of SDGs to explain Saraya’s sustainable product development, activities for preserving biodiversity, and the business contribution to improving and controlling global sanitation and hygiene for all stakeholders. This also contains Saraya’s legacy, together with the latest information and statistics (as of Oct. 2019) in order to provide a clear insight into how Saraya proceeds towards sustainability.

Any questions and queries are welcome and you can contact us by email at <sustainability@saraya.com>.

Editorial policy

Guidelines used for reference

The Japanese Ministry of the Environment’s Environmental Reporting Guidelines 2012
GRI (Global Reporting Initiative)
“The GRI Standards”

Reporting period

The report mainly covers achievements in the 2017 fiscal year (1 November 2016 to 31 October 2017), but also includes some activities outside of this period.

Reporting scope

(Environmental Management System)
Saraya Co., Ltd.
Tokyo Saraya Co., Ltd.
Smile Sangyo Co., Ltd.
Saraya MFG. (Thailand) Co., Ltd
Saraya (Dongguan) Hygiene Products Co., Ltd

Month of issue

March 2020 (the next report is to be issued in March 2022)

Website

<https://worldwide.saraya.com/doc/SustainabilityReport2019.pdf>

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Let's make the world sustainable via the SDGs !



We are facing an unprecedented period in the history of the Earth

The global population is 7.2 billion, and is forecast to grow to 10 billion by the end of this century. More and more people are now aspiring to live an affluent life. Although this is an opportunity for the business community, it is also a great risk for sustainability: There may be more opportunities for expanding sales and marketing, but at the same time, the situation consumes natural resources, increasing global warming, the loss of biodiversity, and plastic pollution in the ocean. These are the risks to sustainability which affect us all. Because the changes are happening so rapidly, we also need to move more quickly.

SARAYA is committed to the SDGs

We started our work for the protection of biodiversity in Borneo in 2006, and began the "Wash a Million Hands" project in Uganda in 2010. In 2015, 193 countries and regions in the UN general assembly resolved the "Sustainable Development Goals", which SARAYA adopted to harmonize with our existing goals and targets. This makes it easier to coordinate the projects implemented by SARAYA for sustainable development. We are especially committed to the sustainable development goals 3, 4, 5, 6, 8, 9, 10, 12, 13, 14, 15, 16, and 17.

The development of the Borneo Conservation Trust

We support biodiversity through BCT (Borneo Conservation Trust) and BCT Japan. Last year, BCT decided to donate 234 hectares along the Kinabatangan River to the Sabah local government, in the understanding that this key land will be combined with the Government's big green area and form the "Wildlife Sanctuary". It will help elephants, orangutans and other wild animals by protecting them, at least from commercial development in Sabah State. We will keep following up this project until it reaches fruition.

JaSPON and RSPO Certified oil

On April 2019, SARAYA, WWF Japan, and other companies and organizations established the Japan Sustainable Palm Oil Network (JaSPON) with the goal of accelerating the procurement and consumption of sustainable palm oil in the Japanese market. SARAYA is the promoter and the director of JaSPON.

SARAYA has already changed to use RSPO certified oil in all palm related products, and also donates 1% of the sales to the protection of wildlife through BCT and BCT Japan.

R4W (Race for Water) and Ocean Plastic Pollution

SARAYA will help and sponsor the visit by the R4W boat to Japan from 26 March till 24 August. The ship is scheduled to visit 10 different ports in Japan in 2020. The boat will be raising awareness of the problems of ocean plastic, and is targeting students, citizens and companies in each port. SARAYA will also organize the events during this visit to promote measures to prevent the plastic pollution of the oceans.

SARAYA has now begun to use biological plastics in some of its products, as well as cutting back the amount of plastic used in the bottles. KSN, a subsidiary of SARAYA, which deals with the recycling of food waste, has started to use plastic packaging waste to make an energy efficient fuel to promote the thermal recycling of the plastic waste.



SARAYA wins in the 1st Japan SDGs Awards in 2018.



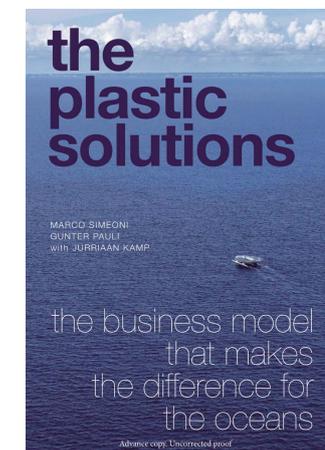
SARAYA continues to support BCT and BCT Japan to make Green Corridors in Sabah, Malaysia.



SARAYA uses RSPO certified palm oils and palm kernel oils in all related products.



SARAYA wins at the RSPO Excellence Awards in 2019.



We will provide Japanese version copies of the book.

- Using 100% renewable energy.
- Investigation on plastic pollution
- Discussion of a value chain for End of Life plastics

SUN, WIND AND WATER

Sole sources of energy for the Race for Water® vessel



The hand hygiene in Uganda and Africa

We started the “Wash a Million Hands in Uganda” campaign in 2010 we started the production of alcohol-based hand disinfectant in Uganda in 2014. The product is gradually being used in the hospitals of Uganda, where we promote hand hygiene in the maternity wards and maternity centers to prevent infections among mothers and children at the time of birth. In 2018, at the time of the Ebola outbreak in the Democratic Republic of Congo, this product was widely used on site. We are now working on a jigger lotion to cure jiggers in Kenya and Uganda.

The challenge for RE100, “gender free” and “diversity at the workplace”

Global warming is moving so fast that we urgently need to tackle the challenge of reducing the carbon in the business process. A Japanese proverb says: “The sunset is close, but we have a long way to go!”. SARAYA also needs to face the challenge of reducing carbon dioxide and gases contributing to global warming throughout the business cycle. We need to pledge to take up the challenge in a reliable strategy in a short period of time.

During the course of our commitment to the SDGs, we will also pledge to comply with the stipulations involving “gender free” and “diversity at workplace” goals at the workplaces in SARAYA and among the stakeholders.

Conclusions and thanks to our stakeholders

We would like to conclude by thanking all the stakeholders who have guided and supported us in pursuing SARAYA’s activities. I look forward to your continued support in 2020 and beyond. Thank you very much!



Race for Water is coming to Japan.



Prof. Pittet visited Hospital in Uganda to teach healthcare workers how to prevent infections.



Mr. Saraya and Saraya Manufacturing Uganda Limited members.



The Honorary Consulate of the Republic of Uganda in Osaka is opened in SARAYA.

President and CEO Saraya Co., Ltd.
Yusuke Shiro Saraya

Good Health and Well-Being

Sanitation Legacy

1952 in Japan

People in Japan were often suffering from outbreaks of dysentery and food poisoning in 1951 after WWII. There were over 111,000 patients at the peak of the dysentery epidemic in 1952. Back then, solid soaps (bar soaps) were widely available in the market, but liquid soaps were not yet sold in Japan.

In April 1952, Saraya introduced liquid soap with a disinfectant effect along with a dispenser. As the product was such an innovative and effective approach to improving hand hygiene, it gained people's trust and gradually spread to the factories of leading industries such as the pulp & paper and iron & steel sectors, as well as schools and public offices. In November of the same year, the new regulations from the Japanese Health Ministry for compulsory hand washing and disinfection at food processing facilities came into force. Saraya has been developing ever since as one of the leading companies in the field of public and food hygiene.

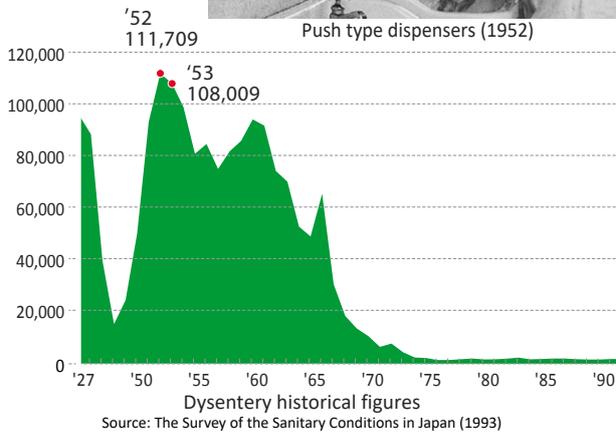
Introduced Alcohol-Based Hand Disinfectant

The "Hand Sanitor S" was the very first alcohol-based product Saraya introduced to the world. Saraya has been researching and developing alcohol-based hand disinfectants (ABHD) ever since. In 1976, MRSA (Methicillin-resistant Staphylococcus aureus) had not been isolated in Japanese healthcare facilities, but by 1987, MRSA was isolated from over 58% of patients. In 1996, prevention and control measures for nosocomial MRSA infection, such as the application of alcohol-based hand disinfectants, finally received medical funding from the government.

The number of MRSA patients in Japan reached 118,539 by 2013. Meanwhile, "Hibiscol" (ABHD), which was first introduced in 1986 at the time of the MRSA outbreak in Japan, has become one of our leading products as a prevention and infection control measure. In 1995, Saraya acquired Best Sanitizers, Inc. A joint venture company was set up, and Saraya's "Alsoft A" was then introduced to the American market through Best Sanitizers. We launched our new product line called "Viro Stera" in 2010 which has proven effective against a wide range of microorganisms, including non-enveloped viruses such as Norovirus as well as ordinary fungi. It is now being produced and sold by Saraya Manufacturing (U) Ltd. in Uganda as Alsoft V.



Push type dispensers (1952)



Iga Factory (pharmaceutical factory) established in 1998



Best Sanitizers, Inc. established in 1995



Kentucky Factory established in 2006



Hand disinfectants "Viro Stera" and "Alsoft A"



Sensor activated dispenser "UD-9600S"

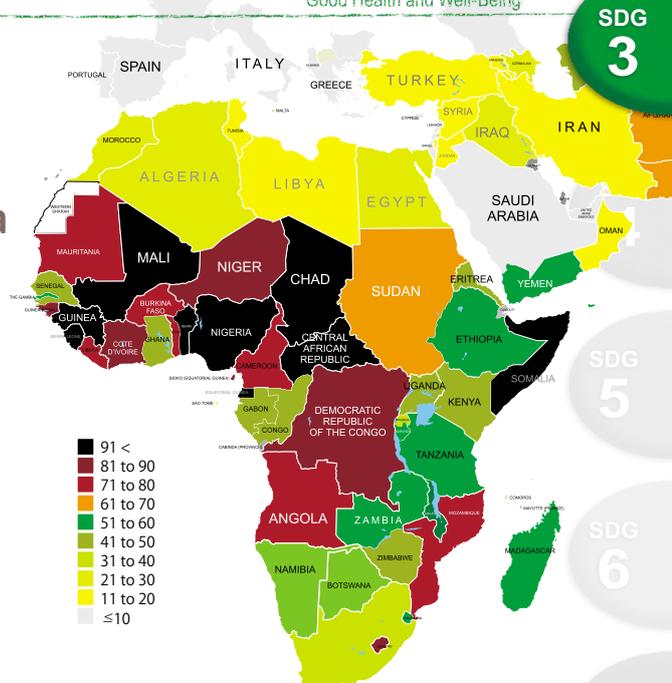
'Wash a Million Hands Project !' in Uganda

Supporting UNICEF

The table on the right is from the "Levels & Trends in Child Mortality Report 2019" from UNICEF, and it shows under-five and infant mortality rates and number of deaths. According to UNICEF, the rate is defined as "the probability of dying between birth and exactly five years of age, expressed per 1,000 live births". The number of infant deaths in Sub-Saharan Africa is 1.97 million, which is nearly 49% of the overall world infant mortality rate. According to the UNICEF report, it is estimated that 0.23 million infants died in East Africa, including Uganda. Among them, a large number of deaths were caused by pneumonia or acute diarrhea, which can be prevented by basic hand hygiene practices such as hand washing.

UNICEF stands for The United Nations Children's Fund. Saraya has been donating 1% of its net sales from hand hygiene products range to UNICEF since 2010. The donations have been used to educate children and mothers in Uganda and promote basic hand hygiene using hand soaps. UNICEF and the Ministry of Health in Uganda have collaborated to train local volunteers to be hand hygiene ambassadors. They also promote hand hygiene with Tip-py Taps (a simple and ecological hand washing device) throughout the country.

This work has successfully helped prevent infections such as diarrhea. The donations through this project have also been used for installing water tanks at schools in Uganda and promoting hand hygiene practice through UNICEF activities. The number of mothers Saraya reached to promote the importance of hand hygiene in Uganda topped 1.2 million, and the rate of handwashing after going to the toilet has been steadily improving from 14% in 2007, and 33.2% in 2015, to 36% in 2016.



Children in Sub-Saharan Africa face higher risks of dying before their fifth birthday Under-five mortality rate (deaths per 1,000 live births) by country, 2018

Estimates of child mortality in East African Community 2018

Country	Under-five				Infant			
	Mortality rate (deaths per 1,000 live births)	Number of deaths (thousands)	Mortality rate (deaths per 1,000 live births)	Number of deaths (thousands)	Mortality rate (deaths per 1,000 live births)	Number of deaths (thousands)	Mortality rate (deaths per 1,000 live births)	Number of deaths (thousands)
Burundi	174	58	46	25	105	41	28	18
Kenya	107	41	105	60	68	31	67	45
Rwanda	154	35	49	13	94	27	30	10
South Sudan	254	99	63	38	150	64	37	24
Uganda	185	46	150	74	109	34	91	54
UN Rep of Tanzania	166	53	176	107	101	38	109	77
Sub-Saharan Africa	180	78	3,857	2,869	107	53	2,344	1,973
Japan	6		2		8	2	5	2
World	93	39	12,524	5,322	65	29	8,733	4,000

Source: Levels & Trends in Child Mortality Report 2019, UNICEF



354 water tanks (60L) with a tap have been installed at schools where there was no access to water. So far, pupils in 177 schools in the Gulu, Kitgum, Pader and Abim districts can now wash their hands with clean water.

'Wash a Million Hands Project !' in Uganda Promotion Products



100% Hospital Hand Hygiene Project

Saraya East Africa Co., Ltd.

SARAYA chose Uganda as an African hub for promoting and improving basic sanitation in developing countries, then set up a subsidiary company, SARAYA East Africa Co., Ltd. in Kampala.

In 2011, SARAYA's hand hygiene project proposal in the healthcare sector was selected as the BOP business preparation survey for infection control and prevention using a new alcohol-based disinfectant in collaboration with JICA (Japan International Cooperation Agency). SARAYA's alcohol-based hand disinfectant Hibischol was introduced to Gombe Hospital and Entebbe Hospital as a case-study of the pilot project from May 2012 to April 2013.

At Gombe Hospital, a hand hygiene compliance project was initiated under the supervision of Dr. Lule Haruna. At the beginning of the project, the compliance rate was barely improved and it took some time to reach 70%. However, since reaching this level, significant results were recorded. After hitting the 70% compliance rate, zero case months of acute diarrhea and post C-S sepsis were recorded, as shown in the "Comparison of HH compliance and case occurrence" chart. Dr. Lule Haruna received the WHO Global Health Workforce Award for this achievement.

