





International University of Japan Top Global University Project Symposium "The Future of Food, Agriculture, and Community in the Digital Age" Event Report

O Date: Saturday August 28 2021 14:00 pm~17:30 pm

O Venue: Main Hall, Minamiuonuma Civic Hall

O Participants: Around 160, both online and at the venue

The International University of Japan, with the support of Minamiuonuma, held a symposium entitled "The Future of Food, Agriculture, and Community in the Digital Age" as a part of the Top Global University Project.

Seven presenters, including Mayor Hayashi of Minamiuonuma, and eight panelists discussed, with a focus on Minamiuonuma's chief industry of agriculture, digital transformation and industry development and community building by using regional resources. Individuals from different positions in industry, government, academia, and the private sector who practice new agriculture and regional revitalization gathered alongside local citizens to share opinions and issues faced by the community while looking forward to the future of food, agriculture, and community.

<Program overview>

Opening Remarks

(Hiroyuki Itami, President of International University of Japan)

I want to express thanks to the many who are participating in this symposium held for our university's Top Global University Project. The International University of Japan is a small and unique university that has a graduate school where everything is taught in English. It has two graduate schools in the liberal arts, the Graduate School of International Relations and the Graduate School of International Management. Additionally, we established an agriculture course in 2020, and we will start a digital transformation program in the fall of this



year. Despite the COVID-19 crisis, I am very happy that we are able to hold the symposium today with the theme of "The Future of Food, Agriculture, and Community in the Digital Age." I am thankful that were able to prepare talks and panel discussions on various topics with the cooperation of Minamiuonuma and many others. I expect that we will be able to have a chance to look towards the future of DX and agriculture alongside the presenters and participants.

Guest-of-honor's Speech

[Ms. Michi Yoshioka, Office for International Planning, Higher Education Bureau, Ministry of Education, Culture, Sports, Science and Technology]

I am happy that such a symposium is being held by the International University of Japan for the Top Global University Project.

Domestic policies for internationalization in higher education began in 2009 with Global 30, a project to establish sites for internationalization, followed in 2012 by GGJ, a project to support the development of global human resources, and then in 2014 by the SGU (Super Global Universities) project, covering a total span of 12 years.



The SGU project was started to provide support to universities dedicated to thorough university reforms and internationalization. The selected universities would use their own ingenuity to improve their internal structure and enhance their organization's international capabilities. Initiatives for greater international recognition made progress in various ways, and the project as a whole achieved substantial results. This year, a university-focused cooperative body called the "Japan Forum for Internationalization of Universities" was formed with the participation of interested universities, most of which are SGUs. The purpose is to further improve international recognition and competitiveness in Japanese higher education in the post-COVID-19 future by enhancing horizontal cooperation and development among universities based on their experiences. As a result, nineteen projects have been created, such as the international online platform, "JV-Campus" (pending name). We would like to have the participation of many universities.

We know that the International University of Japan aims for the creation of a personal network centered around Asian and African regions and to foster global leaders and that they are actively involved in overseas developments by accepting skilled international exchange students and effectively using a network of exchange-student alumni. They are actively involved in fostering individuals who could contribute to the world. For example, they established the "Japan-Global Development Program" in 2018 and the "International Social Entrepreneurship Program" in September of this year, and they are the only Japanese school to be in the Economist's 2021 MBA rankings. We are greatly reassured by their programs that rank at an international level. We look forward to their future progress.

Reference: 「大学の国際化促進フォーラム」 Japan Forum for Internationalization of Universities(JFIU) について (文部科学省)

Keynote Address "The challenges of snow country"

[Shigeo Hayashi, Mayor of Minamiuonuma City]

In Minamiuonuma, young farmers in the city are involved in various activities, such as the web videos, "KNOW THE FUTURE," for which they performed, recorded video, and created music. Other examples include distributing rice from Minamiuonuma as business cards and developing gift products from rice in collaboration with the Tokyo National Museum.

Recently, agricultural workers are getting older and decreasing in number, and it is becoming a national issue. However, in Minamiuonuma, we are

engaging in activities that use new technologies, such as remote grass cutting and fertilization or sterilization with drones. We feel that children who see these things are starting to think that agriculture is cool. Also, I heard that a certain university's agricultural department is becoming very popular with women, so views towards agriculture are not always negative.

