HIGHLIGHTING Japan

SDGs: CHALLENGES AND OPPORTUNITIES
Private Sector Drives Japan’s SDGs
An interview with Keio University Professor Norichika Kanie, a member of the SDGs Promotion Roundtable Meeting

“Defense” as a Business Opportunity for “Offense”
Working to achieve SDGs can create new opportunities for global companies.

For the Health of All People
Takeda Pharmaceutical is contributing to improved health conditions in Africa and Asia through its support of international NGOs.

Geothermal Power Generation Benefits All Three Parties
Itochu’s geothermal power projects benefit seller, buyer and society alike.

Diagnostic Ultrasound Imaging Equipment for Safe Deliveries
Lequio Power Technology is working with the Japan International Cooperation Agency (JICA) to distribute ultrasonic scanners in Sudan.

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From Nagoya to Samurai City

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In this month’s Feature, we look at how Japan’s public and private sectors are working to promote and achieve the Sustainable Development Goals (SDGs), a UN initiative aimed at “Transforming Our World” that lays down a set of seventeen “Global Goals” with 169 targets between them.

**16**
**e-Learning with Ninjas**
A Japanese e-learning system is helping children in developing countries get to grips with basic maths.

**20**
**Civil Society “Transforming Our World”**
Civil Society platform SDGs Japan is assisting Japanese NGOs and NPOs in their efforts to promote SDGs.

**18**
**SDGs as a Yardstick: Shiga-based Efforts to Be Expanded Internationally**
An interview with Taizo Mikazuki, governor of Shiga Prefecture

**26**
**SMEs OVERSEAS**
Glass Soil Conditioner Enables Sustainable Agriculture in Arid Regions

**28**
**WASHOKU**
The Pride of Kochi

**30**
**NATIONAL PARKS**
Nikko: Power Spot
JAPAN-RUSSIA SUMMIT MEETING

On September 7, Shinzo Abe, Prime Minister of Japan, attended the Eastern Economic Forum in Vladivostok, the Russian Federation and held the Japan-Russia Summit Meeting with Vladimir Vladimirovich Putin, President of the Russian Federation.

As for the issue of concluding a peace treaty between Japan and Russia, the two leaders designated the following five candidate projects to be undertaken promptly for the joint economic activities on the Four Northern Islands. It is specific progress based on the agreement at the summit meeting in December last year. They shared the view that they will explore legal frameworks that will not harm the positions of either side, and will start from those which can be implemented. Additionally, they shared the view that they will continue to discuss possibilities of other projects.

1. Project of propagation and aquaculture of marine products
2. Greenhouse vegetable cultivation project
3. Development of tours based on the islands’ features
4. Introduction of wind-power generation
5. Garbage volume reduction measures

The two leaders shared the view that an additional field survey will be carried out in early October in order to examine these five candidate projects. They also shared the view that they will examine each project in detail and a framework for movement of people, which is commonly necessary to all the projects in an accelerated manner. Director-General-level working group will be established in order to undertake these considerations.

Additionally, from the viewpoint of ensuring safety of marine traffic, the two leaders decided to examine a project for refurbishment of Kaigara Island Lighthouse, in a manner that does not harm the legal positions of either side.

The two leaders highly appreciated that humanitarian measures for former island residents, such as grave visits to the Seseki area on Kunashiri Island in August, access to which had been restricted, were realized. They also appreciated the establishment of temporary additional entry/exit points at the occasion of grave visits to the Habomai Islands at the end of August, because it greatly reduced the physical burden on former island residents.

The two leaders confirmed that special grave visits by airplane will take place later this September.

Prime Minister Abe encouraged President Putin to continue discussion on realizing freer entry to the islands by former island residents.

Prime Minister Abe also emphasized that North Korea’s decisions to fire a ballistic missile through the sky above Japan and to conduct a nuclear test are an unprecedented, grave and imminent threat not only to Japan but to the region as a whole. He also emphasized it important that the entire international community exert the utmost pressure on North Korea.

The two leaders shared recognition that the nuclear test by North Korea on September 3rd constitutes a serious threat to the peace and stability of the Korean peninsula and the region. They also shared the view that Japan and Russia will continue to collaborate closely.

Moreover, the two leaders deepened discussions on bilateral cooperation in a broad range of areas such as political dialogue, defense exchange and security, economy, and cultural and people-to-people exchanges.
Private Sector Drives Japan’s SDGs

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EIO University Professor Norichika Kanie is a member of the Sustainable Development Goals (SDGs) Promotion Roundtable Meeting, established by the Japanese government under the SDGs Promotion Headquarters to achieve the SDGs. We asked him about Japan’s SDGs.

What do you think of Japan’s efforts toward achieving the SDGs?

Frankly, the private sector is more active.

I have led a project that considers Japan’s contributions to Post-MDGs (Millennium Development Goals) and SDGs since Rio+20 (The United Nations Conference on Sustainable Development) in 2012, studying under the theme of creating new value in which research on the environment, development and society is integrated. At first, an atmosphere of teamwork was missing among those involved in environmental and development NGOs, but during the formulation of SDGs a change occurred. Those involved in development began to say that SDGs are important for international development. Companies began to show great interest in how to utilize and handle SDGs during the implementation stage in 2016. In addition, environmental and development NGOs started to become integrated. Then the private sector moved toward the achievement of SDGs.

To put it simply, SDGs are not legally binding. Those who want to achieve the goals work toward them and those who can use the goals will use them to achieve a sustainable society. Since these activities are a response to the concept of SDGs, I feel that SDGs are a good system or device that works very well.

Is the penetration of Corporate Social Responsibility (CSR) behind the response of companies?

That’s right. At the same time, because of the awareness of the importance of contributing to ESG (Environment, Social and Governance)
investments, the field has grown, and corporate culture has moved toward solving global issues. SDGs can be seen as an easily accepted system.

Another factor is this year’s Davos Forum. While corporate leaders in Europe and the United States were well aware of SDGs, participants from Japan remain unaware and their frustration at having to catch up has influenced them.

What issues have Japanese companies been working toward more enthusiastically under SDGs?
First, they need to recognize and understand that SDGs are opportunities. They should link these opportunities with their core business, thinking that if they work toward these SDGs, they will profit. They will expand their overseas markets. In Indonesia, where active movements are observed for achieving SDGs, development plans are revised to be in line with SDGs. If they work toward SDGs, they can use the same language, for example, “Our product contributes to the target 5 or 3 of SDGs.” Marketing products would become easier. Therefore, SDGs are not a burden, but an expansion of opportunity.

How should political measures and governance be used during the implementation stage of SDGs?
Simply speaking, we have had governance based on targets for climate change and biodiversity, but now we are finding that the Earth will be destroyed if we only accumulate systems agreements based on turning international negotiations into domestic law. SDGs are the first comprehensive method and are likely to significantly change the system of global governance.

They are an approach in which first a goal is set, then people “work as they like” to achieve that goal, regardless of the method. It may sound slightly rude, but if more companies work actively because they can profit, it should lead to a new framework.