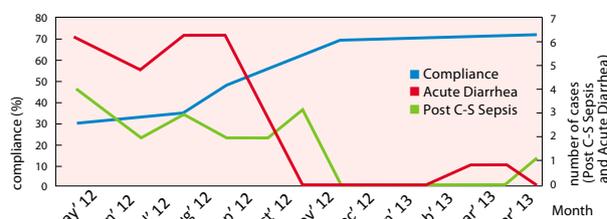
This pilot project has proved that alcohol-based hand disinfectant can be accepted and work effectively in Uganda. Not only that, the basic hygiene in the healthcare facility improved dramatically, and the compliance rate shows and clearly proves that it can protect the patients most vulnerable to infection such as infants and pregnant women. Other details of the Infection Control Seminars held in Uganda and Japan are listed in SDG17, p.34.



Saraya Manufacturing Co., Ltd.



A nurse in Gombe Hospital



Comparison of hand hygiene compliance rate and reported disease occurrence in Gombe Hospital



East African Infection Control Conference 2013

The conference was held in Kampala, the capital city of Uganda, on 21 February 2013. It was planned and instigated by Saraya East Africa Co., Ltd., and hosted by Uganda's Ministry of Health, along with JICA Uganda Office's support, and sponsorship from Saraya Co., Ltd. The conference welcomed Dr. Pittet as a keynote speaker and included a speech from Dr. Lule Haruna of Gombe Hospital. There was a panel discussion between Mr. Saraya and all the speakers. More than 140 participants from all over East Africa attended the event. It was reported in Uganda's national daily newspaper "New Vision" on two days.

Alsoft (Made in Uganda)

February 2014, Saraya Manufacturing (U) Ltd. (SMU) was established within the premises of Kakira Sugar Limited (a major sugar producer in Uganda). The alcohol-based hand rub “Alsoft V” uses ethanol made from the waste molasses, which is a byproduct of the sugar production process. This “Alsoft V” has the same formulation as the “Vil Stera” series which is sold in Japan. The conventional alcohol products are known to be highly effective against enveloped viruses, but it has been said that they are ineffective against non-enveloped viruses. However, we developed our unique formulation to solve this issue, and it was introduced to the market as the “Vil Stera” series (Alsoft V).

We encountered two problems while developing and marketing Alsoft for medical facilities in Uganda. The first problem was the government’s policy to put a 60% tax on alcoholic beverages, even on medicine. We tried to negotiate with the government, but our request for an exception was eventually denied. The government’s rationale was the possibility that companies may sell alcoholic beverages disguised as medicine. The second problem we encountered was a barrier to distributing Alsoft. The National Medical Store (NMS) is in charge of distributing medicines and medical supplies throughout the country. It means that without NMS approval, distributing the medicines to medical facilities in the country is difficult.

There was no alcohol disinfectant procurement in Uganda until Saraya’s Head of Global Operations Division Headquarters met President Museveni during his visit to Japan. We informed the president about the problems we encountered while developing Alsoft, and President Museveni himself sent a letter to NMS to start the procurement of alcohol disinfectants in Uganda. The letter also informed the NMS to prioritize domestic products if the price difference is within 10%. Unfortunately, there was still no procurement even though there were no other products made in Uganda, and the price difference was well within 10%. Eventually, Uganda decided to open the bidding two months after the then suppliers were found to have been involved in illegal operations, which resulted in products being imported.



Saraya Manufacturing (U) Ltd.

We eventually learned that corruption was apparently an exacerbating factor in the infectious disease problems in Africa. The UN Global Compact (established in 1999), added an Anti-Corruption Principle in 2004 as part of its efforts to combat corruption.

Alsoft 50 ml

At long last, in 2017, [AB2]NMS announced the procurement tender for 50ml finger disinfectant, which “Alsoft V 50ml” won on 31 July the same year. On 13 September, a man contracted a fever after he entered a cave searching for salt. He later became the first patient treated for Marburg hemorrhagic fever (Marburg HF), and was cared for in Kapchorwa Hospital. Marburg HF is an extremely deadly disease and the infection is caused by the Marburg virus.

On December 11, the Ugandan Ministry of Health declared a Marburg outbreak in the country. Alsoft V was then used to control infection with the disease (shown in the picture). Kapchorwa Hospital and the Ugandan Health Ministry managed to successfully contain the outbreak. Finally, the Health Ministry declared the end of the outbreak just 42 days after the death of the third patient. No new patients were confirmed after the declaration.



A nurse with Alsoft 50ml

Ebola Infection in Uganda

Around the same time, the Democratic Republic of the Congo’s (DR Congo) Ministry of Health issued a statement declaring that 2,382 patients were infected with Ebola. By 6 July 2018, 1,606 were confirmed dead. A family of six went to visit their father who was in DR Congo on 9 June, and later on 13 June, two members of the family (a five year old child and his grandmother) were confirmed to have been infected by Ebola, and had to stay in DR Congo for further treatment. They eventually returned to Uganda.

Saraya Uganda, local subsidiary received a large number of orders from the UN agency (in this case the WHO), international NGOs and trading companies in DR Congo, mainly for Alsoft V and auto dispensers. As a result, the Ugandan plant has increased production of Alsoft V to meet the increasing demand.



Maternal Health in Tanzania and Uganda

Supporting NGO JOICFP*

SDG 3.1 aims to reduce the global maternal mortality ratio to less than 70 per 100,000 live births by 2030.

According to the WHO report: “Maternal Mortality and Proportion Attended by Skilled Birth Attendants”, the SBA “skilled birth attendance” rate in Tanzania is merely 49%, and the maternal mortality rate is 8 times higher than in Japan.

At Mwamakaranga clinic in Shinyanga, Tanzania, SARAYA supported a refurbishment project led by JOICFP. They rebuilt a maternal and child health unit, and named it the “Milky House for Mothers”, where women can visit for antenatal and postnatal check-ups, and actually deliver their babies at the inpatient care facility. They can also seek help for family planning and sexually transmitted diseases at this unit.

SARAYA donates part of the sales from the “Lactferrin Lab.” cosmetics product line (containing Lactoferrin) to JOICFP, which is an official organization for “White Ribbon Japan”.

* JOICFP is the abbreviation of Japanese Organization for International Cooperation in Family Planning. JOICFP’s mission is to create a society in which women and girls can make their own choices regarding their sexual reproductive health and rights, thereby realizing their potential to the fullest. Ultimately, JOICFP aims to contribute to the achievement of the Sustainable Development Goals (SDGs)

Public-private partnership project in Uganda

The Ugandan Government launched a new policy to improve the reproductive health service. The “Strengthening Quality of Care for Sexual and Reproductive Health Services through Public Private Partnerships in Uganda (SARAYA safe motherhood project)”, organized by the Japan Trust Fund (hereinafter referred to as JTFP) and supported by the International Planned Parenthood Federation, started in June 2018 with the participation of the governments of Uganda and Japan, SARAYA, Reproductive Health Uganda (RHU: Ugandan members of IPPF, NGO) and other NGOs such as JOICF etc. The funding was provided by JTF (75%) and SARAYA (25%).

As a part of this project, an infection control and prevention initiative starts at district clinics in Gulu, Lira, Apac and Luwero, on the outskirts of Uganda’s capital city Kampala. SARAYA Manufacturing (U) Ltd. and SARAYA Co. Ltd. are participating in this project. The launch event was held on 24 August 2019, welcoming some guest speakers; Hon. Dr. Sarah Opendi the Minister of Health



Maternal Mortality and Proportion of attended by Skilled Birth Attendants

Country	Maternal Mortality Rate 2015 (per 100,000 live births)	Skilled Birth Attendants 2009-2018 (%)
Burundi	712	85
Kenya	510	62
Rwanda	290	91
South Sudan	789	19
Uganda	343	74
UN Rep of Tanzania	398	64
Japan	5	100

Source: World Health Statistics 2019 Monitoring for the SDGs, WHO



White Ribbon Japan for Safe Motherhood



Lactferrin Lab. Moist lift Gel Serum



The launch event of JTF project (SARAYA safe motherhood project)

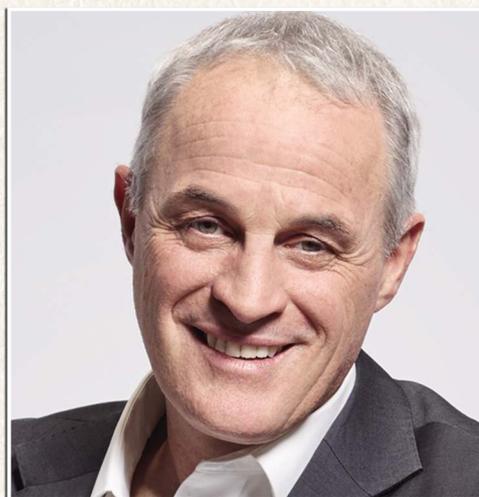
of the Republic of Uganda, the Ambassador H.E. Kazuaki Kameda of the Japanese embassy in Uganda, Professor Didier Pittet (p.9), and representatives of RHU. Mr. Takeo Hojo of Saraya Manufacturing (U) Ltd., also spoke of the challenges faced in Uganda by Uganda’s healthcare environments and Saraya. Professor Didier Pittet gave a speech about the widespread nosocomial infection issues around the world, and the effectiveness of hand hygiene using alcohol-based disinfectants to solve those issues.

Sustaining human behavioral change: hand hygiene as an example

Hand hygiene is the cornerstone of infection prevention and control (IPC). When timely and optimally performed, it reduces healthcare-associated infections (HAIs), antimicrobial resistance, health costs, and saves lives. Poor compliance with hand hygiene practices remains both a problem and a challenge for IPC practitioners all over the world.

The World Health Organization (WHO) Clean Care is Safer Care global programme, launched in 2005, is based around a change model for hand hygiene promotion. It fosters partnerships and coordinates activities as set out in its programme plan. By December 2017, more than 140 of the 194 United Nations member states had pledged their support to implement actions to reduce HAIs, corresponding to 95% coverage of the world population. The WHO's field-tested and validated, multimodal hand hygiene improvement strategy comprises five critical components: 1) system change - replacing soap and water handwashing by alcohol-based handrubbing; 2) healthcare worker training and education; 3) evaluation and performance feedback; 4) reminders in the workplace; and 5) promotion of an institutional safety climate.

WHO, in collaboration with major international stakeholders, including SARAYA, has coordinated more than 50 national campaigns, and launched the global annual healthcare worker call to action; the SAVE LIVES: Clean Your Hands 5th May campaign to highlight hand hygiene action at the point of care. SARAYA is a very active member of POPS (Private Organizations for Patient Safety < <http://www.who.int/gpsc/pops/en/> >) and promotes, co-organizes, and supports a large number of activities contributing to improving patient safety worldwide, and saving lives. Among these activities in 2017, SARAYA supported a very successful Hand Hygiene Train-The-Trainers programme in Malaysia where key IPC representatives and leaders from all parts of the country received training from collaborators of the WHO Collaborating Center on Patient Safety in Geneva (WHO CC), to become trainers of all Malaysian healthcare workers. The event was associated with the renewal by the state Minister of Health



of the pledge to Clean Care is Safer Care.

More than a key stakeholder, SARAYA is a real partner of the WHO CC, and was the main sponsor of the International Conference on Prevention and Infection Control (ICPIC) held in Geneva in June 2017. ICPIC is a chance for IPC stakeholders and key opinion leaders to meet every two years, with more than 1200 participants from almost 100 countries worldwide. As a sponsor of ICPIC, SARAYA is a major player supporting the sustainability of IPC over the years.

Changing behavior does not happen without resistance. Why is Clean Care is Safer Care such a success? Among the many reasons are: system change making behavioral change possible; the fact that the promotional strategy is multimodal and evidence-based and experience-based; the use of a structured "top-down" as well as "bottom-up" implementation strategy; and the development of multiple tools for implementation. Importantly, the promotion campaign is also linked to positive outcomes, and success and excellence are rewarded. In addition, the strategy promotes simplification, co-creation, creativity, community experience, silo busting*, the use of social media, and the application of sharing economy principles. SARAYA promoted and facilitated many of these parameters at different levels: continuous research for the best products; best way to deliver products for hand hygiene; promoting education and training; developing efficient and adaptable tools for communication; and organizing a variety of events and supporting global actions on a large scale. Among the most remarkable and unique activities by SARAYA is the project promoting the local production of alcohol-based handrub in Uganda. Waste products from the extraction of sugar from sugar cane are being used to produce alcohol for hand sanitizer use. Adaptation to local resources is absolutely critical for sustainability, and this project, which generates local jobs for Ugandans (currently around 20 employees), is about to become a model for low-resource countries. It also constitutes a perfect example of social innovation and of the application of sharing economy principles, two key elements of long-term sustainability.

The global impact of Clean Care is Safer Care, with estimates of 5 to 8 million lives saved every year in the world, would not be possible without the significant contribution of partners such as SARAYA. Many thanks for your tremendous support that contributes to the long-term sustainability of this successful WHO programme.

Director, Infection Control Programme & WHO Collaborating Centre on Patient Safety,
The University of Geneva Hospitals and Faculty of Medicine
Geneva, Switzerland
Professor Didier Pittet, MD, MS, CBE

* Silo Busting: In business, silo busting means to break up an isolated department in an organization that operates alone and doesn't share information.



Private Organizations for Patient Safety

WHO POPS for Hand Hygiene

WHO established a platform named the WHO Private Organizations for Patient Safety (POPS), in collaboration with the WHO Collaborating Centre on Patient Safety at the University of Geneva Hospital, to improve safety and reduce healthcare-associated infections (HCAI). The participating companies are involved in developing, manufacturing and/or distributing products for hand hygiene, and the platform will allow WHO and these companies to share information. It is also aimed at aligning such companies' promotional messages for hand hygiene products with WHO recommendations, enhancing the quality of hand hygiene products, and encouraging product availability and accessibility in all parts of the world. The long-term aim of the collaboration, which currently includes 15 companies from around the world, is to improve the implementation of WHO recommendations in different parts of the world, especially in countries with limited resources. <www.who.int/gpsc/pops_hand-hygiene/en/>

POPS Participants as at 2016-2017

- 3M
- B. Braun Medical AG
- BODE Chemie GmbH
- Deb Group
- Diversey, now a part of Sealed Air
- Ecolab Inc.
- Elyptol (formally SunnyWipes)
- GOJO
- HandInScan
- Laboratoires Anios
- MediHandTrace
- Ophardt
- Saraya Co., Ltd
- Schülke & Mayr GmbH
- Surewash



Private Organizations for Patient Safety

Total 15 companies



Business Call to Action (BCtA)

The Business Call to Action (BCtA) is a project that can achieve commercial and development aims to promote progress towards the Sustainable Development Goals (SDGs) led by the United Nations Development Programme (UNDP) and governments*, by challenging companies to develop inclusive business models that engage people at the base of the economic pyramid (BoP).

More than 130 companies have agreed to BCtA and made a public commitment to improve the lives of millions of people by producing commercially feasible businesses and involving BoP people as its consumers, manufacturers, suppliers and sellers. In September 2014, Saraya became an active member of BCtA for its project aimed at combating maternal and newborn infections in Ugandan hospitals.