Currently, as the mayor of Minamiuonuma, I am making the use of snow my primary platform. For example, we hauled in 1,600 tons of snow from Minamiuonuma for people to enjoy in Olympic/Paralympic events, and we are industrializing "snow rooms," a traditional storage method that uses the coldness of snow. The Uonuma region is the furthest along in industrializing snow rooms in Japan. Snow is a natural form of energy that can be used in initiatives for de-carbonizing society, and it continues to function as a refrigerator even without power. For hometown taxes, rice, meat, alcohol, and other products aged in snow rooms are much more popular than anything else, and the amount grows year over year by about 150%. The benefits of hometown taxes are improved local agriculture brands and greater awareness of agricultural workers. It also shows municipal staff that they can secure resources for citizens and improve the community if they work hard.

In the future, a transportation network of ports, etc., will be established that links Kanto with Hokuriku and that connects the mainland. At that time, we must be prospering through energy from local snow and local agriculture. While bringing together the strengths of many people in the future, I hope we can make further improvements and look towards the future of the community.

Presentation"Agriculture DX Concept -Opening up the future of food and agriculture with 'Agriculture x Digital' –"

[Ms. Asuka Abe, the Policy Planning Division, Minister's Secretariat, Ministry of Agriculture, Forestry and Fisheries]

DX (Digital Transformation) is defined as the use of digital technology and other technology to change organizations and our way of life based on customer and societal needs. Germany, the United States, China, and other countries are involved in DX activities. In Japan, the Society 5.0 concept was presented in



2011. The Digital Agency was also established during initiatives to realize the use of technology to solve societal problems and grow the economy.

In regards to agriculture, the age of agricultural workers is increasing as their numbers decrease, and due to the increase in abandoned arable land, the need for DX is high. Therefore, the Ministry of Agriculture, Forestry and Fisheries presented the Agriculture DX Concept in March of this year comprising (1) a shift towards greater productivity in agriculture by using machines instead of relying on people and (2) shifting to a type of agriculture that can create and provide new value through the concept of FaaS (Farming as a Service). The Ministry of Agriculture, Forestry and Fisheries itself is also implementing DX measures. Specifically, we plan to take all application procedures online, of which there are around 3,000, by the middle of next year. Also, as a part of the DX concept, we are publishing a novel on the state of agriculture in 2030 to establish a more concrete image of the future of agriculture. In the world of 2030, more convenient services will appear for consumers in addition to the use of IT at agriculture sites, and we are promoting measures with the belief that the world will be more interesting in terms of food. By realizing the DX concept, we will be able to carve a future for food and agriculture like described in the title.

Reference:「農業 DX 構想参考資料『食卓と農の風景 2030』」令和 3 年 3 月 25 日、農林水産省 https://www.maff.go.jp/j/press/kanbo/joho/attach/pdf/210325-12.pdf

Presentation "From Uonuma to the World. Contributing to the Region Through Business Activities" [Mr. Masato Nagumo, Executive Vice President of Hakkaisan Brewery Co., Ltd.]

We brew alcohol for people to have a drink during a meal to bring out the flavor of food and enrich conversation. Our spirit of manufacturing has been cultivated through our 100 years of history from Uonuma's climate, water, snow, and fermenting culture, and it is the culmination of various factors from the land. We think of ourselves as local brewers. Additionally, what we want customers to understand about our products is that the most important part is experiencing the appeal of Uonuma. Therefore, we are developing the



"Uonuma no Sato" area. In addition to our own beer brewery, there are other stores handling meats aged in snow rooms, Japanese sweets, breads, etc.

Recently, the domestic consumption tax on Japanese alcohol was reduced, and we are actively exporting overseas. Our market share is expanding, particularly in North America. We have also been developing products using technology crafted through *sake* manufacturing under the theme of "rice, malt, and fermentation." For the future, we are currently constructing a whiskey distillation plant in Niseko, Hokkaido. Using our knowledge from this region, we would like to embody the idea of a company that will last for an eternity.

Presentation"Efforts on Revitalization of Agriculture"

[Mr. Wataru Nakajima, President of Orasho no Yasai Co., Ltd., Mr. Sadao Mezaki, President of Yamato Foods Co.,Ltd.]