Tell us about the SDGs on which you (Professor Kanie) are working at the university.
Before the General Assembly of the United Nations determined SDGs, we had an experiment called “Campus SDGs” to learn about how student awareness could grow. For example, we put the following message written on paper in a restaurant: “Reduce food waste by 50%.” We also put a message about water issues in a restroom, one about waste on a garbage bin and one about energy issues on a light switch. Before this experiment, 18% of students were aware of SDGs, but the rate rose to around 80% after three weeks and we received comments such as, “I want to take action” and “This information is not sufficient.” The faculty in the university also began to take an interest and now we are expanding our efforts in cooperation with universities in Shiga Prefecture [see pp. 18–19] as well as high schools.

What role should the government take?
The international community created SDGs and the private sector responded first. The government should adjust its vertical administrative structure to think in a more integrated manner, creating a structure for promoting SDGs and a system for incorporating the necessary funding.

At the same time, companies and local governments need to be more active. For example, they should work on standardization in which added value is attached to sustainable products, which can be done without relying on the Japanese government and the high level of interest from the private sector will change the world, which will set a good example.

The SDGs Promotion Headquarters has determined the creation of the “Japan SDGs Award,” but we need to create a system not just for rewarding, but also for supporting the actions in the private sector. This is a very important approach.

Interview by HITOSHI CHIBA
GLOBALIZATION has progressed rapidly since the 1990s, while its negative impacts have also been evident. Many issues that can no longer be solved by nations and international organizations alone, such as massive deforestation and child labor, have been particularly conspicuous.

The United Nations Global Compact (UNGC), which was launched in 2000, is a global framework for realizing sustainable growth with the aim of solving these issues through cooperation between the United Nations and companies. Currently, more than 13,000 companies and groups in about 160 countries have agreed to and signed the UNGC.

Global Compact Network Japan (GCNJ) was established as a local network in Japan in response to the UNGC in 2003. Toshio Arima, who is the Chairman of the Board of the GCNJ and a Director and Executive Advisor to the UNGC’s board, says that SDGs will become more and more important for Japanese companies as well.

**“Defense” as a Business Opportunity for “Offense”**

The solutions to common global issues proposed by the United Nations’ Sustainable Development Goals (SDGs) also lead to the business expansion of global companies.

KYOKO MOTOYOSHI
Arima says, “By around 2007, only about sixty companies and groups had signed the UNGC in Japan, and I think that the top management showed far less interest in the UNGC than those of other Western countries, China and South Korea. But corporate managers who believe that companies should exist for society have led the movement, which energizes the argument that Japanese companies should also pursue their social responsibilities through business operations. Japanese companies will also need to accelerate the efforts for the SDGs.”

MDGs, which set goals to be achieved by 2015, were more about developmental goals for common issues limited to developing countries, and corporate efforts were not easy. But the SDGs, which were adopted in 2015, are goals and targets that are approachable for developed countries as well, which make it easier for companies to single-handedly make a contribution.

Ten principles in four areas (human rights, labor, the environment and anti-corruption) designated by the UNGC are fundamental values, and the SDGs show the issues to be solved specifying these values. Arima says that SDGs are both offensive and defensive for companies.

Arima says, “I feel that currently, Japanese companies are taking a strong defensive stance, including observing the rules. When a company operates globally, for example, it builds plants in developing countries and works with local business partners. The company establishes governance to prevent problems from occurring. This is, so to speak, the establishment of a ‘defensive’ structure. As a result, this approach will lead to the seventeen goals of the SDGs. On the other hand, however, I think it is necessary for Japanese companies to proactively take ‘defense’ as a business opportunity for ‘offense.’”

In the situation in which SDGs are underway, investors also show strong interest in SDGs and incorporate corporate measures for SDGs into their evaluation criteria. Many global companies think of SDGs in terms of measures for solving common global issues as a business opportunity.

Arima says, “It is ideal that the corporate pursuit of opportunities for growth, such as tapping into new markets, is a perfect fit with the issues of SDGs. The GCNJ holds sub-committee meetings by theme and has discussions and exchanges of information about SDGs. In addition, the GCNJ holds seminars and forums, organizes a SDGs task force made up of specialists, discusses how to utilize SDGs within companies and what message Japan should send, and sends messages via the media.”

Companies have to produce ideas to make profits while contributing to society. For example, companies need to accumulate ideas to resolve the issue of reducing recycling costs and producing profits.

Arima says the following regarding this point: “Overcoming the contradiction between social needs and making profits will lead to social progress. One of GCNJ’s future issues is to expand its network more widely. The current network is limited to urban areas, and major corporations based in Tokyo and Osaka make up about 80%. We can expect small and medium-sized enterprises to join by expanding throughout the country.”

The last issue that Arima pointed out is the need to conduct a range of analyses to communicate in an easy-to-understand way that SDGs are business opportunities.

Further calls for domestic companies and sending strong messages are the key to supporting the progress of SDGs in Japan.
For the Health of All People

A pharmaceutical company established in 1781 is approaching Sustainable Development Goals (SDGs) that have a strong affinity with the spirit of its founder in a very natural manner.

KENTARO SANO

Since its foundation in 1781, Takeda Pharmaceutical Company Limited has based its management on a way of thinking that puts patients at the center at all times. The company has worked on developing superior pharmaceuticals based on the idea that Takeda cannot sustain itself without the sustainability of a sound society. Its coined expression, Takeda-ism (referring to the combination of integrity, fairness, honesty and perseverance), expresses this spirit in one word. Takeda has proceeded with operational globalization one step ahead of the demands of the times. The company has also responded positively to its corporate social responsibility (CSR), the United Nations Global Compact (UNGC) (see page 8-9) and other demands based on Takeda-ism as they have grown in the global community.

“Sustainable Development Goals (SDGs) were very easy to for us to understand and incorporate in our businesses because they have a strong affinity with Takeda-ism,” says Toshio Tamamuro, Head of Takeda’s Corporate Social Responsibility, Corporate Communications & Public Affairs. “SDGs have freed us from the need to consider our business activities and corporate citizenship activities separately. Takeda and its stakeholders share the direction of undertaking their businesses properly to achieve the seventeen targets set under the SDGs and contributing to the global community.” Tamamuro notes that his company’s employees have continued with their initiatives up to this point in a calm, relaxed manner.

The SDG that Takeda is focusing on in particular is SDG3: Ensure healthy lives and promote well-being for all at all ages. Takeda is doing this because it has realized through a variety of past initiatives that prevention is essential for achieving a sustainable society. Through global CSR programs, which are its activities as a corporate citizen, the company is bolstering its support for the health of people in developing and emerging countries from the viewpoint of prevention in partnership with United Nations agencies and global NGOs. Takeda ultimately decided on the partners supported through the CSR programs by asking about 30,000 employees in Japan and overseas to vote for desirable partner candidates.

In 2016, Takeda’s employees mainly selected candidates in Asia, including the Global Measles Vaccination for Children (in partnership with the United Nations Foundation), the Community Health Workers Training for Maternal and Child Health (with the World Vision) and the Maternal and Newborn Health for Ethnic Minorities (with the Save the Children JAPAN) by employee vote.

In 2017, the company’s employees chose the Protecting the Lives of Pregnant Women in Africa (with the Japanese Organization for International Cooperation in Family Planning [JOICFP]), the Holistic Support Program for Refugees from South Sudan and...
Syria (with the Plan International) and the First 1,000 Days: Health and Nutrition Program (with the United Nations Children's Fund [UNICEF]) for its support by employee vote.