* The Dutch Ministry of Foreign Affairs, the Swedish International Development Cooperation Agency (Sida), the Swiss Agency for Development and Cooperation, the UK Department for International Development (DFID), the US Agency for International Development (USAID), and the United Nations Development Programme, which hosts the secretariat.

ISO 9001 and 13485

In 2006, SARAYA gained certification for the ISO 9001 Quality Management System and the ISO 13485 Medical Devices - Quality Management System. Other acquired ISOs are ISO 14001 and 22000. (Refer to "Company Information" on the back of the cover)



Founded in 1952, Saraya is a Japanese based manufacturer of hygiene and sanitation products. The company strives to contribute to the improvement of sanitation, environment, and health around the world with its hygiene products, including liquid soap and alcohol disinfectant. As a leading manufacturer of healthcare and hygiene products, Saraya has committed to combat bacterial infection rates for mothers and newborns in Ugandan hospitals through the sale and marketing of its locally manufactured hand sanitization product. The company seeks to improve the hand hygiene compliance rate in a number of piloted hospitals from 70% compliance in 2013 to 80% by 2016. Such efforts will help to reduce the incidences of infection, namely post caesarean sepsis and acute diarrhoea, and eliminating nosocomial infections in hospitals where Saraya's alcohol base hand products are used.



<https://www.businesscalltoaction.org/member/saraya>



STERIACE 100

STERIACE 100 Hydrogen Peroxide Gas Sterilizer features new technology using peracetic acid for safer, cheaper and faster sterilization. The device won the "Industrial Technology Award" from the "Osaka Industrial Research Association"



Quality Education

Stakeholder Engagement

Sustainability and Health as Commercial Messages

SDG 4.7 “By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development” (Transforming our world: the 2030 Agenda for Sustainable Development).

SARAYA’s Consumer Operation Headquarters offers household goods which promote sustainability and healthy lifestyles. Therefore, an assessment of environmental impact and health risk will always be our first approach when advertising the products. Together with all stakeholders, including companies and consumers, we will keep promoting products which pertain to sustainable lifestyles and minimum health risk.

SARAYA’s Advertising Overview

SARAYA’s Public Relations Department operated with a small budget using not only a B2B approach, but also a B2C approach. The department is in charge of advertising in a wide range of markets, including health care, food sanitation, industrial hygiene and functional foods. Since there are multiple brands, it is difficult to assign the advertising task to one agency. In general, 30% of our advertisements were distributed to magazines, another

35% through online advertising, 20% to radio stations, 15% to newspapers, 10% during events, and 5% for in-house advertising.

We also introduced activities in relation to environmental and social problems by working on projects with artists, such as photographers and musicians. We invited Mr. Yosuke Kashiwakura, a world-renowned nature photographer, who was inspired by Borneo, for an interview on our project.

Another example is National Geographic’s “Special Talk”, where they talked about Borneo’s rich biodiversity, while also discussing the environmental problems surrounding palm oil plantation expansion in the rainforest (<https://special.nikkeibp.co.jp/atclh/TS/19/saraya03/>). Company executives were also interviewed. For example, Online Alterna’s “Solving Social Problems through Business” interviewed SARAYA’s President Yusuke Saraya on the subject of expanding business together with society (<http://www.alterna.co.jp/25818>).

Environmental Education for Children

The July 2018 issue of Paperpuntas 002 wrote about exploring Borneo’s diverse animal species. Readers can scan the QR Code on some of the pages and look at SARAYA’s environmental education page while reading the magazine. Other articles were also published, including in the 2018 Spring edition, on the decline of rainforests.

Raising awareness of environmental and social issues, solid media image

SDGs (Sustainable Development Goals) aim to achieve 17 goals and 169 targets, by striving to bring together private corporations for generating creative and innovative solutions on social issues. What can we do to contribute to achieving SDGs by 2030? Saraya has been continuously making efforts to solve social issues through their products and services since the very beginnings of the company. In addition to the iconic green liquid hand soap with specially designed dispensers, the Borneo Conservation Trust for biodiversity conservation, the “Wash a Million Hands Project”, and being a pioneer in procuring sustainable palm oil etc., Saraya has also been directly contributing to tackling social issues using their core business

At the same time, cooperation between consumers and companies is essential in order to solve these global social issues with a central focus on SDGs. Saraya does not just sell its products, it also raises awareness of various environmental and social issues through their media appearances and advertising communications. This demonstrates Saraya’s commitment to SDG 4.7: “Ensure that all learners acquire the knowledge and skills needed to promote sustainable development”.

The Founder of Business Magazine Alterna
Mr. Setsu Mori

森 張



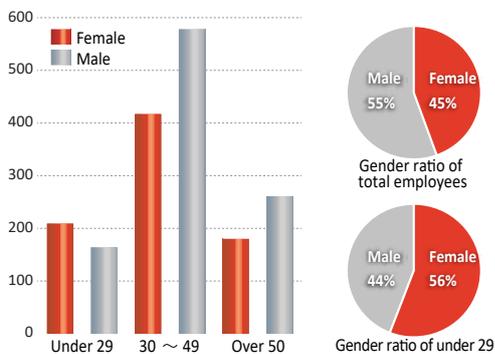
Gender Equality

Promoting Women's Empowerment

Equal Opportunities and Treatment

We not only endeavor to make a commitment to equal pay for men and women, but also that there are no gender inequalities in recruitment, promotion, pay rises and personnel placement, and ensure the provision of equal opportunities for education & training. We continue our efforts to prevent internalized discrimination. We hire and train our employees as professional individuals with high moral standards, regardless of their gender. Female leader training courses and mentoring programmes by the board of directors for females in management are also available.

Osaka City set up an accreditation system for companies to be certified in compliance with the "Osaka City Female Active Leadership" principles when the applicant actively promotes "Equal Opportunities and Treatment". There are two tiers, and SARAYA received a two star certificate in 2015 – which is the highest level. In the same year, Saraya was also approved as a leading company for "Promoting Paternal Involvement", and not only that, we won the award as the best of the approved companies.



Saraya Co., Ltd. / Tokyo Saraya Co., Ltd. Permanent Employee Gender & Age Comparison Chart (as of Oct 2018)

Why we Need Female Leaders

From food sanitation to healthcare hygiene, most end users of Saraya products are female. Even in ordinary households, our decision makers are mainly female. This is the reason why we promote gender diversity, and try our best to place female employees at management level, especially in the Product Development Division, so that valuable voices are included when making crucial decisions. The same applies to employees who want to start a family. We see this positively, as a way of creating new opportunities for them to gain a new viewpoint as parents, rather than negatively as the loss of employees when they take their maternity leave.

These are some fine examples of how we promote gender diversity and help female employees play active and important roles at Saraya. 80% of the food sanitation instructors are female. The executive director of the Medical Business Headquarters is Ms. Yoko Yoshida, and she started up the Medical Marketing Department. 70% of the workforce in the department are female. These are only a few examples, as more and more women are playing active roles in the organization.



"Osaka City Female Active Leadership Leading Company" Certificate logo (left), and Mr. Saraya delivered a speech at the ceremony, receiving the Best Award in 2015.

Direct Employment Composition Ratio by Age and Gender at Saraya, Tokyo Saraya and Smile Sangyo (31st Oct. 2018)

	Age	Female (ratio)				Male (ratio)			
		-29	30-49	50-	All age	-29	30-49	50-	All age
Saraya	Permanent employee	109(52.7%)	160 (29.1%)	32(18.0%)	301 (%34.0)	98(47.3%)	389(70.9%)	146(69.5%)	633(82.0%)
	Other employee	50 (78.1%)	160 (84.7%)	104(73.3%)	314(79.4%)	14(21.9%)	29(15.3%)	40(26.7%)	83 (20.6%)
Tokyo Saraya	Permanent employee	47(49.0%)	65(30.7%)	6(9.0%)	118(31.5%)	49(51.0%)	149(69.3%)	61(91.0%)	259 (68.5%)
	Other employee	2(40.0%)	23(95.8%)	12 (75.0%)	37(82.2%)	3(60%)	1(4.2%)	4(25.0%)	8 (17.8%)
Smile Sangyo	Permanent employee	0(0%)	0(0%)	2(66.7%)	2(14.3%)	3(100%)	8(100%)	1(33.3%)	12(85.7%)
	Other employee	1(66.7%)	9(81.8%)	24(82.8%)	34(81.4%)	1(33.3%)	2(18.2%)	5(17.2%)	8(18.6%)
Total		209(55.4%)	417(41.9%)	180(41.2%)	806(45.4%)	168(44.6%)	578(58.1%)	257(55.4%)	1003(58.8%)

Osaka Sakuyahime Award

Osaka's Chamber of Commerce and Industry established the "Osaka Sakuyahime Award" in 2016 to give recognition to prominent female figures in business. The award selected influential and powerful female leaders who also act as a role model for younger generations. It is also meant to promote and encourage female executives, managers or other highly demanding occupations, especially those who play a major role in corporate activities. The award based its philosophy on the mythological Japanese figure "Konohanasakuya-hime".

The current executive director of the Medical Business Headquarters, Ms. Yoko Yoshida, won the first prize of the Sakuyahime Award in 2018, and SARAYA Biochemical Research Institute's MDRG manager, Emiko Kawamukai won the third grand prize of the same award.



Ms. Yoko Yoshida



Ms. Emiko Kawamukai

Building Long-lasting Trust and Confidence

– Success Story from Food Sanitation Leader in Tokyo's Minato and Shinagawa Ward –

SARAYA's mission is the achievement of health. As well as providing detergents, disinfectants and dispensers necessary for food sanitation, the Food Sanitation Segment issues a food sanitation manual to help educate customers. I have been working as a food sanitation instructor in SARAYA Tokyo since 1992, providing instruction and support, especially for hand-washing, as part of food poisoning prevention measures.

Since then, there have been a lot of changes related to food poisoning. Bacterial infections from *Vibrio enteritis* and *Salmonella* were the main cause of food poisoning in the past. Then in 1996, there were a lot of cases of food poisoning due to intestinal infection caused by *Escherichia coli* O157. Recently, countermeasures to prevent norovirus food poisoning caused by a viral infection are becoming a challenging task.

We are committed to complying with the latest food sanitation standards and measures required by food companies, while also cooperating with government agencies. We believe that our lengthy commitment here has led both industrial/corporate customers and government agencies to trust us on this issue.

Article 61(2) of the Food Sanitation Act mandates municipal governments to appoint promotional leaders for food sanitation in their respective jurisdictional areas. In 2017, Minato Ward's Chief Administrator appointed me as a food sanitation leader in Minato Ward. A year later, I was appointed as the food sanitation leader in Shinagawa Ward.

A food sanitation leader has five main tasks:

1. Provide advice and consultation to business operators with respect to food sanitation
2. Cooperate and assist in raising public awareness on food sanitation
3. Gather information on the local food sanitation
4. Participate in the Food Sanitation Council Conference, held by the Health Department Director
5. Make necessary recommendations during the conference

Our agenda in June 2018 is the revision of the Food Sanitation Act to meet the HACCP (Hazard Analysis Critical Control Point) Standard. Furthermore, we cooperate with health centers to plan strategies for effective promotion and information sharing. I will continue to work hard and share new knowledge about food sanitation with everyone. Hopefully we can broaden our perspectives.

Tokyo Saraya Co., Ltd.
Sanitation Business Headquarters,
Food Sanitation Division,
HACCP promotion Saraya secretariat
Food sanitation leader
in Minato and Shinagawa Ward
Ms. Hisayo Muramatsu

村松 寿代





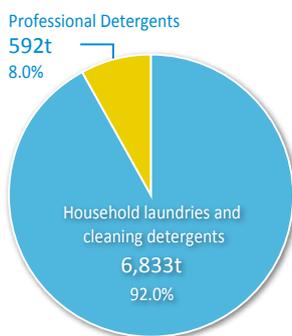
SARAYA household products are LAS free

Zinc and nonylphenyl ethers are known to have endocrine disrupting properties. In addition to these chemicals, the Japanese Ministry of the Environment added environmental standards in 2013 relating to water pollution caused by linear alkylbenzene sulfonate (LAS) to protect aquatic life. The Ministry of the Environment reported that aquatic organisms such as salmon and trout, which inhabit relatively low temperature freshwater habitats in Japan, can be impacted by LAS levels exceeding 0.03 mg/l, and the environment for spawning localities should have LAS levels lower than 0.02 mg/l. The ministry also reported that saltwater aquatic organisms can be impacted by LAS levels exceeding 0.01 mg/l, and that LAS levels exceeding 0.006 mg/l could affect spawning grounds.

The Japanese Ministry of the Environment reports that 42,694 tons* of LAS were handled throughout Japan in FY 2016 (1 April to 31 March), with an estimated 35,269 tons of the surfactant going through sewage treatment, and 7,425 tons released untreated into the environment. Household laundry and cleaning detergents accounted for 92.0% of this volume.

Saraya has never used LAS in its household products, and has started using novel sophorolipids in its flagship products, such as the Happy Elephant series of household detergents.

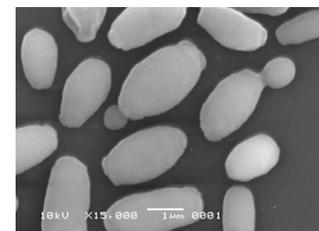
* Source: Japan Soap and Detergent Association and Japan Surfactant Industry Association



Amount of estimated LAS release to the environment in Japan in FY 2016

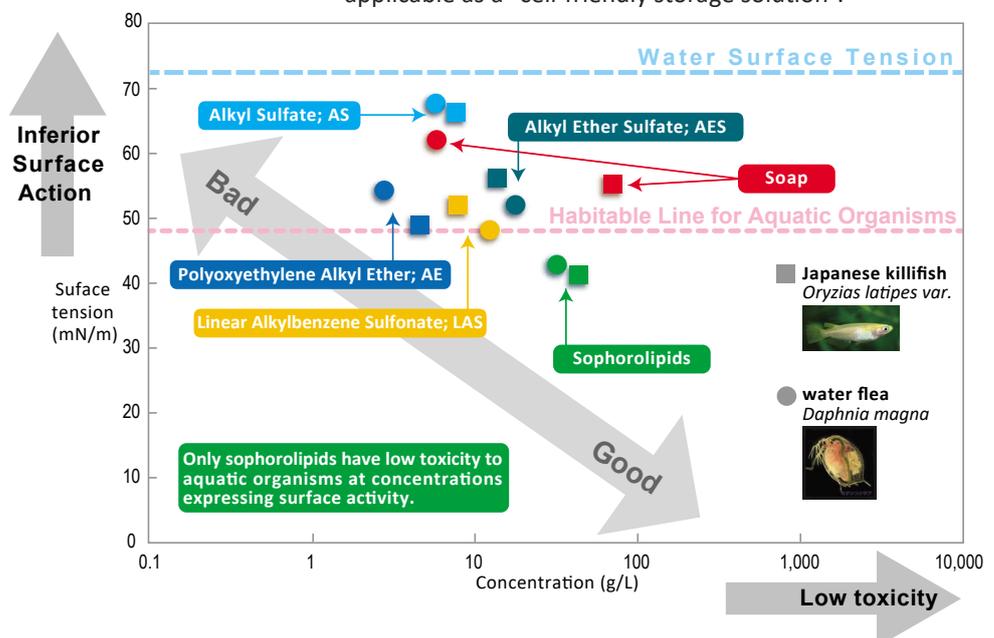
Sophorolipids

SARAYA is collaborating with Osaka University to use sophorolipids in a freezing solution to prevent cells from being damaged by the formation of ice crystals when cells are stored at extremely low temperatures (about -196 °C) in the field of regenerative medicine. Conventionally, dimethyl sulfoxide (DMSO) has been used, but there are concerns about differentiation induction and cytotoxicity. Sophorolipids have low cytotoxicity, and are expected to have little effect on cell differentiation because they are glycolipids. Thus, sophorolipids are expected to be applicable as a “cell-friendly storage solution”.