Our company aims to develop new food products while preserving traditional food culture and agriculture in order to make brands from the agricultural products of Uonuma and to revitalize the region. At Ozawa Farm (read by Mr. Nakajima due to an absence on the day of the symposium), we are involved in diversified farming of Uonuma



koshihikari, yairo watermelon, yairo shiitake, and cauliflower so that we can continue farming throughout the year and so that we can have the next generation want to continue agriculture.

At Orasho no Yasai, we began holding Minamiuonuma ingredient tours over 10 years ago. Every year, we invite about 200 to 300 people, and we guide them around various places throughout the day while explaining the products that are handled. We are also trying our best to express the greatness of Uonuma throughout the year through photos and text. We also cooperate with companies from other regions, but even in the digital generation, our principles are to have relationships with people, communication abilities, and good conversations face to face. In doing so, we can create or deepen a relationship of trust. This pursuit of a relationship makes us different from other companies and leads to others choosing us.

Yamato Foods is a food processing company started by my grandparents two generations ago so that people did not have to leave town during winter to work. Even as Japan's food culture changes, we want to pass on traditions such as *sasa dango* and *mochi* to children in addition to using the vegetables and snow produced by municipal farmers to create new products exclusive to Uonuma.

"IUJ's Efforts and Outcomes of Education of Human Resources Related to Food, Agriculture, and Digital Transformation"

Presentation [Professor Hyunkoo Lee, Dean of Graduate School of International Management]

Future changes will occur on a larger scale than what we experienced during the IT revolution. DX will have an effect on business processes and organizations. The boundary lines between industries will become unclear. We can also expect the government to create a digital infrastructure. In the DX generation, business leaders knowledgeable on both technology and management will be needed. In anticipation of this new environment, the International University of Japan established a new program called the Digital



Transformation Program (DXP). The purpose of this program is to train business leaders to be experts in both technology and business. We are looking forward to admitting students of different backgrounds.

Presentation [Professor Tsutomu Yokose, Graduate School of International Management]

The agriculture course that the International University of Japan started this year is the first course in the Japan-Global Development Program. This program was started with the aim of imparting various knowledge and experience gained from studying Japan's developmental stages, particularly in terms of agriculture. This will be review for the Japanese, and it will be a chance for international exchange students to study the history of Japanese agriculture for the first time. It will explain the history of efforts to improve productivity



through agricultural implements, the development of new rice fields, etc. Students will look at historical changes such as rice yields, the branding history of *koshihikari*, and the path towards mechanization. In addition to lectures, it also includes field learning through rice harvesting experiences, visits, etc., in cooperation with local agricultural producers. We have also devised ways to have students comprehensively think about business cooperation in the private sector, government support, etc., through mayoral lectures and input from the government. We would like to continue our efforts for project-based practical learning in the future.

Q & A

Question (1) (question for Mayor Hayashi from an online user): Worldwide food shortages and employment difficulties continue. Additionally, even if there is land available for large-scale food production, why are there so few young people working in agriculture? Is there a way to change the minds of young people?

Mayor Hayashi: I don't think that young people in this region are moving away from agriculture. However, I think it is natural for small farms to be decreasing in number. It is important for agriculture to be considered as a specialized profession. The government does not push young people in a certain direction, but we think they each have a role, such as providing support through efforts to increase brand power. It is best not to be pessimistic.



Prof. Yamaguchi, IUJ: The number of agricultural workers is certainly decreasing. The price of *koshihikari* from Uonuma and Minamiuonuma has also been decreasing overall. However, some young farmers are being successful through company management that increases the scale of agriculture. Prices are falling nationally, and despite reductions in the demand and consumption of rice, the number of young people working in agriculture in the Minamiuonuma region is not decreasing at all. Along with the mayor, I am very optimistic.

Ms. Abe, MAFF: In my presentation I gave a general explanation about the population aging, but as Mayor Hayashi and Professor Yamaguchi stated, when talking to energetic young people, people running agriculture businesses, and those actively pioneering smart agriculture, they all have dreams, they love agriculture, they continue to learn, and they are actively involved. MAFF also wants to create a foundation for them to use. We are aiming for the future of agriculture in 2030 to be bright, with young people working lively and agriculture being a top career choice.

Question (2) from venue participant: I would like to ask a question to Vice President Nagumo of Hakkaisan Brewery. I saw an article promoting Tsubame Sanjo crafts at the Niseko whiskey plant. We would like you to widely introduce foods that use the culture and traditions of Minamiuonuma, such as snow rooms, and to take actions to increase revenue from overseas customers to a level that we can be proud of for food products other than *koshihikari*. What do you think about this way of thinking?

