

Sep.3 (Thu) • 4 (Fri) 2020 Webinar

# International Conference on Science and Technology for Sustainability 2020

"Social Inclusion in the Global Era" -Sustainable post-COVID-19 Society-



**Program & Abstracts** 

Date: 05:00 - 07:00 (UTC) September 3, 2020 12:00 - 14:00 (UTC) September 4, 2020 Venue: ONLINE (ZOOM Webinar)

## **Concept : Social Inclusion in the Global Era** "Social Inclusion in the Global Era"

SHIRAHASE Sawako Professor, Graduate School of Humanities and Sociology University of Tokyo

As of June 2020, the spread of new coronavirus infections is shaking the world, which has made us realize again the importance of our united collaboration on a global scale. In particular, the importance of the role of science has been reconfirmed, and the expectations for the role of academics are becoming much stronger than ever in building a sustainable society. We will have the International Conference on Science and Technology for Sustainability 2020, entitled "Social Inclusion of the Global Era" virtually across nations. The COVID-19 pandemic has greatly obstructed the movement of people and goods, even temporarily. It is about time to explore new ways of globalization for making our society inclusive and sustainable.

There are two sessions for the conference to be organized. One is "Issues in Asia and the Role of Japan," and the other is "Global Challenge and the Role of Academics." We are globally connected and share common issues across regions and nations. At the same time, it is also obvious that the situation varies from region to region. In this conference, we will first review the position of Japan in Asia. Then, panelists--mostly comprising social science researchers of social policy, sociology, political science--will proceed with a discussion about what academics in a global position can do in the face of the COVID-19 pandemic when viewed from a perspective going beyond a specific region.

The key concept of the Conference is "inclusion." With its 17 international goals, the "Sustainable Developmental Goals (SDGs)," adopted at the United Nations Summit in September 2015, are particularly important to help create a society in which "no one will be left behind." We should be conscious that these goals are not independent of one another; they are related and linked. Because they are related, it is not possible to simply prioritize them. Rather, it is necessary to take an overall view of the 17 goals when we determine specific measures for achieving any one goal.

The predecessor of the SDGs was the Millennium Development Goals (MDGs), which set "issues that require support from the international community." The United Nations Development Program (UNDP) has launched the MDGs Gap Task Force to monitor the smooth progress of approaches from developed countries, including financing to achieve the MDGs. The scheme established a key idea: that developed countries support developing countries. On the other hand, the SDGs emphasize joint efforts of both to deal with common issues going beyond the contrast of developed countries versus developing countries. This is recognized as great progress in terms of an approach to tackle such challenges.

The concept of "inclusion" is key in thinking about a sustainable and developing future. A point worth noting: "being inclusive" means that the elements that make up society are not consistent. Some people are strong, and others are weak. Some are rich, and others are poor. There might be a possibility to divide society even further by race, gender, and economic situation facing COVID-19. Being diverse and being in various situations inevitably contain both good and bad sides, and both the upper and lower hierarchies. To get to the next common ground going beyond the hierarchical nature inherent in diversity, we would need a comprehensive concept of values and philosophies that cross asymmetric and inconsistent elements of society.

Another important aspect of SGDs is that they are more conscious of policy-related aspects in examining social problems, where the key is how we will be able to logically and legitimately build and share a path to consensus building across different backgrounds and different interests.

What is important with "inclusion" is to have a comparative perspective that always relativizes things and various value standards that are not limited to a single scale of economic development. How do we put together a common goal from the heterogeneity of various aspects? It is important to share a common understanding as a global citizen. Money, goods, and people have been cited as the three main players of globalization. As for money, changes have been seen in the form and structure of money such as electronic money. The contents and types of goods are rapidly changing from a capital-intensive society to a knowledge-intensive society. Humans are moving more than ever with the movement of money and goods that are changing greatly, and are urging re-examination of the institutional design of the state, which is currently based on the nation-state. To accurately capture such rapidly changing social movements and create an inclusive society toward the future, it is desired that people become citizens who can sympathize with people of diverse backgrounds and share a global sense of values. We collectively have great expectations of society to rise to the role of higher education and research institutions to lead Education for Sustainable Development (ESD).