Each year, 5.9 million children worldwide die before their fifth birthday, due mainly to malnutrition. Forty-five percent of them die within one month of birth. Studies have shown that children become less susceptible to illnesses and that their life and growth are protected if they receive adequate nutrition and care in the first 1,000 days of life, which equals the period from the time spent in the womb until their second birthday. To address this situation, UNICEF is undertaking the First 1,000 Days program in the three African nations of Benin, Madagascar and Rwanda.

Takeda plans to donate 1 billion yen (US$9 million) in total to this UNICEF program over a period of five years from 2017 to support a total of 1.3 million mothers and children. In the area of health, for example, the company will support about 395,000 expectant and nursing mothers and 323,000 newborns in the five-year period by training health experts and increasing the level of health services in remote regions. In the area of nutrition, Takeda will support the improvement of the nutritional conditions of about 582,000 children under the age of five, their treatment and the dissemination of nutritional knowledge.

About 28 percent of all Takeda employees took part in the vote this year. Commenting on the selected programs, Hiroshi Suita, Associate Director of Takeda’s Corporate Social Responsibility, Corporate Communications & Public Affairs, says, “I think that the results reflected the our employees’ awareness shared through their work that the health of mothers and children is a problem that should be resolved.”

The second point to which Takeda is attaching importance in its global CSR programs is how to direct the attention of its employees from voting to field sites and raise their awareness. “We are urging our employees, particularly young ones, to visit field sites as the members of a corporate citizen to raise their awareness, by telling them that they can gain skills and knowledge from books,” says Suita.

Christophe Weber, Takeda’s President & CEO, is said to have stated that actions based on a way of thinking that “puts the patient in the center, builds trust with society, reinforces our reputation and develops the business” are important. “Takeda needs action only. Our goals are the spread of the word, CSRs, within ourselves and its disappearance in the end,” says Tamamuro.

Takeda is addressing all its seventeen targets in order to be sure of achieving SDG3.
P eople who peddled goods in other parts of the country by keeping their head office or head family in the feudal domain of Ohmi (present-day Shiga Prefecture) were called Ohmishonin (Ohmi merchants) in the Edo period (1603–1867). The management philosophy of Ohmishonin was sampo-yoshi, which means benefits for all three parties – the seller, the buyer and society. Founded in 1858 by Ito Chubei, a trader from the feudal domain of Ohmi, ITOCHU Corporation is one of the companies that carry on the spirit of sampo-yoshi today. ITOCHU is currently undertaking businesses in a broad range of fields, including textiles, machinery, metals, minerals, energy, chemicals, food, general products, realty, information and communications technology, and finance, with around 120 operating bases in sixty-three countries worldwide. Attaching importance to the sustainability of society, the company has been formulating a sustainability action plan based on risks and opportunities in the respective business fields, implementing the plan-do-check-act cycle and promoting the action plan year after year, taking international guidelines and principles such as Sustainable Development Goals (SDGs) into consideration.

“We believe the spirit of sampo-yoshi, the spirit of wishing for happiness in society, instead of positively rating the pursuit of self-gains only, is connected to the ideas of sustainability and SDGs,” says Akira Kurihara, a member of ITOCHU’s Sustainability Management Department.

The business of renewable energy that discharges virtually no carbon dioxide (CO2), a greenhouse gas, at the point of power generation is one of the businesses ITOCHU is focusing on in connection with SDGs. Climate change is positioned as one of the issues facing the world in SDGs. The implementation of emergency measures for reducing climate change and its effects is set as a target in SDGs.

ITOCHU is taking part in renewable energy projects in countries around the globe, including a solar thermoelectric power generation project in Spain, wind power generation projects in the United States...
and Germany, and a geothermal power generation project in Indonesia. Among these, the Sarulla Geothermal Power Plant on the Indonesian island of Sumatra, which commenced commercial operation in March 2017, is a geothermal power plant that leads the world in terms of the volume of power generated. Geothermal power generation produces electricity by driving a turbine with geothermal fluids, such as hot water and steam, which are extracted from underground. The geothermal fluids are returned underground after they are used.

“Geothermal power generation enables us to gain energy permanently by managing the extraction and return of geothermal fluids properly,” notes Hisao Nakano, a manager of the Power Project Investment Team for Asia of Power Project Department. “We can use geothermal energy as a key source of electricity because the weather does not change the output as it does in the cases of solar power and wind power.”

Indonesia, which has the second largest geothermal resource in the world after the United States, has adopted a target of raising the ratio of geothermal power generation to total power output from the current level of 4% to 9% by 2026. The country is aiming to address a chronic power shortage and climate change at the same time through efforts to achieve this target.

At the Sarulla Geothermal Power Plant, Units 2 and 3 are scheduled to enter commercial operation in October 2017 and in the middle of 2018, respectively, in addition to Unit 1 that is already in operation. The combined power generation capacity for the three units is 320.8 megawatts. It matches the amount of electricity consumed by approximately 1,900,000 households in Indonesia (whose population is approximately 260 million). Furthermore, the three units are estimated to reduce CO2 emissions to about one-third compared with older power plants in the country where fossil fuels are used.

ITOCHU, other Japanese companies, a natural resource company in Indonesia and a geothermal power generation company in the United States are jointly investing their money in the Sarulla Geothermal Power Plant Project. Financial institutions, such as the Japan Bank for International Cooperation (JBIC) and the Asian Development Bank (ADB), are providing funds to the Project. In addition to making investments, ITOCHU performed the role of a coordinator with the various organizations concerned.

“We took charge of negotiations and coordination with the various public and private organizations concerned. We worked persistently to develop the Project,” says Nakano. “I think that those tasks enable us to display our strengths as a general trading company. We would like to keep working for the expansion of renewable energy around the world, making the most of these strengths of ours.”

ITOCHU is also working to advance SDGs at the Karawang International Industrial City that it is developing and operating in the suburbs of Jakarta, Indonesia. More than 150 companies occupy this industrial park, which measures approximately 1,400 hectares in size. The Industrial City was installed with about 1,200 smart streetlights in 2016 as the first industrial park in Indonesia to have them. Smart streetlights are a system that reduces energy consumption and CO2 emissions by combining high-efficiency LED lighting with modulated light controls. They reduce CO2 emissions by about 40% compared with ordinary streetlights. In further steps, ITOCHU is providing support to local residents, including farming guidance, scholarships for junior and senior high school students, baby food for infants and medical devices for midwives, in addition to growing more than 10,000 saplings for afforestation within the grounds of the Industrial City each year in cooperation with its corporate tenants.

The spirit of sampo-yoshi is spreading worldwide with SDGs, supporting the sustainable growth of companies.
According to “Trends in Maternal Mortality: 1990–2015” released by the agencies of the United Nations, the global maternal mortality ratio (MMR; maternal deaths per 100,000 live births) was 385 in 1990, which declined to 216 in 2015. However, the rate in developing countries still remains high at 239 (12 in developed countries). In particular, the rate is 546 in sub-Saharan Africa, which is the highest worldwide. To improve this situation, the Sustainable Development Goals (SDGs) target the reduction of the global MMR to less than 70 per 100,000 live births by 2030 (SDG 3.1).

To achieve this, Lequio Power Technology Corp. is trying to contribute to the safety of women and children with its diagnostic ultrasound imaging equipment US-304 that can be used for prenatal checkups. The US-304 is a diagnostic tool to understand the condition of a fetus by placing a probe, a device for sending and receiving ultrasound, on the abdomen of a pregnant woman. Lequio was founded in 2011 in Okinawa (an island in Southern Japan). It has ten employees and mainly does business in developing countries, particularly in Africa.