Mr. Nagumo, Hakkaisan Brewery Co., Ltd.: We are considering expanding the Niseko distillery as a facility for the sale of goods in addition to being a manufacturing facility. Therefore, we have chosen to handle products that are linked to our concept of improving quality in whiskey manufacturing by slowly aging it over time. With the Tsubame Sanjo goods, we are showing that they were selected because they are created with techniques developed by Niigata artisans over a long period of time. In the future, we would like to consider handling products from other regions in Niigata, such as Uonuma.

Question (3) from venue participant: I have two things I would like to ask Mayor Hayashi. First, among the various issues regarding increasing the population and restoring municipal manufacturing, for Minamiuonuma, what is the objective with the highest priority? Second, regarding the digital transformation of government, what actions are being taken or will be taken by Minamiuonuma?

Mayor Hayashi: Anyone you can ask will say that the population decrease is a problem. However, there is a hint in the aforementioned snow initiatives. When considering what we can pass on to future generations, I think that protecting those things will contribute to more people settling down or coming home to try their best here. Previously, Hakkaisan Brewery also mentioned snow as a starting point, and this is a topic that we cannot or must not avoid. I think that these activities will lead to pride with a historical perspective that includes an attachment for one's hometown. I think that those who leave lose their identity. Policies completely change based on identity and pride. We act based on these ideas. There are various examples of digital transformation. It includes government systems and procedures, but the main focus is currently education. We are working on changing the educational environment.

Panel Discussion (1) "Use of Technology and Promotion of Industry"

- Moderator: Ms. Naho Kobayashi, Senior Research Fellow / Research Producer (Platform Research Group) of GLOCOM, IUJ
- Panelist;
 - Mr. Kazuhito Kamiya, CEO, Biomass Resin Holdings Co., Ltd.
 - Mr. Satoshi Koike, President, Vegetalia, Inc.
 - Mr. Masao Ishida, Director for Policy Office, Agricultural Affairs Division, Niigata Prefectural Government

Kobayashi: In this panel discussion, we would like to consider ways to revitalize the industry's economy in the region when using new technologies related to food and agriculture. First, we would like the panelists to introduce themselves and provide a short presentation.

Kamiya (hereinafter without titles): We provide a range of plastics made from rice. By taking excess rice from the distribution chain and converting it to plastic, we are establishing a new business model to solve societal issues by reducing CO₂ and taking measures against food loss. As a new approach to agricultural issues such as abandoned arable land, we are moving forward with the lateral development of a new rice business with a platform strategy that involves related individuals from various



positions. Originally, abandoned arable land was converted into rice paddies, but we are participating in agriculture out of interest in preserving the original landscape. Under the slogan of "Plastic Innovation for Tomorrow," we are seriously thinking about transforming plastics in the immediate future rather than in the distant future, and we are aiming to be a company that will be valued for 100 years.

Koike: In the 1980s I was working in IT consulting and system integration. At the start of the 1990s I was appointed as the president of a local corporation in the United States. Thereafter, I went independent as a venture capitalist. I returned to Japan after the bubble burst to promote the Bit Valley concept mostly around Shibuya in Tokyo, and I gathered young people for investment and training. For the second half of my life I wanted something more stable and to find my life's work, so I went back to school



at Tokyo University, and I initially became interested in health. I wanted to do something with the themes of health, food, agriculture, and the environment, so I started to work in agriculture in 2009. Based on my experiences and fights through agriculture with diseases, insects, weeds, and weather, I thought that maybe I could innovate agriculture in some way by fusing the latest plant science with technology, and I started a company. Currently, we are active in eight locations in Japan, from Hokkaido to Kyushu, through agriculture, processing, distribution, and sales. Within our group we have eLAB

experience, which provides field servers for agricultural sensors. We also have agri-note, which provides a cloud-based cultivation management system that currently has the most users in Japan, and it is used for 600,000 fields nationwide.