Application in Regenerative Medicine

SARAYA is collaborating with Osaka University to use sophorolipids in a freezing solution to prevent cells from being damaged by the formation of ice crystals when cells are stored at extremely low temperatures (about -196 °C) in the field of regenerative medicine. Conventionally, dimethyl sulfoxide (DMSO) has been used, but there are concerns about differentiation induction and cytotoxicity. Sophorolipids have low cytotoxicity, and are expected to have little effect on cell differentiation because they are glycolipids. Thus, sophorolipids are expected to be applicable as a “cell-friendly storage solution”.



Acecide

Acecide disinfectant is the first peracetic acid-based chemical sterilant / high-level disinfectant exclusively for medical devices, instruments, and equipment in Japan. Before the release of Acecide disinfectant, glutaraldehyde preparations were used for a long time for disinfecting endoscopes and other medical devices. However, the development of a substitute has been long overdue because of several issues such as: slow bactericidal action of glutaraldehyde, especially on acid-fast bacteria and spores, the isolation of glutaraldehyde-resistant acid-fast bacteria from an automatic endoscope washer, and health concerns associated with the toxicity of glutaraldehyde, such as allergic reactions. Peracetic acid has great promise as a prospective candidate because of (1) its excellent bactericidal activity – even against spores and acid-fast bacteria – and its reported efficacy on glutaraldehyde-resistant acid-fast bacteria, and (2) very low toxicity from its residues and degradation products. After reacting with organic matter, or as time passes after draining, peracetic acid decomposes and breaks down into acetic acid and oxygen. Hydrogen peroxide in a peracetic acid solution also easily breaks down into oxygen and water. Acecide disinfectant boasts the quick and excellent bactericidal activity of peracetic acid, and has high stability in solution, and can be used repeatedly to reprocess reusable medical devices such as flexible endoscopes.



Replacement PRTRs

Up until 2009, as part of our environmental management system (EMS), we made concerted efforts to avoid the use of chemicals listed in PRTRs – an emission inventory that collects and disseminates data on specific chemical releases.

During recent years, however, there have been a series of amendments to the Pollutant Release and Transfer Register (PRTR). As a result, the PRTR Law contradicts our mission to provide customers with quality products with high biodegradability.

To give an example, polyoxyalkylene alkyl ether, one of the major substitutes for PRTR-designated polyoxyethylene alkyl ether (AE), is less biodegradable than AE, meaning that products containing polyoxyalkylene alkyl ether instead of AE have more impact on the environ-

ment (see later sections for more details). With respect to polyoxyethylene alkyl ether sulphate (AES), which has recently been classified as a PRTR substance, there is no substitute available as of now.

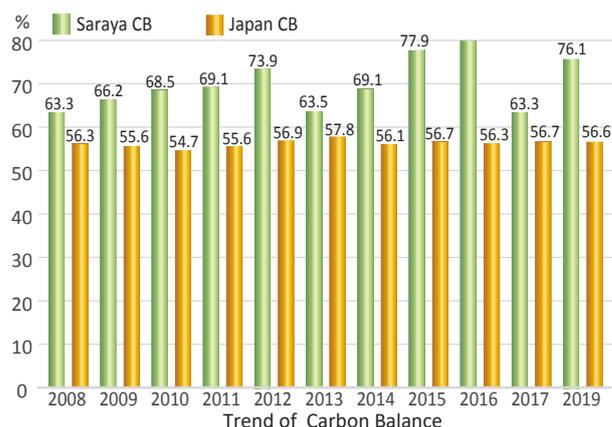
What Is Carbon Balance?

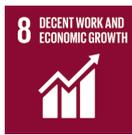
Against this backdrop, Saraya has developed a new environmental barometer called the Carbon Balance (CB) which is designed to indicate the fossil and non-fossil carbon content of surfactants. The Carbon Balance (%) of a surfactant is the proportion of total carbon content which comes from a non-fossil source (i.e. a CB of 100% indicates an entirely non-fossil derived surfactant; and a CB of 0% indicates the carbon source is entirely fossil based). We calculate the total CB of surfactants used in our products for each year and try to maintain it above 60% as part of our EMS targets. In 2017, 11 surfactants made up most of those produced in Japan. The total CB of the 11 most frequently traded surfactants was approximately 56.7%.

The CB of Surfactant A (PRTR-designated AE) is approximately 40%, while those of Surfactant B and C, two major substitutes for AE, are about 20% and 12%, respectively. Generally, the higher the CB or non-fossil carbon content of a surfactant, the higher the biodegradability. For these reasons, instead of avoiding PRTR chemicals which could end up being less biodegradable, we have decided to use chemicals with higher CB values.



The following is the Carbon Balance of AES as an example: $12/(2 \times 3 + 12) \times 100$





Decent Work and Economic Growth

Work Life Balance

Saraya was certified by the Ministry of Health, Labor and Welfare as a "Childcaring support company" in 2009, and Saraya Tokyo was certified in 2014.



Better Balance between Family and Career

SARAYA provides various systems for its employees so that they can work under different circumstances without losing job satisfaction and with a good work life balance. They can choose how they work flexibly in different circumstances at various life stages to suit their needs. For example, starting a family or looking after elderly parents. In these life changing periods, we need a good balance between work and caring for family members at home.

Prenatal and postnatal maternity leave, childcare leave, reduced working hours, flexible working hours, work-from-home, no overtime, restrictions on night work and out-of-hours, and leave for the care of a sick child. They are available to all for our employees to support their parent-

ing, and of course they apply equally to both parents.

For those who need to look after and care for elderly parents, we provide nursing care leave, nursing care reduced working hours, nursing care flexible working hours, work-from-home, no overtime and restrictions on night work and out-of-hours.

Personal development leaves and Volunteering leaves

It is necessary to have a good work life balance to refresh your mind and boost your energy to increase creativity at work. At Saraya, all full-time employees are eligible for 5 special paid leaves (total up to 12 days) as "Work life balance special leaves".

Reduce Inequalities



Reduced Inequalities

Diversity



Diversity is one of Saraya's Valuable Assets

Just as biodiversity is the key to ecological resilience in nature, so diversity at the workplace is one of the important factors for company growth and sustainability. The key characteristics of diversity in the workplace include gender, age, race, ethnicity, religion, nationality, cultural differences, family, educational background and disabilities.

At SARAYA, we implement strategic diversity management in the workplace to attract and maintain global talent. This brings a positive effect for motivating employees, improving productivity, and enhancing the company's competitive position in the market. We have set up the "Diversity Promoting Section" within HR at SARAYA headquarters, and are actively promoting the recruitment of elderly people, disabled people and foreigners.

"Diversity Management Selection 100"

In 2012, the Ministry of Economic Affairs, Trade and Industry introduced the "100 New Diversity Management Companies" initiative to award companies which have improved their company value by implementing diversity management. This initiative rewards companies for their contribution to promoting diversity in the workplace by strategic management. They provide opportunities for

these diverse talents so that they can create innovations and promote a management system to create more value. Saraya was one of the 100 awarded in 2013.

Percentage of companies attaining the legally stipulated disabled employment rate

	2016	2017	2018
Saraya Co., Ltd.	100%	100%	100%
Smile Sangyo Co., Ltd.	Employment rate: 2.09%	Employment rate: 2.18%	Employment rate: 2.97%
Tokyo Saraya Co., Ltd.	71% Employment rate: 1.41%	93% Employment rate: 1.85%	100% Employment rate: 2.61%

Diversity and Inclusivity

SARAYA opened job vacancies for individuals with disabilities, and I joined the company in February 2015. I am an individual with schizophrenia and bipolar disorder, and my health may sometimes go up and down. I am now able to receive my medication and visit the hospital and also work full-time at the company, all the while stably controlling my physical condition.

I am also a member of the LGBT community, and had been discriminated against in the past before joining the company. SARAYA put an emphasis on respecting diversity, and I still remember how I was understood and accepted by everyone like it was yesterday.

Saraya Co., Ltd.
Sales Management Division 2nd section
Ms. Haru Takahashi

高橋 はる





Industry, Innovation and Infrastructure

Establish cold chains in Cambodia and Eastern Africa

JICA Support for JPN SMEs Overseas Venture Development

Normally when water drops below 0°C, it freezes and turns to ice. The freezing point of ethanol is shown in the table on the right. SARAYA introduced the “RAPIDFREEZER”, which use a unique method to rapidly freeze vacuum sealed foods by immersing them in -30°C liquid ethanol. A project was launched using this “RAPIDFREEZER” to produce safe and high-quality frozen food. In January 2017, the “Survey on Projects for Improving Food Safety with Advanced Hygiene Management and Value-Added Processing System” was adopted by JICA.

We are exploring on a trial basis the possibility of commercialization by processing aquacultured tilapia from a collaborating company (Rainbow Progress Enterprise Co., Ltd.), and fresh fruit such as mango and pineapple from an agricultural venture (Japan Farm Products (Cambodia) Co., Ltd.). This not only makes it possible to export products to countries outside of Cambodia, but also enables the farmers in Cambodia to expand their sales channels.

Traditionally, tilapia has been said to be unsuitable for raw consumption due to contamination with bacteria and parasites. However, disinfecting foods with slightly acidic electrolyzed water using SARAYA’s Sanistar machine (also sold as Purestar in Japan), and killing the parasites by using the rapid liquid freezer RAPIDFREEZER, make it possible to provide safe sashimi. This tilapia is available in Cambodia’s local restaurants.

The Cold Chain from Monvasa to Kampala

In Africa, the Ministry of Agriculture, Forestry and Fisheries adopted a new business project “FY2018 Market Development Project to Solve Food Value Chain Problems in Africa and Other Areas,” whereupon Saraya commenced initiatives for food sanitation businesses in the East African region. This initiative is being implemented in collaboration with two Japanese companies, KAI GLOBAL Limited (Nairobi, Kenya), and Cots Cots Ltd. (Kampala, Uganda, a Saraya trade investment).

Temperature-controlled transport vehicles are rarely used in East African countries. Cooling during transport is usually done using ice-packaged polystyrene foam boxes. There is a large amount of food loss during the process from harvesting to consumption. Improving the situation therefore requires the establishment of a new food distribution system. In this project, Saraya, in collaboration with KAI GLOBAL Limited, conducted research on the distribution of marine products, and tested the transportation of marine products from fishing ports in Kenya to Nairobi and Kampala. Seafood is processed and provided at the Yamasen, a Japanese restaurant managed by Cots Cots Ltd. Yamasen’s kitchen undertakes food sanitation and processing using Saraya’s Sanistar and Rapidfreezers, amongst others. We also plan to expand our food processing business to neighboring countries in East Africa.

Consistency %	0wt%	10wt%	20wt%	30wt%	40wt%	50wt%
Freezing point	0.0°C	-4.6°C	-11.2°C	-20.9°C	-30.7°C	-38.1°C
Consistency %	60wt%	70wt%	80wt%	90wt%	95wt%	100wt%
Freezing point	-45.4°C	-50.5°C	-67.0°C	-113.0°C	-120.0°C	-114.5°C



Soaking in an ethanol solution at minus 30°C and freezing it at once, protects cell membranes, and therefore maintains flavor and texture, so that food still tastes fresh after defrosting.



Tilapia has been said to be unsuitable for eating raw because it contains quite a large number of bacteria and parasites. However, the parasites are killed by SARAYA’s Sanistar, which produces slightly acidic electrolyzed water with a strong bactericidal effect, together with the Rapidfreezer, which freezes food rapidly at low temperature. The photograph shows slices of tilapia, which is similar to sea bream. It is considered that the taste and texture of tilapia are similar to those of sea bream when consumed as Japanese sashimi and sushi.



(photo above) Staff members of the Yamasen Japanese restaurant in Uganda. The second person from the right in the first row is Mrs Miyashita, the representative of Cots Cots Ltd. (SARAYA trade investment), and the master chef of Yamasen, Mr. Yamaguchi, is pictured in the center in the second row. The restaurant is very busy and is fully booked several months ahead.

- SDG 3
- SDG 4
- SDG 5
- SDG 6
- SDG 8
- SDG 9
- SDG 10
- SDG 12
- SDG 13
- SDG 14
- SDG 15
- SDG 16
- SDG 17

Responsible Consumption and Production

Palm Oil Supply Chain

Palm Oil supports global food chain

NPO CDP (Carbon Disclosure Project) officially reports that 80% of the global deforestation on the planet resulted from agricultural and livestock farming supplying beef, wood products, soya and palm oil. Until 2005, soya oil topped the production and consumption figures for oil crops. However, palm oil overtook soya in 2006, and it has been steadily increasing ever since.

Country of Origin of Palm Oil

55% of palm oil is produced in Indonesia, followed by Malaysia at 34.6% - so that these two countries together account for 88.6% of global production. The island of Borneo is the largest palm oil production location. Sabah in northern Borneo, is the closest state to Japan. This is where most of the exported palm oil products come from.

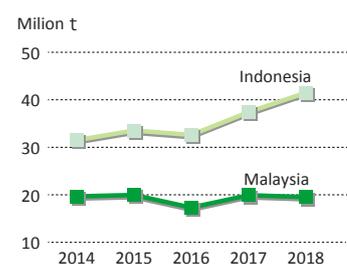
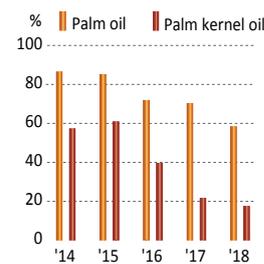
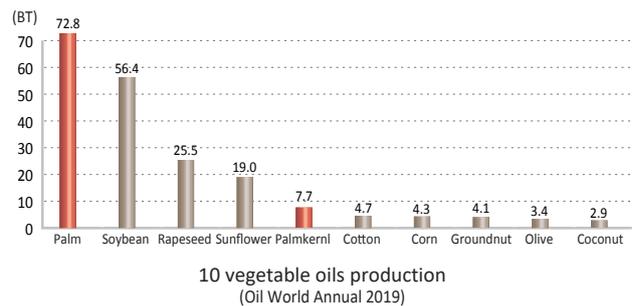
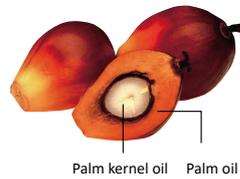
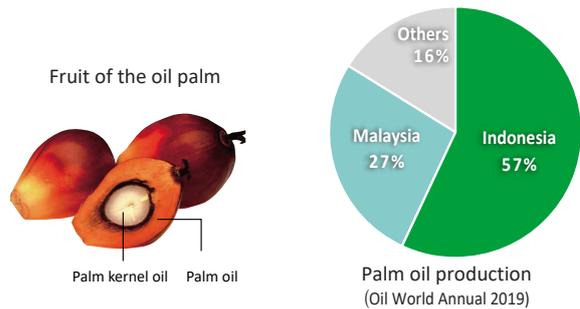
85% of palm oils are used in processed foods or deep-fried foods as an alternative to margarines, shortenings and cocoa butters. The majority of the palm kernel oils

are used as an ingredient in non-edible products such as soaps, detergents, cosmetics, candles and industrial products in Japan.