Lequio’s relationship with Africa dates back to a previous project introducing “Dr. Car,” a mobile car clinic containing medical devices, into Sudan with the support of the Ministry of Foreign Affairs of Japan and the Japan International Cooperation Agency (JICA).

“Sudan, which experienced a long civil war, is making a strong effort for healthcare to rebuild the country. However, diagnostic ultrasound imaging equipment is very expensive and even most public
hospitals are unable to introduce it. Few companies worldwide manufacture a low-cost device. I thought that if a low-cost, miniaturized integrated circuit (IC) were combined with Japan’s excellent manufacturing technology, diagnostic ultrasound imaging equipment could be manufactured at a much cheaper price,” says Tetsu Kawamura, President and CEO of Lequio.

Lequio started development in 2014, completing the US-304 in about one year and installing it in Dr. Car. The US-304 has a simple structure in which a 170-gram probe has a USB cable. When the cable is connected to a computer, an image can be displayed on the monitor. It is about one tenth of the price of a conventional device. The US-304 can be powered by a computer’s battery and can be used stably in developing countries where the electricity supply is unpredictable.

In 2015, the project in which the US-304 was used to support maternal and child health in Sudan was adopted as a Verification Survey with the Private Sector for Disseminating Japanese Technologies for Improving Maternal and Child Health Utilizing Ultrasound Equipment, a program for Supporting Overseas Expansion of Small and Medium Enterprises by JICA. In this project conducted in Khartoum, the capital of Sudan, Lequio provided training to about fifty midwives on how to operate the device and perform diagnostic imaging. Those midwives perform diagnostic imaging in the hospitals and health centers. Since the start of the project, nearly 500 pregnant women were examined monthly using the US-304 and abnormalities requiring a cesarean section during childbirth were detected.

“If you find an abnormality early, risk during childbirth can be reduced. In addition, when a pregnant woman sees an image of her fetus during the prenatal checkups, she is more conscious of her own health management,” says President Kawamura.

In addition to Sudan, the US-304 has also been purchased by a hospital in Kenya and a UN agency, and is currently used in about thirty countries, including pilot systems.

Lequio will build a database of videos of a probe being operated, ultrasound images, diagnostic imaging results and more, with a plan to start providing a service in 2017 in which users of the US-304 can access the database for the diagnosis of pregnant women. Lequio aims to improve the diagnostic technique of doctors and midwives as they diagnose a pregnant woman by referring to the database. In addition, the company is currently working on the development of a system to be operational in three years in which artificial intelligence (AI) uses the database to perform automatic diagnosis.

“If a small company like ours can profit continuously, more companies will enter this field. Such business expansion will also contribute to SDGs,” says Kawamura.

Lequio will also make a strong effort to develop educational software for everyone to easily learn about the technology on a computer, increasing the number of users of the diagnostic ultrasound imaging equipment.
Schools overseas are introducing a cloud e-learning system for elementary school arithmetic in a bid to break the negative cycle of educational gaps due to income disparities.

There are numerous businesses undertaken by Japanese companies that are contributing to the achievement of sustainable development goals (SDGs). The Surala Ninja! cloud e-learning system for arithmetic designed for elementary school pupils overseas is one of the outstanding models of such businesses. This e-learning system uses Japanese ninja characters that are very popular among children all over the world. The system was born as a version of the original Surala e-learning program that was released in Japan in 2008 with modifications made for overseas use. This e-learning system is characterized by high-quality education for a low price. Takahiko Yunokawa, president and CEO of SuRaLa Net Co., the developer and marketer of the system, provides the following explanation.

“A major concept for both SuRaLa Net and Surala Ninja! is that children who are not attending school for a variety of reasons can understand arithmetic with no intervention by teachers. Almost all preceding e-learning systems were developed for economically privileged children whose academic abilities fall in the middle or higher levels. There was no
e-learning system developed with the consistent concept of enabling children with low academic ability who are not attending school to study arithmetic systematically in small steps.”

SuRaLa Net opened Surala JUKU, the first after-school study facility of its kind where Surala Ninja! is used for teaching arithmetic to children, in 2015 in a slum area of Sri Lanka with the adoption by the Japan International Cooperation Agency (JICA) of the Preparatory Survey for base of the pyramid (BoP) Business Promotion project for businesses that contribute to the solution of problems faced by the impoverished class in 2014. The company now operates seventeen Surala JUKU facilities in Sri Lanka. Fifty to 100 children, mainly in the low-income class, attend each facility. In addition, the e-learning software program is used for classwork in certain parts of Indonesia and India.

An animation starts when the children log in to the Surala Ninja! system. The characters begin their actions with the ninja protagonist named Hayate in the center. Voice actors and actresses ask the children questions and praise their achievements in clear voices depending on the scene.

The interactive style of instruction enables children to enjoy and learn at the same time while maintaining a suitable feeling of tension. The incorporation of game factors that excite children is another major characteristic of this system. It displays ranks as studies advance, enabling the children to compete with other pupils and win medals on the screen. Furthermore, the classwork progresses in ultra-small steps that are elaborately designed to ensure an understanding of the matters taught, giving the children a sense of achievement and a feeling of definite understanding.

Instructors are essential for the operation of these after-school study facilities. SuRaLa Net hires two facilitators (instructors) per facility from the impoverished class in local communities in partnership with Women’s Bank, a local nonprofit organization undertaking deposit, financing and insurance operations for women who belong to the BoP class. At the start, SuRaLa Net staff members dispatched from Japan educated and trained these facilitators. Recently, local staff members have begun to provide them with training.

The friendly, enthusiastic approach of the facilitators has won favorable comments. In a questionnaire survey, 96% of parents rated the facilitators as “very good.” On the other hand, 92% of surveyed facilitators replied that their income grew and all of them said that they were satisfied with the job.

Says Yunokawa, “We must eliminate the vicious circle of income disparities leading directly to educational gaps. We are advancing our business targeting the BoP class based on this concept. Children who belong to this class comprise a significant majority in developing countries. They have potential for high performance. I believe that the improvement of their basic academic levels leads directly to the development and growth of their respective countries.”

In May 2017, this business won the Scale-out Award in the SDGs Business Award 2017, a commendation for Japanese companies’ superior SDG businesses co-sponsored by the BoP Global Network Japan and the Tokutaro Hiramoto Laboratory at the Kanazawa Institute of Technology.

Surala Ninja! is attracting attention in Japan and abroad as an advanced example of contributions to the solution of problems in the three areas of poverty, education and gender equality.
First of all, could you explain why you, as a local government body, are committed to SDGs?

Shiga is one of the places in Japan where Buddhism was introduced very early. People in this area placed importance on the idea that Buddha inhabits the mountains, rivers, grass and trees. In medieval times, the merchants who were referred to as Omishonin (“Omi” is an old name of Shiga and “shonin” means merchant in Japanese) started traveling around the country and gave birth to the spirit of sanpo-yoshi. This means benefiting three different parties, which in this case include the seller, the buyer and the world. Considerations to users of water from the downstream of Lake Biwa also took root. Shiga has implemented welfare policies from an early stage. Furthermore, Shiga ranks top among the prefectures in Japan in the proportion of the number of kodomo shokudo to the total population. Kodomo shokudo is a restaurant for children where volunteers offer meals free of charge or at low prices.