Ishida: As a way to solve the problem of aging populations on production sites, and also with the perspective of passing on techniques, improving safety, and saving labor, Niigata Prefecture is engaged in initiatives related to smart agriculture, ICT, robotics technology, and DX. Also, because there are various problems in regional management, we ascertain the problem-solving needs of agriculture, forestry, and fishery businesses in the prefecture related to management, and we match those needs with



businesses interested in solving problems with smart agriculture and technology. We have done this about 20 times, and through these activities, we have promoted the development of new technology and products and improvements in agricultural management to help revitalize industry across Niigata Prefecture.

Kobayashi: In Kamiya's and Koike's businesses, the source of their innovations is the use of the local resources nearest to us, which is very interesting. They are looking at solving problems on a global scale related to deplasticization and the food supply chain by starting with the elimination of regional problems from a regional viewpoint. As indicated by the term "glocalization," they are putting changes into practice at the local level while considering global standards. In the future, what will be needed for glocal food and agriculture businesses to succeed?



Koike: The phrase "smart agriculture" is currently popular, but it is not necessarily based on IT. Making something "smart," at a macro level, is looking at how societal issues can be solved, in other words, determining how to meet the needs resulting from these issues, and then moving forward while backcasting. Although the number of agricultural workers in Japan is decreasing, the population is much higher than the United States when accounting for area. In other words, innovation can make agriculture more efficient. There is a very high potential for this technology in Japan.

Kamiya: When thinking about new applications for technology, there is no industry more attractive than agriculture. In our business, there is no need to consider the flavor of the rice that will be used as a material for our plastic. This means we can prioritize productivity and focus on efficiency, and we can find new approaches and business ideas based on scientific rationales. There is a reason that societal problems persist, and this is the biggest challenge. However, by changing how people think, opportunities will come to create new industries and innovations.

Ishida: In Niigata Prefecture, agricultural leaders are aiming for agriculture with a future outlook of continuity and sustainability. In order to secure future leaders, we are promoting three new concepts for

agriculture: earning potential, coolness, and excitement. It was normal in Niigata for rice farming to be a side job, but currently, the focus is on incorporating and increasing scale. In order to achieve this, we are also focused on training leaders to have a good management sense. Additionally, we would like to develop agriculture while strengthening relationships for collaborations with other industries to develop new technology.

Kobayashi: If you have any views or sense any issues with the keywords for earning potential in agriculture or, more generally, sustainability, please point them out.

Kamiya: We want to become a safety net for agriculture. Previously, we have used rice that could not be shipped due to water damage from typhoons, etc., and that had no option other than disposal. Agriculture faces weather-related risks, but we can stably use rice for industrial use. More specifically, we are considering trying agriculture with a completely different approach. Through a good mutual understanding of what we and others are doing, we can uncover new roles and developments. It is important for future companies to have the same sense of purpose as local governments so that they can work together for the prosperity of the citizens instead of just their own independent enrichment. Without this attitude, businesses cannot build a reputation or grow.

Koike: As Mayor Hayashi said, the key to sustainability is young people. Nichinan Shintoku High School, a prefectural school in Miyazaki prefecture, is a vocational high school that combines an agricultural high school, a business high school, and a technical high school. I had students there give presentations for a project-based lesson to create a business plan on regional societal issues. The speeches were great. First, students in the agriculture course would determine the issues in agriculture. Then, the students in the technical course would consider how to solve those issues with technology. Then, the students in the business course would consider how to commercialize this and create business plans. It was impressive because this combination generated ideas that were relevant to the regional issues but were unlikely something that adults would come up with. I got a similar positive reaction in classes for high school students in other regions such as in Hiroshima prefecture. Accordingly, we can expect significant changes if we can create a place for young people who understand the region to be active.

Kobayashi: In closing, if we could have a comment from each panelist on the role to be filled by universities when developing businesses through food and agriculture.

Ishida: Collaboration among industry, government, and academia is necessary for activities related to the development of technology. Also, the International University of Japan is connected internationally through exports, etc., and interactions are possible through DX. We and the faculty are also involved in research to determine how to approach DX. It would be a great help to have this kind of cooperation from universities.