The main reason why palm oil became so popular is that it is much cheaper compared to other oils. The harvest yield per hectare (FAO Statistics Division, 2016) of oil palm fruits is 14.24 t, while soybeans follow far behind in second place at 2.71 t. On top of that, they are produced in equatorial areas like Malaysia and Indonesia where labor is relatively cheap, which contributes to the general low price of palm oil. There are said to be several issues behind cheap palm oil production such as child labor, forced labor or unlawful working conditions. To tackle these issues, SARAYA took action to seek a sustainable development approach for its whole value chain.



Harvesting a fruit bunch from an oil palm





Oil palm tree

Roundtable on Sustainable Palm Oil

In 2004, a Roundtable on Sustainable Palm Oil (NGO) was set up to promote the sustainable production, procurement and use of palm oil products. There are 8 principles and 43 criteria (established in 2013), which are reviewed every 5 years. CSPO (Certified Sustainable Palm Oil) is palm oil that is certified by the Roundtable on Sustainable Palm Oil (RSPO) according to specific criteria. The CSPO rate was 21% in 2016 for global palm oil production. RSPO farms can also earn credits according to their production and shipping volumes.

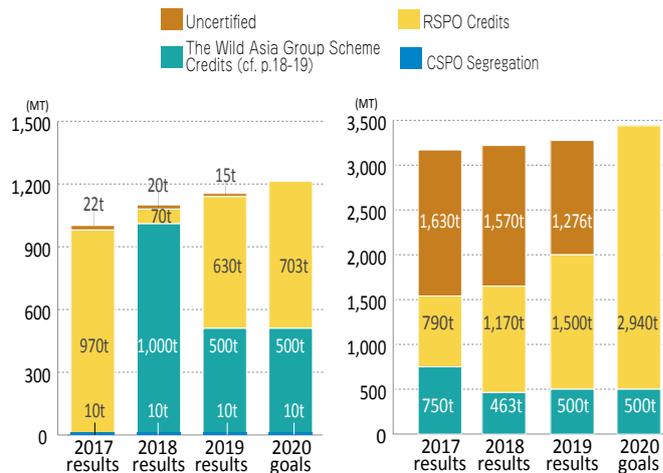
2020 RSPO Certification Targets

SARAYA's consumer goods are produced from materials derived from palm oil, either through segregated or credit supply chain models certified by RSPO. In terms of market availability, RSPO certified palm kernel oil (CPKO) is currently very limited, and this situation may not change much in the near future. We therefore decided to revise our previous target for 2020 certification.

Our new 2020 target is the use of RSPO certified palm oil, including Book & Claim (Credit) for all our domestically sold products. In 2030, we are planning to have RSPO certification for all product lines, including those sold overseas. The figures on the right show our current and future targets for RSPO certified palm oil and RSPO certified palm kernel oil.

RSPO 8 PRINCIPLES

1. Commitment to transparency
2. Compliance with applicable laws and regulations
3. Commitment to long-term economic and financial viability
4. Use of appropriate best practices by growers and millers
5. Environmental responsibility and conservation of natural resources and biodiversity
6. Responsible consideration of employees, and of individuals and communities affected by growers and mills
7. Responsible development of new plantings
8. Commitment to continuous improvement in key areas of activity



CSPO results and goals

Types of RSPO Certified Palm Oil Used in Saraya Products

Segregation or Identity Preserved

RSPO-1106041

Segregation: Sustainable palm oil from different certified sources is kept separate from ordinary palm oil throughout the supply chain. Identity Preserved: Sustainable palm oil from a single identifiable certified source is kept separately from ordinary palm oil throughout the supply chain. The Saraya Happy Elephant line has been using segregation palm oils.

Credits (Book & Claim)

RSPO-1106041

The supply chain is not monitored for the presence of sustainable palm oil. Manufacturers and retailers can buy credits from RSPO-certified growers, crushers and independent smallholders. The Book and Claim supply chain model is supported by the trade of RSPO credits.

Supporting Independent Palm Plantation Smallholders

Certified Sustainable Palm Kernel Oil

In 2019, 13.93 million tons (19% of total) of RSPO certified palm oil was certified sustainable palm oil (CSPO), whereas only 3.02 million tons were CSPK (certified sustainable palm kernels). There should have been more CSPO oils produced, but the relatively small size of palm kernel oil crushing mills, called “PK crushers”, means that they often do not have RSPO certificates. The same applies to certified palm kernels seeds whose crushers do not have certificates from RSPO and therefore produce uncertified oil.

Cooperation with Wild Asia

Wild Asia is a social enterprise, which was established in 2003 with its headquarters in Malaysia. It has been promoting tropical rainforest conservation and supporting smallholders to obtain RSPO certification within the Wild Asia Group Scheme (WAGS). The younger generation oil palm smallholders in Sabah are acting positively to obtain RSPO certification. In fact, they put into practice the WAGS to reduce pesticide or fertilizer use and increase yields. Nevertheless, the older generation of smallholders tends to cling to conservative and traditional methods, and they tend to be less willing to accept changes.

SARAYA visited one of the WAGS smallholders who was experimentally using beehive fences as a Borneo elephant or wild boar deterrent. They take advantage of elephants’ natural instinctive behavior to avoid bees. They also contribute to biodiversity, and carefully choose how and where to grow their crops so that they do not ruin beautiful sites for tourism.

Since 2017, SARAYA purchased palm kernel oil book & claim credits, which are worth 750-1,463t, through Wild Asia. These are the credits which smallholders gained from CSPO seeds and which were the equivalent of the palm oil they sold to mill farmers. These smallholders were introduced to the buyers and thus guaranteed its tractability. In addition, this scheme also helps support these independent smallholders. SARAYA continues to purchase RSPO credits from smallholders through Wild Asia.



An independent smallholder in Gomanton village installs beehives at an entrance to deter elephants.



The Kemajuan Tanah Julur Collection Center opened in 2017. They weigh the delivery trucks before and after unloading the fresh fruit to calculate the actual weight of the fruit. They apply a daily exchange rate for the purchase. The center enables them to transfer FFB weighed fruit collectively instead of being sold separately to mills. Unfortunately, the center does not yet have RSPO certification.



One of the WAGS’s projects: the Award System. Part of the B&C credits are used as operational payments for Wild Asia. They award independent smallholders for their achievement, and credits are used to award prizes such as mowing machines. The above picture was taken on 12 December 2017, when SARAYA purchased credits and awarded three independent smallholders.



Saraya Co., Ltd. wins 2019 RSPO Excellence Awards. <https://rspo.org/news-and-events/news/2019-rspo-excellence-awards-announced>

Towards Sustainable Palm Oil

Over the last decade, I have followed Saraya's efforts to support the growth of sustainable palm oil. What has always struck me is the way they have invested a good deal of time and effort to understand the local people and regions where palm oil is being produced. I think this is why their support for efforts like the Kinabatangan Wildlife Corridor and other biodiversity initiatives stands out for me. This local understanding has led them to Wild Asia, where we are exploring how the company can make a difference to how palm oil is being produced. At Wild Asia, we work in different ways to create models that can be adopted by the palm oil industry, and we have been focused on two major themes: (a) making palm oil production environmentally and socially responsible by adopting the RSPO standard for production; and (b) identifying opportunities for new ideas and innovations that can be introduced to local producers, and that help them sustainably improve their environmental and social practices or the management of their farms.

One of the first areas we have cooperated in with SARAYA was to provide a direct link between the volume of palm oil used by SARAYA in its production, and an equivalent volume of RSPO-certified credits (or RSPO Palm e-trace). What we hope is to be able to progressively widen the small producers groups, which are supported by Wild Asia, and expand the available volumes sold as RSPO credits. These credits are a tangible and direct financial incentive that provides a bonus for farmers, and contributes towards the technical support costs for managing these producers. It is a very simple way to create a link between the market and the producers.



We have also identified the need for small producers to reduce farm inputs, because currently a good deal of the farm expenses results from the use of chemical fertilizers and herbicides. This may be an opportunity to explore new collaboration projects with Japanese partners as we feel that there is much to be learnt from Japanese farmers that apply kaizen and other methods to keep small farms productive, efficient and sustainable. There are also other cooperation opportunities to be explored to allow local producers the ability to produce their own fertilizers (Bokashi and others), which provide alternatives to store-bought chemical fertilizers. Finally, addressing the pressing need to manage modern waste in rural farming areas is another area that we have identified. There are little to no facilities in these regions, and much waste is buried or discarded in the waterways. This is not a sustainable solution. What we hope to identify are partners that are able to help us create micro-industries around significant waste streams that can create opportunities for additional incomes, or ways to add value to their farms.

Our direct relationship with SARAYA is really just beginning. What we see is that there is a very real opportunity to not only support biodiversity conservation, but also to support the producers of palm oil that live and work in the regions where biodiversity is critically important. This is after all, the essence of what the UN's Sustainable Development Goals are encouraging corporate and national leaders to work together to address.



<http://www.wildasia.org/>
<http://oilpalm.wildasia.org/>
<https://www.youtube.com/watch?v=HR1ChQFIY0>
<http://www.wildasia.org/portfolio/reza-azmi/>
<https://www.sukau.com/conservation-fellows/dr-reza-azmi>

Wild Asia Founder
Dr. Reza Azmi

Borneo, Kalimantan Survey (towards Indonesia)

Flowering for the first time in nine years

In Sabah, Borneo, this year marks a simultaneous flowering season. This is a phenomenon unique to rainforests in South-east Asia. Every few years, many species of trees all bloom at once. This was the first time in nine years. It is the season that many stakeholders, not just I, have been waiting for. After the flowers have bloomed, seeds are produced. The most characteristic tree species in this area is the dipterocarp. The name is derived from the shape of two-winged seeds, which are blown away by wind from the branches of the trees, spin like propellers and spread out away from the tree. Looking directly up at those numerous seeds, slowly falling down from the trees, they seem to be more dynamic than any animal.

Widespread forest fires

In August, two months after this valuable experience, I visited the Indonesian side of the island of Borneo. Until a few years ago, most of the palm oil imported by Japan was from Malaysia, and we have been concentrating our efforts on biodiversity conservation on the Malaysian side. However, Japanese imports from Indonesia now account for more than 40% of the total, and it has been steadily growing (Oil World 2019). We therefore had to do something. Firstly, I decided to do a site inspection. Forest fires are a problem in this region every year at this time. I visited the frontline with local NGOs. We went up the river by boat and landed at the site in the riverside forest. The fire was burning in the trees around us. The ash fueled by the wind falls like snow. We could barely open our eyes due to the smoke.

The forest fire in 2015 spread over an area more than 10 times the size of Tokyo city. Borneo Island has a lot of peat swamps, and it is difficult to extinguish a fire because it continues to burn in the deep soil. Not all causes of fire can be identified, but some seem to be malicious and occur during the development of palm oil plantations. We have identified more areas known as hot spots where forest fires frequently occur in Indonesia.

We also learned that the decline in tropical rainforests in

Indonesia was caused not only by the expansion of the palm industry, but also by the development of coal. This coal is also exported to Japan, and is mainly used for thermal power generation. A few dozen hectares of forest are cut down every month once plantation development begins.

Distress of local NGOs

I visited several NGOs to hear their stories working under these severe conditions. A certain group purchased land to protect orangutans, only to find out later that it was the planned site for coal development, and ended up being forced to move the facilities. This happened just a few years after the project started, when the activities of the project had stabilized after a great deal of trial and error.

Another group was asked by the government to conduct local fire training in the middle of a forest fire. Fire-fighting activities and exercises are essentially the responsibility of government organizations, and so the representatives of the NGOs were also astonished at being asked to carry out fire drill activities in an actual fire-fighting area. After hearing many of these disheartening stories, I wondered why they continued to operate in such a desperate situation, and asked the leaders. They answered, "above all, it is people like you, who have traveled here from abroad, who give us the strength to continue. We can't do anything big, but we have to do what we can, one step at a time."

Expectations for the next generation

During this visit, I was impressed by the local young people working on projects without losing their hope, like this leader. Everyone I encountered was a highly educated and talented person. Many of them were veterinarians, some had studied physics or engineering at universities, and some others were former journalists. They could have had well-paid good jobs, but these young people were outraged by these excessive developments, and they purely want to protect rich natural habitats and animals. They set a goal to protect them and are proud of their jobs, and get a great deal of enjoyment doing something worthwhile. I learned a lot from them. I am not sure whether this is a problem that can be resolved, but we will search for what we can do to help and cooperate with local people to conserve tropical rainforests and biodiversity on the Indonesian side, in parallel to what we have been doing in Malaysia. We ask for your support.



Indonesian NPO, International Animal Rescue (IAR), and Mr. Nakanishi (third man from the right)

中西宣夫

Nobuo Nakanishi
Saraya Co., Ltd. Researcher



Saraya's sustainable product development

Lakanto and MDGs

One of Lakanto's ingredients, Lo Han Guo (monk fruit), is a gourd family plant which grows near Yongfu County of Guilin in Guangxi, China. In 1998, SARAYA exchanged a business cooperation contract with Guilin City of China (Lo Han Guo Sweetener Product Development Project MOU). The late Mr Saraya (the founder of SARAYA) sympathized with the severe conditions that the farmers of Guilin were facing at that time, when China was still relatively poor, and decided that the company's business policy regarding Lakanto was to protect and improve the lives of local people rather than the company's own profit. He said that a foreign company expanding its business in China should not keep all the profit for itself, but should put the local people first. SARAYA holds a patent in Japan, but not globally, and released its technical information. This is how the story behind the now world-famous monk fruit began.

The SDGs were preceded by the United Nations Millennium Declaration in September 2000. Other international development goals in the 1990s were merged together with this declaration to form the basis for the MDGs (Millennium Development Goals). In Guilin city, SARAYA has been contributing to MDG Goal 1: "Eradicate extreme poverty and hunger" through its Lakanto business.