In 2015, Shiga Prefecture included “a new kind of richness” in its basic initiative. This aims to encourage the local people to join the efforts to create a new kind of richness by reevaluating the spirit and philosophy rooted in Shiga and taking action accordingly. This new kind of richness can apply to anyone, both now and in the future, and even to intangible things. This year, we have declared our participation in an effort to set specific goals and review our current lives and the state of our homeland Shiga in terms of our connection with the world and with the future. A yardstick for this is SDGs. Hopefully, we will be actively involved in SDGs by remaining aware of a perspective for the future and our connection with the world. This will nurture a new sense of mission among the people in Shiga.

In my view, a local government body is therefore an optimal unit for working on SDGs, and it must do so. It should be capable of effectively pursuing SDGs.

In 1977, the people around the lake were united both publicly and privately in an effort to resolve the deterioration of water quality that arose from a red tide in Lake Biwa. It seems that this experience is utilized in your pursuit of SDGs.

The spirit of SDGs sees the same future as the people in Shiga do. The large red tide in Lake Biwa occurred precisely forty years ago. The local people rose up together and formed a movement for stopping the red tide by using phosphorus-free soap instead of detergent. This led to the development of new products and the enforcement of a new ordinance.
We have a belief that we are “humbly allowed to keep” Lake Biwa, which is one of the world’s oldest lakes. About 14.5 million people in the neighboring prefectures drink and use the water from Lake Biwa. People in Shiga are traditionally humble and thoughtful in using the water from Lake Biwa. We would like to utilize this experience and idea more.

**The Act on Preservation and Regeneration of Lake Biwa was enforced in 2015. The Act may also have significance in pursuing SDGs.**

Yes, the significance is great. This means that the national law, not a prefectural ordinance, officially positioned Lake Biwa as a national asset. Lake Biwa is inhabited by more than sixty endemic species and turns into a wetland in winter where more than 100,000 waterfowl stay. The wetland was designated by the Ramsar Convention and is also important in terms of the ecosystem.

The enforcement led to a new initiative, a new era of Lake Biwa. Based on the respect for the will of our ancestors who cherished Lake Biwa, the new initiative aims at making the area around the lake more attractive through the utilization of Lake Biwa, strengthening the economic foundations in the area and making economic growth and environmental conservation compatible with each other so that no one will be left behind in society, as well as the pursuit of environmental conservation. Conflicts over water control may be found elsewhere. The enforcement of the Act, however, led to the establishment of an organization to hold discussions with the governments of the prefectures concerned. This will lead to meaningful efforts for the next generations. The world has seen numerous disputes over water consumption, including the issues of rivers that cross national borders. Globally sharing the experience of Shiga will lift our efforts and contribution to a new height.

**Tell us about the symposium held this past June on the sustainability efforts in Shiga and SDGs.**

Aimed at diffusing SDGs, the symposium was a great success, inviting panels from different communities including Mr. Thomas Gass, United Nations Assistant Secretary-General. Behind the success lies cooperation from the enthusiastic business community in Shiga. They place importance on the spirit of sanpo-yoshi (benefiting three parties) in order to continue their business in the midst of rapid changes. For example, the Shiga Committee for Economic Development is setting forth a new principle for delivering a sustainable society, namely the addition of *asu-ni-yoshi* (benefiting tomorrow) to sanpo-yoshi. These ideas have strong affinity with SDGs.

In particular, Mr. Gass had a discussion with first-year junior high school students near the venue before the opening of the symposium. The pupils observed the discussion intently, who enthusiastically suggested that Mr. Gass imagine who made the clothes they wore and how these people lived.

**Developing the next generations is important.**

For example, a university in Shiga Prefecture is partnering with Keio University in the initiative titled Campus SDGs [see pp. 6–7]. In addition, more than 1,000 students from athletic societies at Ritsumeikan University Biwako-Kusatsu Campus gathered around Lake Biwa this summer and helped get rid of weeds of fertile and invasive foreign aquatic plants. They intend to establish the activity as a regular event. They are highly motivated to do something for the benefit of the environment, the future and the people around them. This makes me feel very happy and reassured.

It is meaningful for high school students, citizens and residents’ associations to pursue what they can do in accordance with the yardstick of SDGs. Shiga Prefecture would like to connect and facilitate these efforts.

In Shiga, we have made these efforts in our own unique way. Making these efforts more actively known from a global perspective and through expressions and performances could give birth to different involvements and chemical reactions or gain a diverse range of knowledge. As a result, the cooperation could be deepened.

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**Interview by HITOSHI CHIBA**
In Japan, initiatives are being undertaken by a large number of NPOs and NGOs in a variety of fields such as international cooperation, welfare, environmental protection and education. These NPOs and NGOs have become particularly active in the initiatives aimed at achieving SDGs in response to “Transforming our world: the 2030 Agenda for Sustainable Development” (also known as the 2030 Agenda) adopted by the United Nations General Assembly in September 2015.

For example, Action against Child Exploitation (ACE), a non-profit organization addressing the issues of child labor around the world, aims to achieve the goal to end child labor in all its forms by 2025. Projects are currently underway to protect children from being engaged in hazardous labor in the cocoa farms in Ghana and the cotton farms in India and to support their admission to schools.

Furthermore, the Japan National Assembly of Disabled Peoples’ International (DPI-JAPAN), an NPO established as a network of people with disabilities, promotes activities both in Japan and abroad with the aim of achieving equal access for disabled people to employment and educational opportunities. Its global initiatives include activities aimed at assisting disabled people in Africa to encourage their efforts to develop self-sustainability as well as developing leadership among them.

Founded as a civil society platform in April 2016, SDGs Japan has been assisting with these activities undertaken by NGOs and NPOs in Japan. This organization has as many as 100 members represented by NPOs and NGOs in Japan, addressing issues in a range of fields including sustainable development, health and medical care, disaster prevention and environmental protection.

Masaki Inaba, the chair of SDGs Japan, says, “Our organization serves as a civil society network comprised of NPOs and NGOs with the aim of achieving SDGs after many years of achievements that have been made in their respective fields. We also serve as a ‘catalyst,’ promoting stronger cooperation or partnership among NPOs and NGOs as well as between government organizations and private sector companies.”

One of the activities of SDGs Japan is to make recommendations on government policies, which are...
usually undertaken as part of the activities at the SDGs Promotion Round Table Meetings established by the government. This round table has been established as a subordinate body under the SDGs Promotion Headquarters chaired by Prime Minister Shinzo Abe and composed of all ministers. It serves as a platform for a multi-stakeholder dialogue for SDGs, involving members representing various ministries, NPOs, NGOs, international institutions and academia. The SDGs Promotion Headquarters adopted the SDGs Implementation Guiding Principles in December 2016 based on the discussions conducted by the round table meetings. The principles embrace a vision that states, “Become a leader toward a future where economic, social and environmental improvements are attained in an integrated, sustainable and resilient manner while leaving no one behind” and are comprised of principles toward the achievement of SDGs for Japan, priority areas and an implementation framework.

“We have succeeded in having our opinions reflected in the principles by becoming actively involved in the process of working them out. It is necessary to create an environment for NPOs and NGOs to be able to work with ease in order to achieve SDGs. For this reason, it is vitally important for us to make recommendations on government policy,” Inaba says.