Kamiya: We have various interactions with the faculty of the International University of Japan. Individuals representing Asia and the world gather here, and we would like to have more interactions with them as

we expand the business that we started in Minamiuonuma domestically and overseas. If we had our business model used as an example in MBA classes, it would be useful to discuss what the possibilities would be if students returned home and developed a business in the same way. And it would be great if these excellent students would come to my company. *laughing*

Koike: The International University of Japan is unique as a gathering place of the international elite. There is no reason not to go. By 2050, the world's population will be about 10 billion people, mostly in Asia and Africa. We want to be positioned as a place that can provide various technologies and business innovations to solve the food problems faced by Asia and Africa. As it is doubtful that the large-scale agriculture of the United States and the plant factories of the Netherlands are appropriate for Asia and Africa, there is potential in Japanese-style agriculture. If we can backcast from solutions to global agriculture and food problems through Japan-first innovations and create a design for things that can be done now, it will be possible to execute much greater initiatives. We need to value our graduates and get them involved in various networks.

Kobayashi: Your comments have again made me feel that the roles of a university are to act in cooperation with the community through human resource development and networking and to create a place in the region connecting industry, government, academia, and the private sector. To the panelists, thank you very much for your participation.

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Panel discussion (2) "Utilization of regional resources and globalization"

- Moderator: Mr. Eiki Kikuchi, Research Fellow / Assistant Professor of GLOCOM, IUJ
- Panelist;

Mr. Katsutoshi Koshigoe, General Manager, Department of Industrial Promotion, Minamiuonuma City

Mr. Yu Toyonaga, EcoRice Niigata Inc.

Professor Noboru Yamaguchi, Graduate School of International Relations, IUJ

Kikuchi: This panel discussion is on the utilization of regional resources and globalization. We will discuss regional resources that include food and agriculture and how they may be used internationally. First, we would like the panelists to introduce themselves and provide a few words.



Koshigoe (hereinafter without titles): The latitude of Minamiuonuma is 37 degrees north. San Francisco, Athens, Lisbon, and Portugal are the same despite being warm locations. Minamiuonuma is unusual in the world because it gets heavy snowfall, and since the Jomon period, we have been brought up to survive with the snow. The preserved food and woven materials from the Jomon period have a link to the present. The Showa era was a postwar period of significant growth, and people and goods came to



Kanto and Tokyo with the creation of a transportation network. Previously, people farmed in the summer and left home to work during the winter, but they developed a side business to provide lodging and agricultural and livestock goods that were made in the summer. This region was prosperous during the ski boom, but it shrunk with the bursting of the bubble. Thereafter, there were campaigns like Maji Don and the Gourmet Marathon to bring in tourists by focusing on foods, etc., cultivated with snow. This region's resource is snow, which has developed the lifestyles, culture, and food. In the near future, the inbound side is unlikely to recover, but the focus is on how to connect it to globalization.

Toyonaga: EcoRice Niigata Inc. was started 20 years ago as a small agricultural coop gathering farmers engaged in sustainable, organic cultivation. Rice cannot be eaten simply by being farmed. After 20 years, our current job is to process rice and create new products through regional cooperation. I have a management position, but I initially wanted to be a farmer. Therefore, last year I started a 20-hectare farm on the side with another person.



So, why would we go overseas? For the last 2 years, we have been exporting 12-ton shipments of rice to Dubai and selling it for more than in Tokyo. Uonuma in Niigata is said to produce the best rice in Japan, and there is no need to sell it cheaply. Instead of changing the price, we are trying to determine how we can add value in expanding overseas. Currently, we are making inroads into France, South Africa, the United States, Dubai, and Taiwan.

We also use rice from Minamiuonuma to make instant rice for disaster use as well as allergen-free halal sweets with the International University of Japan by using rice flour. I think that the exchange students that come to the International University of Japan are also a regional resource. The products that we have made alongside them are currently being exported. Through future regional cooperation, I think we will enter a generation where we take pride in aiming to send *koshihikari* overseas.

Yamaguchi: The climate of the region is the first resource. This includes the snow that was talked about earlier. The second resource is the cultural fixation with food, or rather, the very high level of the culture. For example, when I come here, I strongly feel that there is a fixation with eggplants. There really are many different varieties. The *ayu* caught in the Uono River are also delicious.



The resource possessed by the International University of Japan is the students. There are around 350 exchange students enrolled yearly in the master's course from around 60 different countries. We are aware that there are not enough ways for students to integrate into the community, but the international students that bring new life to the community are the third resource.

In regards to specific actions, what about an International University of Japan version of a roadside rest area? We could do marketing for world specialties or to send the unique products of Uonuma to those 60+ countries. Another idea is creating an Uonuma International Village as a single spot where people can gather.