Monk Fruit Contract Farming

SARAYA normally exchanges contracts with local monk fruit farmers to efficiently manage and control the farming process, such as the use of pesticides, to achieve sustainable production. The contracted farmers grow their monk fruit under a strict pesticide management regime. At the Lakanto factory that SARAYA built in Guilin in 2016, they produce high quality and safe monk fruit extracts, and provide raw materials for all the Lakanto series. They monitor the activities, from growing monk fruit, to producing monk fruit sweetener under a full traceability system.



On the middle, founder Shota Saraya. To his right, current president Yusuke Saraya.



Harvested Luo Han Guo (Monk Fruit).



A contracted Monk Fruit farm.



Guilin Saraya Biotech Co., LTD management (left building) and research facilities (right building).

MDGs: Millennium Development Goals



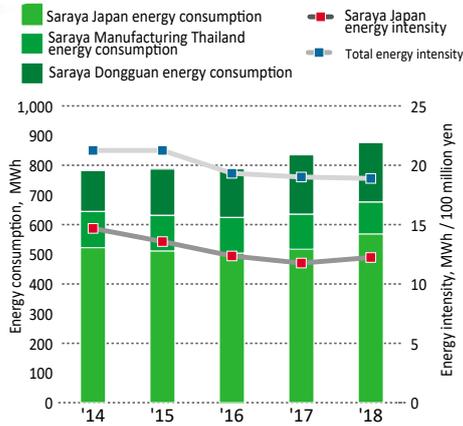


Climate Action

Environmental Management System



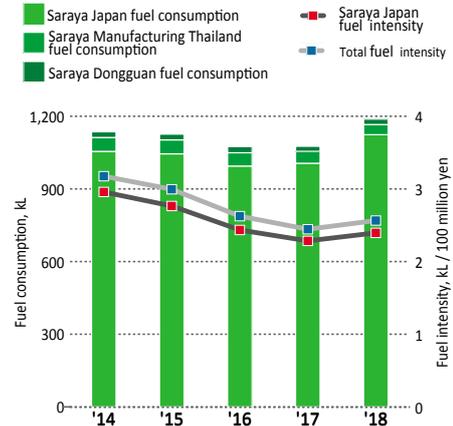
Annual Energy Consumption



Thousand kWh	FY	2014	2015	2016	2017	2018
Saraya Japan energy consumption		4,781	5,224	5,114	5,042	5,687
Saraya Manufacturing Thailand energy consumption		1,164	1,220	1,200	1,200	1,177
Saraya Dongguan energy consumption		1,339	1,377	1,560	1,641	2,000
Saraya Japan energy intensity		14.87	14.68	13.57	12.36	11.78
Total energy intensity		23.08	21.25	21.25	19.32	19.01



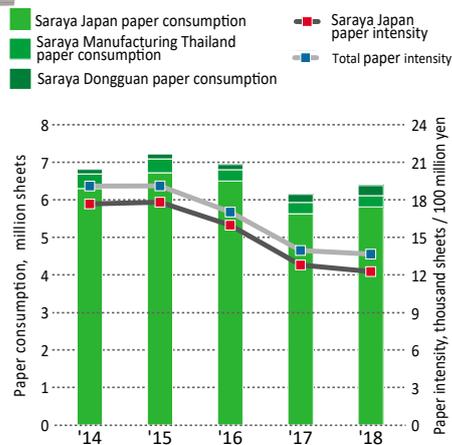
Annual Fuel Consumption



Thousand litres	FY	2014	2015	2016	2017	2018
Saraya Japan fuel consumption		1,055	1,045	995	1,006	1,129
Saraya Manufacturing Thailand fuel consumption		58	57	55	49	42
Saraya Dongguan fuel consumption		23	24	25	21	22
Saraya Japan fuel intensity		2.96	2.77	2.44	2.26	2.4
Total fuel intensity		3.18	3.0	2.63	2.42	2.57



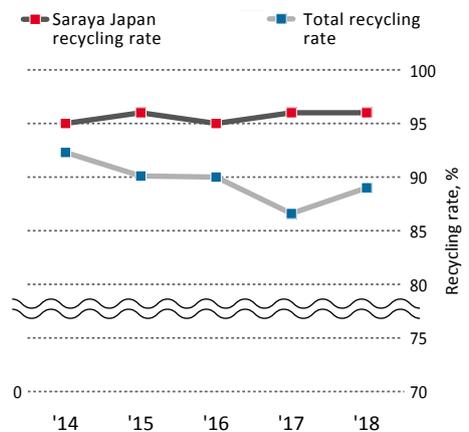
Annual Paper Consumption



Thousand sheets	FY	2014	2015	2016	2017	2018
Saraya Japan paper consumption		6,300	6,720	6,500	5,626	5,810
Saraya Manufacturing Thailand paper consumption		390	360	30	290	300
Saraya Dongguan paper consumption		120	130	140	210	210
Saraya Japan paper consumption intensity		17.70	17.84	16.00	12.82	12.49
Total paper consumption intensity		19.13	19.14	17.05	13.96	13.69



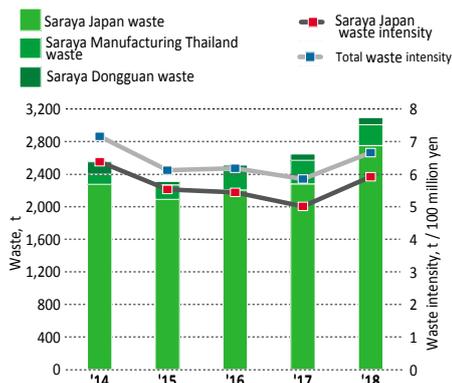
Annual Recycling Rate



Rates	FY	2013	2014	2015	2016	2017
Saraya Japan recycling rate		95%	96%	95%	96%	96%
Saraya Manufacturing Thailand recycling rate		35%	39%	20%	13%	16%
Saraya Dongguan recycling rate		88%	91%	78%	81%	83%
Total rate		92%	90%	89%	86%	89%



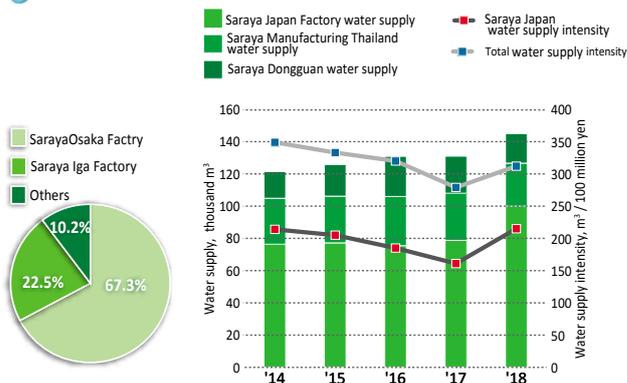
Annual Waste Discharged



Tons	FY	2014	2015	2016	2017	2018
Saraya Japan waste discharged		2,275	2,090	2,222	2,280	2,571
Saraya Manufacturing Thailand waste discharged		1,240	178	239	289	256
Saraya Dongguan waste discharged		152	42	66	78	87
Saraya Japan waste intensity		6.39	5.54	5.45	5.20	5.93
Total waste intensity		7.17	6.13	6.19	6.30	6.67



Annual Water Supply



Thousand m³	FY	2014	2015	2016	2017	2018
Saraya Japan Factory water supply		76,170	77,107	75,288	78,573	99,804
Saraya Manufacturing Thailand water supply		28,505	28,969	30,539	29,226	26,663
Saraya Dongguan water supply		19,618	19,567	24,902	22,996	18,291
Saraya Japan Factory water supply intensity		214	205	185	179	215
Total water supply intensity		319	333	320	298	312



Greenhouse Gas (FY 2018)

t	CO ₂	N ₂ O		NH ₄		HFC (Hydro Fluoro Carbon)		Total	Intensity	Ratio
GWP	1	310		25		1,300				
Scope	CO ₂	N ₂ O	CO ₂ e	NH ₄	CO ₂ e	HFC	CO ₂ e			
1	2,626.3t	1.046t	311.7tCO ₂ e	0.53t	1.3t	0.05344t	76.4tCO ₂ e	3,016tCO ₂ e	6.94t CO ₂ e/100M yen	1.15 %
2	3,065.2t							3,065tCO ₂ e	6.59t CO ₂ e/100M yen	1.18 %
3	260,063t							260,063tCO ₂ e	559.3t CO ₂ e/100M yen	97.67%
Total								265,754tCO ₂ e	570.03t CO ₂ e/100M yen	100.0%

Corporate Value Chain (Scope 3) Category		CO ₂ emission, t CO ₂ e
Upstream scope 3 emissions	1. Purchased goods and services	241,926t
	2. Capital goods	4,488t
	3. Fuel and energy-related activities (not included in scope 1 or scope 2)	305t
	4. Upstream transportation and distribution	10,556t
	5. Waste generated in operations	130t
	6. Business travel	728t
	7. Employee commuting	305t
	8. Upstream leased assets	No leased
Downstream scope 3 emissions	9. Downstream transportation and distribution	Included in upstream
	10. Processing of sold products	Not applicable
	11. Use of sold products	39t
	12. End-of-life treatment of sold products	1,586t

		FY2018
Consumed electricity	total	5,687 MWh
	Purchased	5,563 MWh
	Produced	130MWh
Renewable electricity	Produced	341MWh
	Sold	211 MWh



Solar panel in Iga factory



Life Below Water

Saraya and ZERI Japan

The meeting between Mr. Saraya and Prof. Pauli

Mr. Saraya (president and CEO of SARAYA) met Mr. Gunter Pauli in 1982 through the activities of Junior Chamber International Japan in Osaka. Mr Pauli later became one of the proponents of zero emissions, and became a global authority on environmental issues. Later, in April 1994, Mr. Gunter Pauli visited the United Nations University in Tokyo and assisted the preparation of the Kyoto Protocol under Prof. Heitor Gurgulino de Souza, the third Rector of the United Nations University.

During this period, Mr. Pauli founded ZERI (Zero Emission Research and Initiative). The ZERI initiative is a scheme in which waste from one industry becomes a raw material for other industries, so that industries recycle and reuses resources like an ecosystem.

In 2001, Mr. Saraya established ZERI Japan, a specified non-profit corporation based in Japan and was himself appointed as the chairman of the board of directors.

The office is located on the second floor of Tokyo Saraya Co., Ltd. Mr. Pauli's ZERI initiative has now evolved into a "blue economy" of sustainable businesses, and is in the process of putting its principles into practice. A similar concept is the so-called "Circular Economy."

ZERI Japan formed an alliance with R4W.

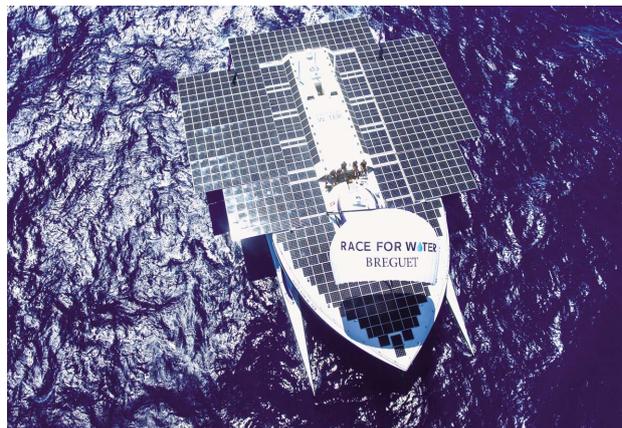
The Race for Water Foundation (R4W) is tackling the problem of plastics contamination of the oceans. The foundation, supported by Swiss watchmaker Breguet, has spent approximately 2.8 billion JPY to develop its R4W boat (100 t). The R4W uses solar power to make drinking water from seawater, and electrolysis to make hydrogen. Using hydrogen, wind, and solar as its power sources, the boat sails only with the energy created by the ocean to navigate the world.

This voyage is called the "Race for Water Odyssey 2017-2021", and after leaving France in April 2017, it will call at Tokyo in April 2020 prior to the Olympics and Paralympics, and stopping ports all over Japan for four months. We will conduct awareness-raising activities for researchers, various organizations, companies, and children on SDGs issues, such as the problem of plastics contamination in the oceans.

Mr. Pauli, a special adviser to the non-profit organization ZERI Japan, is trying to remove microplastics drifting in the oceans using seaweed. R4W and ZERI Japan signed an alliance at the Saraya Medical Training Center in Osaka on 9 February 2019, after several discussions between Mr Pauli and R4W. On 29 August, special adviser Mr. Pauli and the chairman Mr. Saraya issued a press release about the "Odyssey project" at the official residence of the Swiss Ambassador.



Mr. Saraya and Prof. Pauli in 1982 Mr. Saraya and Prof. Pauli in 2010



The R4W crew and their boat will be coming to Japan this Olympic year, invited by ZERI Japan.



R4W and ZERI Japan after their signing



The press release of the R4W Odyssey 2017-2021 at the official residence in Tokyo

SARAYA - a leader in industry and a family legacy

It was 1982 when I first learned about the Saraya company. As a privileged guest of the Osaka Junior Chamber, I was learning a great deal about the business and political world of the Kansai region and the rest of Japan. This provided me with an encounter with Yusuke Saraya, then a rising star in the JCI movement.

While at the time I had no interest in cleaning products or health foods, I was intrigued by the drive shown by Mr. Saraya in exploring new areas of expansion for the company. What particularly struck me was his keen interest in finding pragmatic solutions for the prefecture, the region and the country, through his business ventures. Due to the expanding business – both as a supplier of finished products and as a buyer of raw materials – Mr. Saraya’s international network provided a solid basis for a company development strategy that went beyond simple business. SARAYA is one of the first companies I worked with from Japan to practice corporate social responsibility, even before CSR was a well-established term.

In 1994, when the Rector of the United Nations University invited me to help prepare for the Kyoto Protocol, we quickly established a solid base for cooperation. First of all, I shared my experience with palm oil – as one of the pioneers of its use in detergents in Europe – and admired Saraya’s approach of playing a proactive role in the Roundtable for Sustainable Palm Oil. SARAYA subsequently created a platform in Malaysia to offer a sanctuary for elephants in the land around palm plantations. While the cutting edge proposals to create a corridor for wildlife along the rivers were not accepted by the RSPO, Yusuke Saraya persevered and has demonstrated that this strategy makes sense.



Over the years, I noted the shift in SARAYA’s messaging from “disinfecting” to a more all-encompassing “promoting health”. This transformation of the enterprise was associated with the introduction of new products like Lakanto, a natural sweetener made from an extract of the Chinese luohanguo fruit. The rapid and clear deployment of the strategy demonstrated the application of the principle: “Be impatient to start. Be patient to get results”. Indeed, a launch on the market that is very competitive does not bear immediate results. But Saraya has clearly demonstrated its commitment to becoming an agent of change. Explorations of other fields, like the production of charcoal, demonstrate this desire to take on one issue after the other.

The SARAYA project that has been the most motivating to me is the “Wash a Million Hands!” initiative in Africa. This project, supported by UNICEF, introduces simple and practical steps for establishing local production and distribution. It shows that SARAYA is not limiting its operations to the industrialized world, but is ready to venture into Africa and take on greater responsibility.