SDGs Japan remains focused on activities in the international arena. As part of its international activities, SDGs Japan participated in the 2017 session of the United Nations High-level Political Forum on Sustainable Development (HLPF) held in New York this past July, a central platform for the follow-up and review of the 2030 Agenda participated in by government representatives from around the world, as well as representatives of stakeholders including NPOs, NGOs and private sector companies.

As a side event at the HLPF, SDGs Japan cohosted with an African NGO a symposium entitled “Cooperation between Africa and East Asia for SDGs and Agenda 2063: Lessons from TICAD.” At this symposium, participants delivered speeches and held discussions about contributions that can be made to achieve SDGs and the Agenda 2063 on the strength of the Tokyo International Conference on African Development (TICAD) initiatives driven by the Japanese government, or by civil society in Japan and Africa.

SDGs Japan has been taking active steps to publicize its activities related to SDGs by hosting a variety of events and dispatching lecturers to workshops around the country. In January of this year, SDGs Japan published the Japanese version of a handbook for youth entitled, “The World We Want: SDGs for Children,” which can be easily downloaded from the Internet in cooperation with eight Japanese NGOs including Save the Children Japan.

Says Inaba, “Sustainable society cannot be achieved without citizens’ power. Going forward, we aim to cultivate a better understanding of SDGs among citizens in collaboration with the regional NPOs across Japan.”

Japan will host major international conferences in 2019, including TICAD VII and G20. SDGs Japan will accelerate its activities in a variety of fields toward 2019.

1 The African Union’s (AU) Agenda 2063 action plan was formed at the Organization of African Unity (OAU) 50th anniversary celebration (OAU was established in 1963). It is a strategic framework for the socio-economic transformation of the African continent over the next 50 years, adopted by the AU’s general assembly in January 2015. The Agenda 2063 calls for strategic initiatives in an extensive range of fields including poverty eradication, educational reforms, the promotion of innovations, economic reforms, and agricultural modernization.
Against this backdrop, one of the problems in irrigation agriculture is salt damage, which occurs from the movement of underground salt to the topsoil. This has occurred in nearly 20% of the irrigation farms around the world. The exposure of plants to stress from a high concentration of salt limits their absorption of moisture at the root, inhibits photosynthesis and significantly damages the growth or yield of crops. As the global population continues to increase, the development of crops and fertilizer that are resistant to salt damage is one of the major challenges urgently needed to maintain sustainable food production.

A group of researchers including Motoaki Seki, team leader of the Plant Genomic Network Research Team at RIKEN Center for Sustainable Resource Science, Kaori Sako, a postdoctoral researcher, and Hong Mai Nguyen, a graduate student at the Department of Nanosystem Science, Yokohama City University, have discovered that ethanol increases plant resistance to salt. The study results were published in July 2017 as a research report in the online flash version of *Frontiers in Plant Science*, an international journal on plant science.

The discovery stems from the process of searching for compounds that make plants resistant to stress.

“In general, experiments on compounds use organic solvents such as ethanol, acetone and...
methanol to dissolve insoluble substances. A recent experiment also used several kinds of organic solvents and obtained data that made us suspect that the organic solvents, not the compounds, could have a property that makes plants stress-resistant,” Seki explains.

First, the team conducted an experiment using Arabidopsis (rockcress), and found that the administration of ethanol strengthened salt resistance. When stress was applied as a high-concentration salt (0.6% sodium chloride), the Arabidopsis plants turned white and died. When treated with ethanol, however, the Arabidopsis plants were shown to survive, even under conditions of salt stress.

Next, gene expression analysis was performed to clarify the mechanism of strengthening salt resistance. This analysis led to the finding that ethanol treatment increased the expression of the genes that work to eliminate the reactive oxygen species* that are generated under the stress of high salt. The analysis also showed an increase in the activity of ascorbate peroxidase, an enzyme that eliminates hydrogen peroxide, which is a type of reactive oxygen species. Moreover, an experiment using rice also showed the effects of ethanol treatment to control the accumulation of reactive oxygen species and reinforce salt resistance.

Ethanol is one of the most common types of alcohol. It is extensively used in food additives and fuel as well as for sterilization and disinfection. Available at low prices, it has minor effects on the human body and is easily transportable and storable. For these reasons, making plants more salt-resistant through the use of ethanol is very advantageous in commercializing the substance.

“The effects of climate change on farm products and the food problem from the increasing population are becoming more severe year after year. Although some verification on farms will be necessary, application based on the outcome of the recent study can be expected to enhance the resistance to stress from causes such as drying and high temperatures, and to increase the yield of farm products. We would like to contribute to solving the global food problems through our study of stress adaption and resistance,” says Seki.

The commercialization of this technology can be expected to help develop fertilizer for growing farm products that are resistant to salt damage, and increase yields in areas where the installation of irrigation systems is difficult.

* Reactive oxygen species: Unstable molecules that contain oxygen and that react with other molecules in a cell. Reactive oxygen species may occur as a result of in vivo energy metabolism and during the process of protection against infectious diseases. It may also be generated in plants subjected to environmental stress such as a high concentration of salt, high temperatures, drying and strong light. Reactive oxygen species play important roles in various life phenomena. However, an excessive accumulation of reactive oxygen species poses toxicity to cells.
NAGoya’s FM radio station ZIP-FM’s popular music program “Radio Orbit” features a segment called “History Mystery.” The program’s DJ is Australian Chris Glenn, who researches and presents stories on the historical personages and happenings in the broadcast coverage area in an effort to teach the Japanese audience about their own history and culture.

“The Tokai region, including Nagoya, produced 70 percent of the early Edo-period (1603-1867) daimyo (feudal lords),” says Glenn. “Historically, it’s an extremely important area for Japan, and yet, surprisingly, people who live here don’t really know the history or importance of their own town. I find that regrettable, so I pass on my research to the listeners. When I hear the amazed reactions of listeners when they discover that this is the birthplace of such exceptional samurai, or that their town is the setting for such an interesting story, it makes me happy,” he says with a smile.

It was Glenn’s grandfather, a teacher, who sparked Chris’s love of Japanese history. “My grandfather had a high regard for Japanese history and culture. Unfortunately, he ended up fighting against Japanese troops in World War II, but as soon as the war ended he taught his students that it was important for Australia and Japan to improve relations,” says Glenn.

Having heard about Japan’s history and culture from his grandfather, Glenn came across an exchange program when he was a senior high school student, and came to Japan to study. At the recommendation of his teacher at the time, he read a novel depicting the life of the great seventeenth-century swordsman Miyamoto Musashi and became fascinated by the world of the samurai. “What

Australian DJ, columnist and author Chris Glenn is promoting the history of Nagoya, birthplace of samurai generals of the Sengoku (Warring States) period (1467-1603), to local residents and to the world.

KUMIKO SATO

From Nagoya to Samurai City

Chris Glenn poses in a suit of samurai armor that he made from scratch by himself.

Photo: COURTESY OF Past Present Future
I find appealing is that the samurai had great courage, passion and military skills yet at the same were highly educated and cultured with an artistic side, which they express through painting or poetry. Later, as I pursued my studies, I learned that the great generals of the Sengoku period, including Oda Nobunaga and Tokugawa Ieyasu, were cultured people who performed noh dance and enjoyed the tea ceremony,” says Glenn.