There is also the potential of advanced introductory education. The students at the International University of Japan are excellent and can speak English. If they held supplementary lessons teaching math, home economics, physical education, etc., to children in English after school or on Saturday mornings, we could provide advanced introductory education.

Kikuchi: What do you think is the source of the regional resources that were introduced?

Koshigoe: Snow has fallen consistently throughout recorded history. It is the mother of our lifestyle and industry. Within the tourism, agriculture, brewing, and manufacturing industries, there are companies starting to recognize the appeal of the abundant water from melted snow. It is said that snowfall will decrease in the future, but snow will always be at the root of our community. It is the root that has supported our livelihoods throughout the past.

Toyonaga: Personally, the Chuetsu earthquake 17 years ago was the main starting point. I was impacted by the earthquake and evacuated. I realized there were many people who could not eat rice and who had difficulty swallowing or high blood sugar. So what would happen, then? I thought about what could be done in response to the declining birthrate and population and the increase in people with diseases. Therefore, I created emergency foods that could be eaten by dialysis patients, and I began to handle rice flower, which is hypoallergenic, and halal and vegan food, as demand for it was increasing. At this time, I tried to create a relationship with the International University of Japan, and I asked students for their opinions. Disasters, snow, rain, and earthquakes were the source of our current business.

Yamaguchi: The fact that Uonuma is here is a big factor. For that reason, snow is a resource, and the people here have developed knowledge and perseverance over many years. However, snow melted with water is different from snow in Hokkaido. In terms of location, Urasa is next to Omiya, and you can come from Kanto wearing sandals. Even though it is called the snow country, it is not a region that requires you to wear boots. Uonuma's geographical position is one of its strengths.

Kikuchi: Next, I want to discuss how these regional resources can be globalized. What are your opinions on how regional resources can be promoted overseas, or should they be promoted at all?

Yamaguchi: In terms of Uonuma's agriculture, there are many great products recognized worldwide in addition to rice. We took students to Tokyo on a field trip, and they were not at all looking forward to

the lunches and dinners. This is because they know that Urasa is more delicious. It just shows the high value of the resources here. However, it is a problem that sales routes and networks are not fully utilized. Also, the people who eat Uonuma *koshihikari* from birth take it for granted and do not fully appreciate its deliciousness. The first step is for us to realize the value of the resources.

Kikuchi: How do you think Minamiuonuma can globalize its regional resources?

Koshigoe: Currently, the world's population is about 7.8 billion people. That is about 1.7 billion in South Asia and 600 million in Southeast Asia. Snow does not fall in those regions. As those regions develop in the future, snow should become a point of appeal. Also, Japan is a choice as a region that is easy to get to. And in Japan, Minamiuonuma is easy to get to from Tokyo, so its appeal should be strong. Another thought I have is that students from the International University of Japan integrate into the community. With these two points, this region should have a strong international appeal.

Kikuchi: Toyonaga, what do you think the path is to globalization, besides developing halal foods? Also, in connection to this symposium's theme of "digital generation," how do you think the digital aspect can be involved?

Toyonaga: The instant rice manufactured in Urasa was not previously given any attention even if it was exported to Dubai, etc. However, since February of last year, people in Europe and the United States have started saying things like this are necessary because of disputes and the pandemic. I thought that the time has come. In other words, Japan's experience with numerous disasters can definitely be turned into a business.

In terms of digital, I was always going overseas 3 to 4 years before the pandemic, but I wasn't successful. However, currently I talk with the people I met there remotely a few times a week. And this leads to sales. Even if there is no extraneous conversation or if there is a difficulty in communicating, it turns into a request for 12 tons of *koshihikari* the next month. Also, because they want to come to Japan to experience different things, I use videos to show how we make rice, and it gets an impressive response.

Also, we have continued to provide instruction for almost 20 years through small rice paddies at eight elementary schools in Tokyo. Currently, we are providing the instruction on rice planting and harvesting remotely. When we show the children satellites, drones, and GPS tractors, they say they want to work in agriculture. Previously, we would go to schools and say things like "rice is important," "everyone should eat rice," and "agriculture is important," but when they are told that they could pilot a drone, they become very interested. Therefore, we can rapidly increase the number of people who work in agriculture by changing how we approach young people, and we have entered a generation where work can be done without a large work force. Therefore, I think that there is a lot of potential in changing the way we think.