However, the most important role of SARAYA has been to play a critical part in the creation of the Zero Emissions platform in Japan. Mr. Saraya is the President of ZERI Japan (Zero Emissions Research and Initiatives) and without his personal dedication we would never have reached the level of recognition and impact we have today.

When Prof Carl-Göran Hedén, then chair of the UN Scientific Advisory Council and Member of the Royal Academy of Sciences of Sweden, declared achieving zero emissions in industry and society is not only possible, it is indispensable for attaining sustainability, it was Mr. Saraya who put these words into action so that this long term goal can indeed be achieved. This year we celebrate the 20th anniversary of the creation of ZERI Japan. Society needs visionaries to achieve long term goals – not as captains of industry, but as captains of legacy. The Saraya company clearly offers this legacy!



The Global ZERI (Zero Emission Research and Initiative) Founder
Professor Gunter Pauli

Tears of Baby Elephants - The Hidden Pitfalls of Eco-friendliness

A TV programme called “Toyota Eco Series, the Earth, what a wonderful spaceship”, broadcast a documentary film titled “Tears of Baby Elephants - The Hidden Pitfalls of Eco-friendliness” on 1 August 2004. It was about the rapid expansion of oil palm plantations destroying the habitat of the Borneo elephants in the Borneo tropical rainforest.

At the end of the programme, Mr. Saraya, the president of a company selling detergents whose main ingredient is palm oil, was interviewed and asked what he thought about the fact that he was unwillingly helping bring these animals to the brink of extinction by selling so called eco-friendly products. He was genuine and honest and admitted that he had no idea how selling his company’s products in Japan was affecting these innocent animals in Borneo. Since then, he took a swift U-turn and defined his company vision as being truly friendly to both people and the environment. As a start, he launched biodiversity conservation activities in Sabah, Malaysia.

Right after the interview, Saraya immediately sought out Mr. Nobuo Nakanishi, who is now a member of Saraya and a director of the Borneo Conservation Trust Japan. Then Saraya made contact with BBEC (Borneo Biodiversity and Ecosystems Conservation in Sabah, Malaysia) in JICA. At the end of the same year, he then applied to RSPO, which had just been founded in August 2004.

In Sabah

Mr. Nakanishi joined an elephant rescue mission organized by SWD (Sabah Wildlife Department) in autumn 2004. In the following January, Mr. Saraya made a public report on the rescue mission and the possibility of the extinction of the elephants at the RSPO Seminar in Kuala Lumpur. This report was also broadcast in the TV series as part 2 of “Tears of Baby Elephants - The Hidden Pitfalls of Eco-friendliness”.

RSPO RT2 was held in November 2005. Mr. Saraya proposed the “Green corridor project”, but initially faced a rejection from growers and failed to gain their approval. In February 2006, Mr. Saraya again proposed the “Green corridor project” at BBEC (Borneo Biodiversity and Ecosystems Conservation), and this time the same project received full approval at the conference. The success led to an aerial photo shooting from a helicopter including the Sabah State Secretary as a guest.

In February 2007, SARAYA started a field trip to Sabah together with oil palm suppliers and eight selected Saraya consumer product customers.



Green areas represent rainforests. Orange areas represent palm plantations. Around 30 years ago this entire area was covered by native rainforest. It was a paradise for wildlife. Now there is very little rainforest remaining, limited to a small area along the main river.



A baby elephant with its leg tied with a rope which was set as a trap by local hunters. If baby elephants escape from the traps but still have a rope tangled around a leg, this gets trapped under the skin as the elephant grows and ultimately causes the elephant’s death as it can no longer walk. These elephants are called “Tally” (rope) by the locals. It causes much more severe damage if the rope is wrapped around their trunks. The TV programme “Tears of Baby Elephants” comes from this story. This elephant was the very first to be rescued by Saraya and received treatment. It was then released back to the care of its parents.



From right, Sabah State Secretary and Mr. Saraya. Photo taken in 2006.



Palm Oil Symposium 2007



An orangutan crossing a suspension bridge made from used fire hoses constructed with the help of Saraya in 2010. This project was carried out by a joint collaboration with smallholders and their local support.

- SDG 3
- SDG 4
- SDG 5
- SDG 6
- SDG 8
- SDG 9
- SDG 10
- SDG 12
- SDG 13
- SDG 14
- SDG 15
- SDG 16
- SDG 17

Green Corridor

This map shows the 5km wide corridors on both banks of major rivers in Sabah. These areas are said to have the highest populations of wild animals such as elephant, rhino, tembadau, orangutan, colobine monkeys, sambar deer, clouded leopards and sun bears.

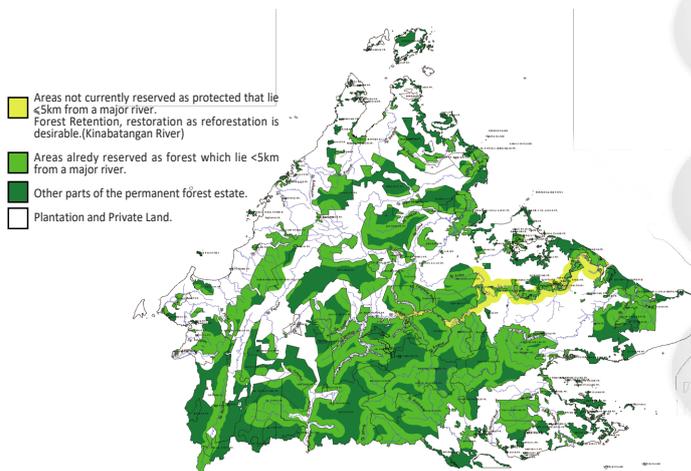
The yellow areas on the lower Kinabatangan River are where land has been developed as oil palm plantations. As you can see, the green highlighted conservation areas are divided by the plantations. However, these are essential habitats for wild animals and considerable numbers of wild animals are still living there – they are thus regarded as highly important for biodiversity conservation. The developed areas along the river must be preserved as secondary forests so that they can be a sanctuary for wildlife. This is why the Borneo Conservation Trust was established.

Borneo Conservation Trust

In September 2006, Mr. Saraya established the Borneo Conservation Trust, together with Mr. Patrick Mahedi Andau of SWD (Sabah Wildlife Department) and Dr Toshinori Tsubouchi, COO of then BBEC (Borneo Biodiversity and Ecosystems Conservation). Mr. Saraya was a trustee when the trust was launched, and then became Deputy Chairman in 2013. The trust was approved by the government as an NGO in October 2006. The headquarters were set up in the SWD (Sabah Wildlife Department) office in Kota Kinabalu, Sabah.

BCT's mission, other than the Green Corridors, includes wildlife conservation, such as rescuing injured elephants and isolated orangutans, as well as promoting biodiversity conservation activities. Saraya has been donating 1% of Yashinomi detergents and Happy Elephant products' sales to BCT since May 2007.

BCT has acquired 80ha of forest under the Green Corridor project (of which SARAYA's forests are approximately 12ha), which is merely 0.4% of its goal of 20k ha. One of the possible reasons for the slow growth is that the land price has risen incredibly and much less land is becoming available for sale. One of the reasons for this development is that at Sandakan, a transport hub in Sabah, the security situation has deteriorated and is having a negative impact on tourism in the lower Kinabatangan River area, and that leads people to shift to the cultivation of oil palms.



Threatened Species in Sabah and Sarawak, Malaysia (IUCN Red List)

	Amphibia	Reptilia	Mammalia	Aves	Total
Critically Endangered	2	1	2	1	6
Endangered	2	1	9	0	12
Vulnerable	2	3	11	2	18
Total	6	5	22	3	36



Press conference at the launch of the Borneo Conservation Trust, 12 September 2006



This rescue center was set up within the Borneo Elephant Sanctuary in LOT8 conservation area in 2013. Further construction work such as roofing and installing a sandpit was done in 2017. Saraya supported this construction work. The rescued elephants cannot be released back to the wild as they soon come back to the farmed areas.

* In 2013, an armed force called "Royal Sulu Sultanate Army" invaded Lahad Datu in Sabah from the Philippines. The Department of Foreign Affairs of Japan has since then released a travel warning: "Recommendation to consider whether it is wise to travel to this area".



Desert Greening Project in Egypt

Jojoba

The jojoba – botanical name *Simmondsia chinensis* (the generic name honours the English botanist Thomas William Simmonds) – is the sole species of the family Simmondsiaceae, and is a native evergreen shrub of the Sonoran Desert. Jojoba grows in dry semidesert regions and has an ability to withstand high salinity. It typically grows 1–2 meters tall and produces jojoba oil, 90% of which consists of a liquid wax ester, extracted from its seed.

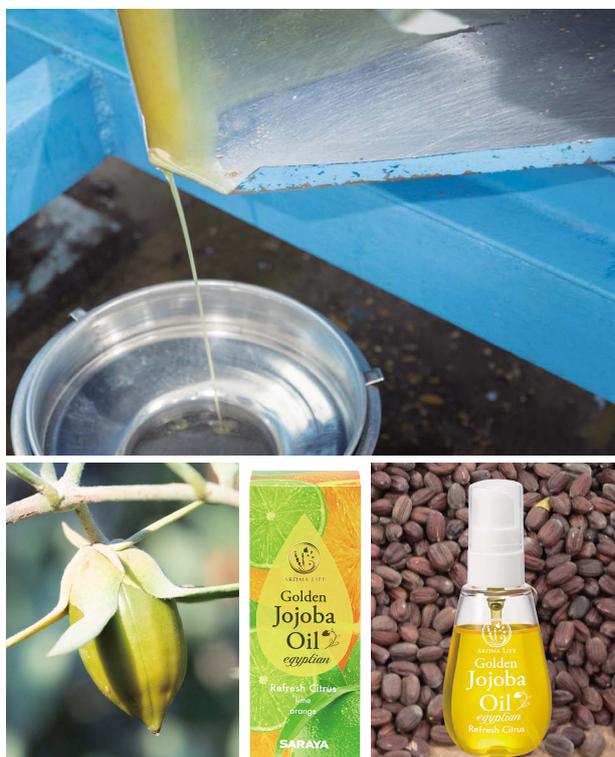
The “wax ester” closely resembles human skin sebum, and jojoba oil has been used as a treatment for hair and skin for hundreds of years. Human skin sebum contains 20 to 30% “wax ester”, which helps keep skin hydrated and healthy. Jojoba oil is also naturally anti-bacterial and improves skin turnover. The cold-pressed golden jojoba oil is rich in vitamin A and E.

“Jojoba” Desert Greening Project

With tree planting projects, trees such as poplar can be planted and grown, but they are sometimes then cut down and burnt as fuel by the locals. To achieve a sustainable greening strategy, it is very important to create a system which profits the local community. Planting jojoba was not widespread, and harvests were unreliable, because little research was available until a study by Osaka University researchers established methods for the proliferation and breeding of jojoba, a drought-resistant and profitable plant. Based on the results of this study, the Osaka University venture company Simmonds Co. Ltd., was established in April 2017 for the sustainable production of jojoba in the desert, and sale in Japan. Jojoba oil was on sale from October 2017. Saraya invested in this project, and produced cosmetics using jojoba oil to promote the desert greening.

SARAYA Subsidiary in Egypt

SARAYA Middle East for Industrial Investment J.S.C was established on 4 July 2018. The company, currently building its factory in Suez, will start extracting and distributing jojoba oil to Egypt and the Arab world in 2020. The Suez factory is located in an industrial estate named the SIDC Zone (SIDC: Suez Industrial Development Company SAE). The area is 2 ha in size, and has direct access to the road, making transportation easy.



Jojoba and Golden Jojoba Oil



Jojoba Production

Jojoba shrubs are an important industrial plant, and have attracted worldwide attention recently, even though jojoba plants can only be cultivated in a very limited number of countries, due to its environmental needs. Egypt is one of the countries best suited for cultivating jojoba and expanding its production.

Jojoba planting began in several countries in the Middle East including Egypt in 1985 through a regional project carried out by the United Nations Food and Agriculture Organization (FAO) for the introduction of jojoba cultivation. The programme ended in 1990.

The plant has been commercially grown since 1991 by Egyptian Natural Oil Co. (NATOIL), which pioneered the cultivation and processing of jojoba in Egypt and the Arab world, and is the only Arabic member of the International Jojoba Export Council (IJEC).

Our experience during the nineties proved that jojoba is one of the most successful plants to be cultivated in the Egyptian reclaimed lands, and has one of the best economic returns in the agricultural sector in the Egyptian desert.

NATOIL has developed many new products that depend on jojoba oil in the cosmetics industry, medicine, natural pesticides, industrial oils and additives, biofuels and many other products in different fields.

Jojoba produces seeds which contains 50% oil by weight, which is chemically classified as liquid wax with unique qualities and properties.

This is the reason why SARAYA International Co., in cooperation with some partners from Osaka University, decided to invest in planting an area with jojoba in Egypt after establishing the Simmonds company in which SARAYA Co., Ltd. holds a majority stake.

An agreement was signed with Al Rehab. Agricultural Development Co. to lease 10 feddans (42,000 m²) for a period of 20 years starting from 12/4/2017. The farm is located in Wadi Al Natron half way along the desert road between Cairo and Alexandria.

Another contract for the establishment of the farm and its preparation for the cultivation of jojoba, plus supervision, was signed with NATOIL for a period of five years on 12/4/2017, renewable for another period.



At the beginning of June 2017, NATOIL started preparation of the land for jojoba planting by installing fencing, a drip irrigation system, paving internal roads, and building accommodation for the workforce, as well as storage facilities and a guest lounge on high ground overlooking the farm.

The farm was divided into four parts, each covering 2.5 feddans (10,500 m²). Jojoba was planted every 2 m in lines 4 m apart, so each feddan contained 460 female plants (planted as seedlings selected from high yielding mother plants), plus 65 male plants for pollination.

The planting process was completed by September 2017, and a high efficiency irrigation and fertilization programme was set up to encourage plant growth. Production is expected to start in 2020 in the third year of planting as follow:

- Third year of planting (2020) 1,500kg. seeds
- Fourth year (2021) 3,000kg. seeds
- Fifth year (2022) 4,500kg. seeds
- Sixth year (2023) 5,500kg. seeds

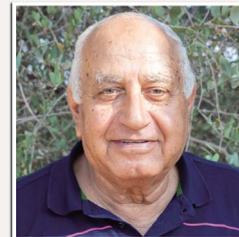
NATOIL shall pay compensation if the production is less than 70% of the aforementioned quantities. The University of Osaka scientists monitor the progress on a weekly basis. The production in the second year of planting (2019) could reach 200 kg of seeds. Palm trees were planted along the main road of the farm.

The plant growth is monitored, and their performance is evaluated to optimize production.

The genetic factors of the best producing plants will be studied to determine the genes responsible for raising the productivity of these plants, so that enhanced plants can be used in future plantations in Egypt and the Arab world.

Simmonds farm is expected to start earning more than its annual expenses from the fifth year of planting.

At this stage, the tallest female shrubs can be selected for investigation and evaluation by scientists at Osaka University, to establish a greenhouse to produce very high yielding female jojoba seedlings for sale to investors in Egypt and the Arab world, and to generate higher profits for Simmonds Co., and to enhance the Egyptian-Japanese cooperation in this field for the benefit of both parties.