After returning to his home country, Chris attended a media broadcast vocational school before commencing work as a DJ at an Australian radio station. But the desire to “go home” to Japan grew stronger, until seven years later he returned and got a job at a Tokyo radio station. In 1993, learning that a new radio station would be starting up in Nagoya, Chris applied for a transfer to the town that held such appeal for him as the birthplace of many samurai generals in the Sengoku period.

Chris has a growing collection of old samurai armor. He now has sixteen suits of armor, mainly from around 400 years ago. But one of them is newer – and larger. This is one he constructed himself to fit his size, having apprenticed himself to a traditional armor craftsman residing in Nagoya.

“I did everything myself, the way it was done in the old days, from beating the iron sheets to create the shape, to producing the lacquered finish. Now, whenever I see lacquer tableware or furniture, I can understand just how sophisticated and difficult the techniques required to make them are,” says Glenn. “That applies to all Japanese things – items made to be used are all so beautiful they are also works of art. I think this is a particular talent of the Japanese.”

When he has the opportunity to appear at events, Chris wears his armor and imparts his knowledge of the samurai spirit and culture. He also utilizes his long experience in the media to work as an advisor at municipalities across Japan on inbound tourism and urban design to appeal to tourists from overseas.

Says Glenn, “My proposal is to market Nagoya as ‘Samurai City Nagoya’ in order to promote Nagoya to the world. Right now a program is underway to properly restore Nagoya Castle, the symbol and foundation of Nagoya, based on old documents. In the same spirit, I think we should cultivate Nagoya’s roots as the birthplace of Sengoku period generals by reviving the old place names of Teppochō [“teppo” means gun and “cho” means town in Japanese] and Kajiya-cho [“kajiya” means blacksmith], for example, so that local people understand that this is where the samurai were active. I’d like everyone in Japan to learn about the history of their own town and take pride in it.”

Glenn’s message eloquently expresses how we can rediscover the appeal of Japan.
A soil improvement agent based on foamed glass is helping to solve global issues such as water shortages due to climate change and food shortages caused by the increasing population.

KUMIKO SATO

The soil improvement agent “Porous (POROUS ALPHA)” has been developed through industrial-academic joint collaboration between Tottori Resource Recycling, Inc., based in Tottori prefecture, and the Arid Land Research Center, Tottori University. POROUS ALPHA is a soil conditioner for water conservation in irrigation systems. It achieved excellent results in an experimental project that grew tomatoes and green beans in Morocco, a semi-arid region near the Sahara Desert.

Tottori Resource Recycling, Inc. has ten employees engaged in business to recycle waste glass. Yoshiaki Takeuchi, the company’s president and CEO, describes the development of POROUS ALPHA:

“The beginning of our company was when we developed our glass foaming technology by burning pulverized glass with additives such as shells and calcium carbonate. The product was initially sold as civil engineering material but sales were poor. Then, the Arid Land Research Center of Tottori University, one of the local research institutions, suggested using the product as a soil conditioner for agriculture.”

Tottori Prefecture, which faces the Sea of Japan, has one of the largest sand dunes in Japan and gave birth to local specialty products grown in the sand dunes. The Faculty of Agriculture of Tottori University has long been engaged in the development of technology to cultivate crops in this sandy area. It has successfully grown Japanese leeks, green onions and Chinese yams. In 1990, the Sand Dune Utilization Research Institute was reorganized into the Arid Land Research Center, Tottori University. As a joint usage/research center in the field of arid land science, researchers visit from all over the world.

The foamed glass developed by Tottori Resource Recycling, Inc. is a porous material which stores water and soluble fertilizer when mixed in soil. In addition, since the glass is made from silica, which originally exists in the ground, it has a very low environmental impact. Focusing on its advantages, the Arid Land Research Center of Tottori University repeated the test of using foamed glass as a soil conditioner, and after confirmation of the performance and safety, POROUS ALPHA was commercialized.

Mauritania, located in the northwestern part of Africa, was the first location in the POROUS ALPHA verification survey. One of the Mauritanian students from the Arid Land Research Center of Tottori University served as intermediary. Subsequently, Tottori
Resource Recycling, Inc. carried out verification surveys in Kenya and Senegal. The effectiveness of POROUS ALPHA was highly evaluated in these surveys and the product was registered in the United Nations Industrial Development Organization (UNIDO) environmental technology database. Since 2015, the company has implemented a verification/dissemination project in the Souss Massa region (central Morocco) through “the Verification Survey with the Private Sector for Disseminating Japanese Technologies for Water-Saving Agriculture in Arid Area in Morocco” financed by JICA.

Morocco is an agricultural giant where production on large-scale farms is thriving. It is well equipped with facilities to reduce water consumption, including drip irrigation. The country’s high-quality tomatoes have the fourth largest export value in the world. However, in recent years, the groundwater level has declined, raising concerns about the depletion of water resources.

In the POROUS ALPHA verification survey conducted in collaboration with the Office Régional Mise en Valeur Agricole, Souss-Massa, under the Ministry of Agriculture, Maritime Fisheries, Rural Development and Water and Forests of Morocco, Tottori Resource Recycling, Inc. demonstrated a 28% yield increase in tomatoes while conserving 50% of the water supply.

According to Takeuchi, “If water consumption is reduced by half, you might be able to increase the crop acreage. While the Moroccan Government is advancing infrastructure development, such as irrigation for agriculture, you might be able to reduce the infrastructure size. We expect that the introduction of POROUS ALPHA will enable many future discussions.”

The company plans to construct a local production factory if a certain level of demand is foreseen in the future. It is also planning a verification survey in Peru, where large-scale agriculture is practiced in arid regions.

The company is looking ahead to the expansion of its business to the Gulf countries in the future. The acceptance of foreign students plays an important role in reaching mutual understanding with foreign countries for business expansion and it leads to international contributions. In August 2017, the company accepted a foreign student for the first time through the JICE (Japan International Cooperation Center) Internship Program for the United Arab Emirates (UAE). The student is now receiving training as an intern at the company.

Says Takeuchi, “It is impossible for small and medium companies like ours to expand overseas on our own. I believe that we owe our current success to encounters with a variety of people, including professors at Tottori University, overseas students, consultants who negotiate overseas and JICA staff.”

Approximately 40% of land in the world is in an arid region. Problems such as drought and desertification due to climate change are becoming more serious. Tottori Resource Recycling, Inc. will continue its research and development in the future, hand in hand with the people working to address these global issues.
ORANGE-RED flames engulf the pitchfork-like implement that Shoichiro Otani deftly lowers and raises, then rotates as he flash-grills fillets of representative regional cuisine of Kochi Prefecture.

The grilling process in the making of katsuo no tataki (seared skipjack tuna) lasts no more than a couple of minutes, and it takes even less time for Otani to expertly cut the meat into 1-cm slices with a handmade sashimi knife.

“There’s no counting, no timer, just a sense that comes from experience,” says Otani’s mentor, 84-year-old Josaku Tanaka, who has been grilling the Kochi delicacy at his family-run fishmonger, Tanaka Sengyoten, in Naka-Tosa Town for sixty-five years. “The trick is to only sear about 1 mm of the outer surface. Any more than that, and you have nothing more than grilled fish.”