Kikuchi: What does the government think about the issue of getting foreign countries involved, including in terms of expressing the appeal of the region? Have activities already started?

Koshigoe: In regards to tourism, travel companies are starting to give online tours due to COVID-19. If people cannot go to the actual place, efforts to make them feel like they are touring together are important, like sending them local goods, etc. The inbound side is projected to greatly recover around 2024, so we are taking actions in preparation for that.

Kikuchi: From the viewpoint of tourism, Minamiuonuma has been streaming content since the start of the season, and we feel it has great potential. We expect it to become more active.

I think there are a lot of alumni from the International University of Japan, and by using digital platforms, we can connect current students with alumni to express the appeal of the region.

Yamaguchi: Alumni events are held frequently. However, they are all being held remotely. The Tokyo alumni are in charge, and they are investing a lot of time trying to come up with solutions so that people can participate despite the time differences.

Many students at our school are from developing nations, and as these countries shift from old infrastructure to new, there are some fields where Japan ends up lagging behind. In this way, networks are becoming much easier to use.

Relatedly, it has become much easier to understand what is needed where, what is being produced, and the logistics of what is going on in between. For example, Kyrgyzstan supports the "one village one product" project, and one of the products from this project is a delicious white honey that is in a crystal form at room temperature. By using current infrastructure, you can order and get the product in about 1 week. Regardless, there is only one company in Japan making a business of this. If we can develop things by using the International University of Japan's network, it will lead to the distribution of various products in addition to honey, and it will also be possible to distribute Uonuma's products.

Kikuchi: As Yamaguchi was saying, our university has a lot of potential, but we would like to hear from Koshigoe and Toyonaga about their expectations.

Koshigoe: We have exchange students from over sixty countries, and many of them have a very high political or social status in their respective countries. That kind of network could not be created overnight and is a very valuable asset. If the government collaborates with the International University of Japan, it will be important to deepen the relationship with them in the future.

Toyonaga: Because of COVID-19, we are currently not operating, but we would definitely like to develop products alongside the International University of Japan. The things that the Japanese think are delicious and the things that foreigners think are delicious are not the same. We have tried numerous times, but things like red bean rice, which the Japanese think is delicious, doesn't go over well.

When the inbound side recovers, if we can provide frozen foods or instant foods that suit foreigners' palates, it would be an advantage for Minamiuonuma's food industry. Maintaining a halal kitchen is difficult, but halal frozen foods could support the inbound side. I think the first step for the International University of Japan is to become the best place for field work.

Yamaguchi: I think it is an asset for a region to have a university, but the reality is that it is not being fully utilized. I think that efforts are insufficient to bring in people from the community and create a place for community members and students to interact, and I think that efforts to ingrain the International University of Japan into the community are also insufficient. There are various restrictions due to COVID-19, but we can make greater use of this asset by increasing such awareness. I would like to move in that direction.

Kikuchi: COVID-19 is currently stalling various activities, but we can use this chance to prepare, as it is a vital period for determining what actions can be taken afterwards. This discussion could continue for much longer, but we will now end panel discussion (2). My deepest thanks to the panelists for their participation.

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Closing Remarks

(Hiroshi Kato, Vice President of IUJ)

Today, we were able to have a broad discussion with the participation of not only individuals from the central government, prefecture, and city, but also farmers, IT businesspersons, innovators, and others. In particular, I want to express my thanks again to Mayor Hayashi of Minamiuonuma, who was actively involved in the discussion and stayed through the end despite a busy schedule, and to Minamiuonuma for providing the support for this event. I think that each person learned something different from the symposium's discussions,



but I learned a great deal, such as about the great potential of agriculture, that incorporating digitalization will lead to even greater value, and that international factors, including the role of the International University of Japan, can provide major contributions.

This was the International University of Japan's first attempt at holding such a symposium. I would like this to be our first step towards activities that will continue for a long time. Once again, thank you very much for your participation today.

General host of the day:

Ms. Kaede Sakamoto, Newscaster of "Niigata News 610" NHK Niigata



- <Comments from the questionnaire (excerpts)>
- I was able to listen to individuals doing great things.
- I am satisfied because I was able to understand the current state of the region.
- I was able to learn about projects being undertaken in Minamiuonuma for regional revitalization.
- I was inspired by efforts to create appeal by combining regional characteristics.
- Minamiuonuma is very interesting, and I have come to like it more.

etc.