N. S. El Mougy

Dr. Nabil El Mougy
Saraya Middle East for Industrial Investment J.S.C. CEO



Business and Biodiversity



UN BIODIVERSITY CONFERENCE
investing in biodiversity for people and planet
COP 14 - CP/MOP9 - NP/MOP3
 Sharm El Sheikh, Egypt, 2018

14th Meeting of Conference of the Parties to the Convention on Biological Diversity

The 14th meeting of Conference of the Parties to the Convention on Biological Diversity (hereinafter referred to as COP14 CBD) was held at the Sharm El Sheikh International Congress Center (SICC), Sharm El Sheikh, a city facing the Red Sea at the southernmost part of the Sinai Peninsula. The conference was held from 17-29 November 2018.

Business and Biodiversity Forum

Prior to COP14 CBD, the high-level segment, and a parallel event “Business and Biodiversity Forum - Investing in Biodiversity for People and Planet” was held from 14-15 November in the SICC. Business leaders, government officials and private sector NGOs attended the forum and took turns to make presentations. The forum was created to share experience, progress and ideas regarding biodiversity conservation and investment, and to further advance biodiversity conservation activities, especially in the private sector. Executive Secretary of the Secretariat of the Convention on Biological Diversity, Christiana Paşca Palmer, participated in the discussion on solving problems surrounding ecosystems and biodiversity conservation by assessing various business models and case studies.

A panel discussion on “Mainstreaming in Manufacturing and Processing” was held on the first day of the forum from 16:00-17:30 local time, with SARAYA’s president and CEO Mr. Yusuke Saraya participating as one of the panel members. Other members of the panel included Dr. Helen Crowley of the Kering Group (also acting as the mod-

erator), the environmental management director of Fuji Xerox, Biocare India Pvt Ltd, and Unilever.

The president of SARAYA presented the company’s conservation activities in Borneo, the use of RSPO Certified Palm Oil, 2020 targets, as well as the desert greening project with jojoba planting and cultivation in Egypt. Besides SARAYA and Fuji Xerox, two other representatives from Japan also attended the event: Sampo Japan Japan-East Asia Development chairman, Mr. Ninomiya, and Ajinomoto Co., Ltd. managing director, Mr. Kimura.

After the end of the event, Mr. Saraya met Egypt’s Minister of Trade and Industry, Amr Nassar, who also took part in the ministerial meeting.



Daily News Egypt, <https://www.dailynewssegypt.com/2018/11/17/japanese-saraya-to-establish-10m-worth-cosmetics-pharmaceutical-complex-in-ain-sokhan/>



Mr. Saraya speaking at the CBD COP14 Business and Biodiversity Forum, “Investing in Biodiversity for People and Planet”, Panel: Mainstreaming in Manufacturing and Processing



Peace, Justice and Strong Institutions

Governance

Participant of the Global Compact

The UNGC (United Nations Global Compact) is a voluntary initiative based on CEO commitments to implement universal sustainability principles, and to undertake partnerships in support of UN goals. There are 161 countries with 9,678 companies (as of April 2018) taking part worldwide.

Saraya Co., Ltd. joined UNGC in June 2009, and agreed on the 10 principles aimed at protecting human rights, banishing unlawful or unfair labor practices, promoting environmental responsibility, and acting against all forms of corruption. Saraya has been continuously striving to promote these principles and put them into practice, and acts through its Japanese local network called GCNJ (Global Compact Network Japan).

Mr. Saraya appeared and made a presentation at Session Part 1 of the “Global Compact China-Japan-Korea Roundtable Conference and Youth & Researcher CSR Forum” which was held in August 2014. Mr. Daishima from Saraya made a presentation at “SDG Industry Matrix ~Japanese Release Symposium~” co-organized with GCNJ in March 2017. In June 2017, Mr. Saraya gave a keynote speech at a symposium, co-organized by GCNJ and Sophia University, on the “Advanced Efforts of UN Organizations and Global Companies to Achieve SDGs”.

SARAYA'S Governance

SARAYA is a private company and promotes compliance and ethical behavior in business practices by following the 10 principles of the UN Global Compact as a guideline. The board of directors is structured as shown below and a board meeting is held monthly.

There are designated staff members in the HR division who are responsible for handling complaints on any form of harassment. This service is open to everyone and it is there to help SARAYA employees.

UN Global Compact – 10 Principles

UN Global Compact – 10 Principles		page
Human Rights		
Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights; and	8,16,19
Principle 2	make sure that they are not complicit in human rights abuses.	
Labour Standards		
Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	19
Principle 4	the elimination of all forms of forced and compulsory labour;	
Principle 5	the effective abolition of child labour; and	
Principle 6	the elimination of discrimination in respect of employment and occupation.	12-13,16
Environment		
Principle 7	Businesses should support a precautionary approach to environmental challenges;	14-15
Principle 8	undertake initiatives to promote greater environmental responsibility; and	14-15,19
Principle 9	encourage the development and diffusion of environmentally friendly technologies	12, 13
Anti-Corruption		
Principle 10	Businesses should work against all forms of corruption, including extortion and bribery.	33

	Directors		
	Total	Woman	Auditors
Saraya Co., Ltd.	18	2	2
Tokyo Saraya Co., Ltd.	9	1	1
Smile Sangyo Co., Ltd.	4	1	1



Saitama Prefecture gives Mr. Saraya, president and CEO of Saraya Co.Ltd., the Shibusawa Eiichi Prize* in 2014.

Shibusawa Eiichi Prize:

Shibusawa Eiichi (1840-1931) was a leading figure in the development of Japan's modern society. A dynamic force in the industrial world, he was involved in the founding of some 500 enterprises and economic organizations. Equally dedicated to social and public welfare, he was instrumental in the founding of some 600 organizations for social welfare, education, and international exchange. To follow his legacy, Saitama Prefecture awards the Shibusawa Eiichi Prize to Japanese managers carrying on his spirit of entrepreneurship.



Partnerships for Goals

Infection Control Training

Disinfection of Medical Instruments in Ugandan Hospitals

SARAYA's project of disseminating full-automatic washing and disinfecting devices for medical instruments in healthcare facilities for infection control and prevention was approved by JICA, and the pilot survey was carried out from 5 December 2013 to 30 November 2016 in 4 hospitals in Uganda (Mulago National Referral Hospital, Jinja Regional Referral Hospital, Entebbe General Hospital and Gombe General Hospital).

The device is specially designed for washing and disinfecting surgical instruments. Instead of the conventional method in Uganda of using buckets to wash medical instruments by hand, both washing and boiling water disinfection with 93 °C hot water for 10 minutes can be achieved fully automatically. What's more, it can save energy as well. Gombe General Hospital is a public hospital but it has neither electricity nor a clean water supply. It was therefore necessary to build a solar panel and accumulator system first, along with a supply tank and a pump.

Infection Control Training of Ugandan professionals in Japan

JICA provided a training programme in collaboration with SARAYA. The programme was focused on preventing healthcare-associated infections (HCAI). There were 9 participants in total, including two principal medical officers from the Ugandan Health Ministry, and doctors and nurses. It took place from 23 May 2015 to 1 June 2015, mainly at Saraya Headquarters in Osaka, but also included training in a local hospital.

Infection Prevention Training in Uganda

Japanese hospital infection control personnel acted as trainers in a 3-day infection prevention programme hosted by the Ugandan Health Ministry and Saraya at Jinja Regional Referral Hospital and Jinja School of Nursing and Midwifery. It was tailored to suit the local needs, and attended by hospital managers and infection control officers from 14 major hospitals in Uganda, along with four Ministry of Health personnel. It was focused on guidelines for the prevention of hospital acquired infections so that the hospital workers can apply them in their own workplaces. The participants acquired knowledge as well as hands-on learning experience in practical training sessions. The certificate of completion of training was presented by the Ministry of Health together with SARAYA, and was officially included in the criteria for eligibility to promotion in hospitals. There are high hopes that the trainees will be good ambassadors, and pass on what they have learned to others all over the country.



Washer Disinfector AR-40



Power Quick W Alkaline cleaner for Washer Disinfector



A nurse operating a Saraya AR-40 at a local hospital in Uganda. (July 2016)

Program Curriculum of "Infection Control Training for Ugandan professionals Japan"

- | | |
|--|---|
| 1. Introduction to infection control management | 10. Environmental cleaning and disinfection |
| 2. HAI (hospital-acquired infection) Control Committee, system, actual approaches for prevention | 11. Hospital waste management, needle-stick injury prevention |
| 3. Microorganisms in hospital environments | 12. Reprocessing of reusable medical devices |
| 4. Surveillance of HAI | 13. Infection prevention along transmission routes |
| 5. Introduction to infection prevention | 14. Case study 1 |
| 6. Hand disinfection | 15. Case study 2 |
| 7. Infection prevention tools for individuals, proper application of hand disinfectant | 16. 5S-KAIZEN-TQM |
| 8. Other standards for infection prevention | 17. Hospital visit |
| 9. Infection prevention along transmission routes | 18. Saraya Iga factory tour |
| | 19. Create your own action plan |
| | 20. Present your action plan |



2015 Infection Control Training for Ugandan professionals in Japan



Infection Prevention Training at Jinja Hospital and Jinja School of Nursing and Midwifery in Uganda

SARAYA Company Information

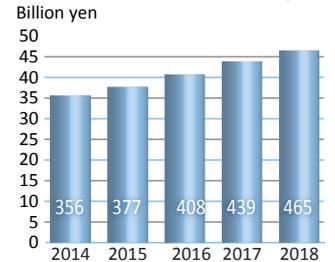
	Saraya Co., Ltd.	Tokyo Saraya Co., Ltd.	Smile Sangyo Co., Ltd.	
Headquarters	2-2-8 Yuzato, Higashiumiyoshi-ku, Osaka Japan 546-0013	1-25-8 Higashishinagawa, Shinagawa-ku, Tokyo Japan 140-0002	24-12 Tamate-cho, Kashiwara-shi Osaka Japan 582-0028	
Telephone	+81-6-6797-3111	+81-3-5461-8101	+81-72-978-7800	
President and Representative Director	Yusuke Saraya	Syuji Saraya	Ryuji Saraya	
Year of establishment	1952	1969	1983	
Capital	45 million yen	60 million yen	30 million yen	
Number of employees	1,288	406	62	
Business summary	<ul style="list-style-type: none"> Development, manufacturing and sales of health and hygiene products and services. Consultation for food and environmental sanitation. Development, manufacturing and sales of food products. 		Manufacturing plastic bottles, operating business sites	
Business sites	Headquarters	Osaka	Tokyo	Osaka
	Research lab	Osaka, Guilin(China)	—	—
	Manufacturing sites	Osaka, Iga (Mie), Chonburi (Thailand), Dongguan (China), Selangor (Malaysia)	—	Osaka
	Main service office in Japan	23 cities	23 cities	1 site
	Overseas bases	Manufacturing 6 sites, sales 23 sites	—	—



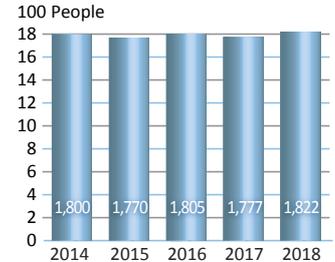
International Organization for Standardization Certification

Management System	Certified Organization (Certified Dept.)	Date
ISO 9002	Saraya Co., Ltd.	13 Dec. 1999
	Smile Sangyo Co., Ltd.	
ISO 14001	Saraya Co., Ltd. Tokyo Saraya Co., Ltd. Smile Sangyo Co., Ltd.	26 Nov. 2001
	Saraya Co., Ltd. Tokyo Saraya Co., Ltd. Smile Sangyo Co., Ltd.	13 Dec. 2002
ISO 9001	Saraya (Dongguan) Hygiene Products Co., Ltd.	1 Nov. 2005
	Saraya MFG. (Thailand) Co., Ltd.	7 Jul. 2006
ISO13485	Saraya Co., Ltd. (Head office, Development dept. Research Lab, Osaka fac., Iga fac.)	In part 22 Dec. 2006
ISO14001	Saraya MFG. (Thailand) Co., Ltd	Whole 26 Dec. 2008
ISO 22000	Saraya Co., Ltd. Tokyo Saraya Co., Ltd. (Food Sanitation Instructor, Food Sanitation H.Q. etc.)	In part 8 Dec. 2008

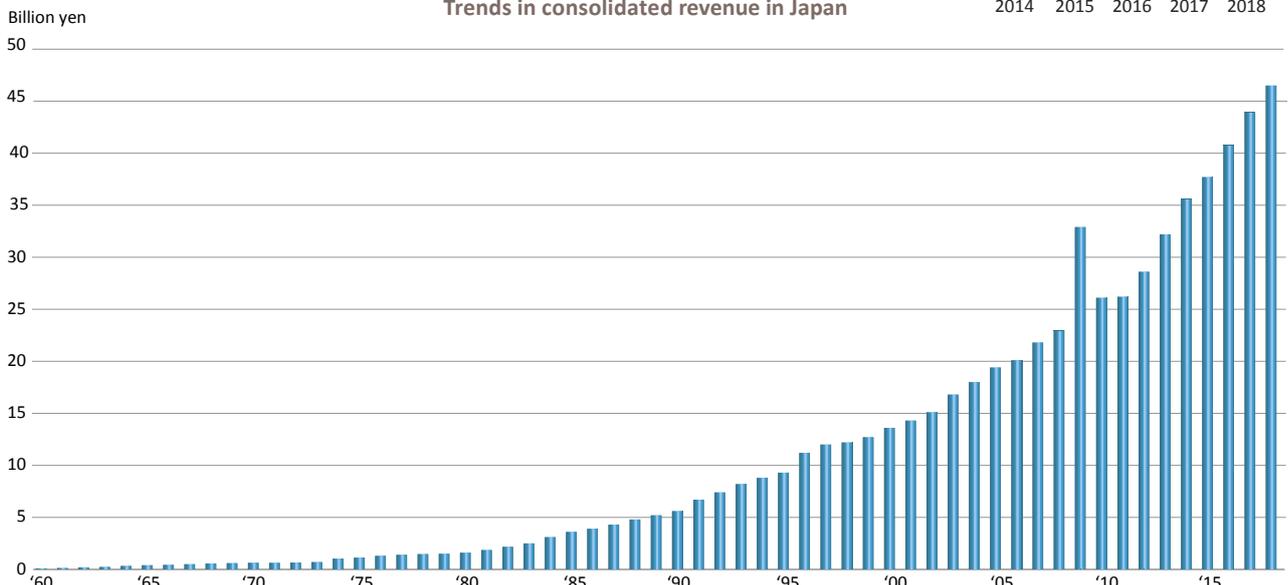
Consolidated revenue in Japan



Consolidated number of employees in Japan



Trends in consolidated revenue in Japan



Sustainability Report 2019

We are committed to the SDGs!

Publication:	Saraya Co., Ltd.
Concept, content and design:	Atsuko Takahashi
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