The origins of katsu no tataki are uncertain, though it is sometimes said it was first practiced by Ryoma Sakamoto, a celebrated nineteenth-century samurai who adopted it from foreigners he once saw searing meat in Fukuoka.

Sakamoto was born in Kochi when it was known as the province of Tosa and even today...
the dish more generally known as “katsuo no tataki” is also called “Tosa-zukuri” (literally “Tosa-made”).

While katsuo is caught at many places around Japan, those hauled in by the region’s ippon-zuri (“single rod and line”) fishermen off Naka-Tosa’s Kure Bay are considered skipjack royalty. A combination of water quality and temperature and excellent “nabura” (shoals of fish feeding on the surface) makes Kochi the perfect environment for the fish, according to Tanaka.

“The katsuo caught here is particularly good, featuring an appropriate amount of fatty tissue,” Tanaka says, adding that a characteristic of the dish is that after searing it is immediately placed on a bed of icy water to arrest the cooking process and retain the sweet, smoky flavor of the wara rice straw from which the grilling fire is made.

Another characteristic is the array of condiments served with the fish, according to Tanaka’s son, Takahiro, who is the current president of Tanaka Sengyoten.

These include sea salt, chopped green onions and paper-thin slices of locally grown garlic featuring a pleasingly subtle, even aromatic, aftertaste.

“Adding garlic and so on was not some flight of gastronomic fancy – traditionally these were the only things that were available to harvest in this region,” says Takahiro, a graduate of Keio University who quit his job at a large corporation at age 30 to rebuild the family’s 130-year-old business.

Interestingly, while tuna has come to be seen as the king of seafood by many Japanese over the past thirty years, that title once belonged to katsuo, according to Takahiro.

“Katsuo has a complex, deep taste, far more so than bluefin or other types of tuna,” he says, adding that the main season for catching skipjack in the area is between March and July. “After that they migrate northward to cooler waters, where its increased size and fatty content alter that depth and balance.”

Takahiro’s father, Josaku, recalls a time as a child when the fish caught by the town’s fishermen would be sold by their wives in outside stalls in a district known as Kure-Taisho-Town Market. “There were about fifty women selling seafood, including katsuo no tataki, and the area became known as the town’s kitchen.”

While the number of sellers has halved since, efforts by Takahiro to rejuvenate the area through promotion of the local delicacy have paid off, with Tanaka Sengyo flash-grilling as much as 500 kg of katsuo daily for visitors who flock to Kure-Taisho-Town Market from far and wide.

The trend is also seen at other outlets, such as the lovely Yamasaki restaurant in neighboring Susaki City, where Masayoshi and Rie Kawasaki serve up sumptuous variations on the theme, among them a skipjack makimono (roll) which is dipped in a tangy ponzu sauce (made with soy sauce and citrus juice).

A short drive away in Kochi City, meanwhile, the wonderfully chaotic Hirome Ichiba market is home to two flashy katsuo no tataki joints, both sporting glass-fronted counters where the dish is prepared amid searing flames right before customers’ eyes.

“It’s a bit of a show, but customers enjoy it and can see for themselves how tough the grilling process is and fresh the fish is,” says Kei Fujimoto, manager of Myojinmaru’s Hirome Ichiba store as he takes a break from grilling katsuo, the technique for which, he says, takes two years to master. “It’s a unique dish among Japan’s varied food culture and one of which the people of Kochi are extremely proud.”

Josaku Tanaka agrees, adding that the only way to enjoy it to the full, is to eat it fresh. “And that means you have to come to Kochi,” he says.
Straddling Fukushima, Tochigi and Gunma Prefectures in eastern Honshu, Nikko National Park is arguably the most beautiful in all Japan.

ALEX HENDY

Mountainous and thickly forested, habitat for bears and monkeys, location of lakes, ravines and waterfalls, Nikko National Park is a place of outstanding natural beauty.

At Lake Chuzenji in Oku-Nikko (inner Nikko), some of the famous falls of Nikko can be seen close up from hiking trails that wend through forests and along precipitous ravines. The sweeping marshland vistas of Senjogahara and Odashirogahara nearby, partly traversed on raised wooden boardwalks, are breathtaking in the fall, when the grasses turn a russet red and the surrounding larch forests yellow gold.

Nikko attracts throngs of visitors at this time of year, when the forests, thick with Japanese beech, Mongolian oak, maple and other trees, put on one of the nation’s most celebrated koyo (colorful
the climb to the first Shogun’s mausoleum was surely also by design.

Toshogu, like many of Nikko’s sacred sites, lies at the foot of Mount Nantai, also known as Futara-san, itself considered sacred since ancient times. At the Futara-san-jinja shrine next to Toshogu, a well-known “power spot” founded by the Buddhist monk Shodo in 767, visitors climb through cleansing hollowed-out tree trunks, throw quoits to test their fortune, wish for better luck in love, and drink water from a spring said to restore lost youth, improve eyesight and confer wisdom.

One of the first travelers to “discover” Nikko was British diplomat Sir Ernest Mason Satow (1843–1929), who wrote a guide book on the area in 1875 and was among the first of many dignitaries to build a villa on the shores of Lake Chuzenji, in 1896.

“If the traveller is learned in the old history and mythology of Japan,” wrote Satow, “he can spend days in examining the temples, shrines and other objects of interest in the sacred grounds…. If he prefers nature, he can be equally interested in exploring the neighbourhood, and whichever way his steps lead him, he will find points of attraction. … Add to this a delicious atmosphere, bracing and health-giving, and no more is needed to stamp this place as one of the pleasantest resting-places in Japan.”

Satow’s words are as true today as they were at the turn of the twentieth century.

For all its natural splendor, it is for the Park’s man-made structures, in particular the dazzling Toshogu shrine, that most visitors come to Nikko.

Toshogu was built in 1617 (rebuilt in 1636) in honor of Tokugawa Ieyasu (1543–1616), one of the “three unifiers” of Japan and founder of the Tokugawa Shogunate (1603–1868). Flamboyantly decorated with brightly colored lacquer, gold leaf and thousands of exquisite wood carvings, the complex demonstrates the reverence in which Ieyasu was held and is a testament to the skills and creativity of Japan’s elite craftsmen. Imagined elephants, bewhiskered dragons, a “sleeping cat” and “three wise monkeys” (see photos) … the visual experience is almost psychedelic, the artistry overwhelming. The knee-numbing effect of leaves) displays. In the winter, the slopes of towering Mount Shirane are a popular destination for skiers, with Yumoto, Kinugawa and other onsen resorts providing hot spring accommodation below. Walkers relish the challenges and rewards of the active volcano zone that is Nasu-Shiobara to the northeast of the National Park year round. With forested hiking trails leading to waterfalls and suspension bridges, the area epitomizes the deep natural beauty of Nikko.
In this haiku by Matsuo Basho (1644–1694), written in 1689 and recorded in his seminal prose and verse diary *The Narrow Road to the Deep North*, the poet conveys the “overwhelming loneliness” he felt looking out to sea from his temple accommodation in Tsuruga, present-day Fukui Prefecture. Basho had traveled by boat to Ironohama (Colored Beach) to pick the tiny pink shells which give the beach its name. In the evening, while drinking warm tea and sake, he spied pink petals of the bush clover rolling with the waves. The bush clover is the first flower of the autumn. Its delicate pink or white flowers decorate long arching stems and spell the end of the long hot summer.