It is becoming increasingly difficult to determine what is right and true as information flies through the world. There are children who suffer from hunger while there are places with too much food. In the face of such realities in our global society, it is required to establish a new social mechanism. The realization of an "inclusive society" rests on paying the short-term costs and sharing future-oriented values so that society can develop for the future. It could lead to a game change away from the conventional value system. The recent spread of the new coronavirus infection semi-forced the movement of people and goods. It gave us the opportunity to reconsider our global system, which is built on the premise of "moving" and to think again about what sustainability concretely means. In the area of carbon reduction efforts too, transformative changes are happening that have never been unimaginable until now. At the same time, it is undeniable that the division of society has become more prominent. This global crisis has ironically made us reaffirm how important "inclusion" is in the "new normal" toward the post-COVID-19 society.

As mentioned above, this symposium will address the generations, genders, and races that are the main axes of the unequal structure common throughout the world and will discuss future forms that enable sustainability and inclusive growth.

#### International Conference on Science and Technology for Sustainability 2020 Programme

Theme: Social Inclusion in the Global Era -Sustainable post-COVID-19 Society-

Organizer: Science Council of Japan

Co-Organizer: The Japan Sociological Society

Endorsement: ISC/ ISA/ IGES/ UNIC

Time, Date: 05:00 - 07:00 (UTC) September 3, 2020/ 12:00 - 14:00 (UTC) September 4, 2020

Tool: ZOOM Webinar (Recorded video on demand. Live stream)

This program is subject to change at the discretion of the organizer.

5:00	Opening Remarks	YAMAGIWA Juichi	President, Science Council of Japan / President, Kyoto University
5:05	Introduction	SHIRAHASE Sawako	Professor, Graduate School of Humanities and Sociology, The University of Tokyo
5:10	Short Speech	OSAWA Mari	Professor Emeritus, The University of Tokyo
5:25	Short Speech	Leena Srivastava	Deputy Director General for Science, IIASA
:40	Short Speech	USUI Emiko	Professor, Institute of Economic Research, Hitotsubashi University
5:55 7:00	Discussion	SHIRAHASE Sawako (moderator) OSAWA Mari	Professor, Graduate School of Humanities and Sociology, The University of Tokyo Professor Emeritus, The University of Tokyo
		MACHIMURA Takashi Leena Srivastava	President, The Japan Sociological Society / Professor, Hitotsubashi University Deputy Director General for Science, IIASA
		USUI Emiko	Professor, Institute of Economic Research, Hitotsubashi University

12:00	Introduction	SHIRAHASE Sawako	Professor, Graduate School of Humanities and Sociology, The University of Tokyo
12:05	Short Speech	Daya Reddy	President, International Science Council
12:20	Short Speech	Elisa Reis	Vice President, International Science Council
12:35	Short Speech	Martin Kohli	Distinguished Bremen Professor, Bremen International Graduate School of Social Sciences (BIGSSS)/Emeritus Professor, European University Institute
12:50 13:55	Discussion	SHIRAHASE Sawako (moderator) Daya Reddy	Professor, Graduate School of Humanities and Sociology, The University of Tokyo President, International Science Council
		Elisa Reis	Vice President, International Science Council
		Martin Kohli	Distinguished Bremen Professor,Bremen International Graduate School of Social Sciences (BIGSSS)/Emeritus Professor, European University Institute
		TAKEUCHI Kazuhiko	Vice President, Science Council of Japan / President, Institute for Global Environmental Strategies
13:55	Closing Remarks	TAKEUCHI Kazuhiko	Vice President, Science Council of Japan / President, Institute for Global Environmental Strategies

# Opening Remarks Dr. YAMAGIWA Juichi

The President of Science Council of Japan. An expert in the study of primatology and human evolution. Awarded Doctor of Science from Kyoto University. Experienced positions at the Karisoke Research Center, Japan Monkey Center, Primate Research Institute Kyoto University, and Professor of Graduate School of Science at Kyoto University. Served as President of International Primatological Society, the Editor in Chief of Primates, and now serves as the 26th president of Kyoto University.



# Introduction SHIRAHASE Sawako

SHIRAHASE Sawako is a professor of sociology at the Graduate School of Humanities and Sociology, the University of Tokyo. She received her D.Phil in sociology from University of Oxford in 1997, and joined the University of Tokyo in 2006.

Her main research interests include social stratification and social demography, inequality in income and wealth, and family and social security system in crossnational perspectives. She has published books and articles on these issues including Todai Juku: Demography and Society: Looking for the Future in japan

(ed.) (2019, University of Tokyo Press), Social Inequality in Japan. (2014, Routledge), Demographic Change and Inequality in Japan (ed.) (2011, Trans Pacific Press), and "Income inequality among older people in rapidly aging Japan" (Research in Social Stratification and Mobility 41:1-15).

She became a professor at the Department of Sociology in 2010. She served as Associate Dean of Graduate School of humanities and Sociology from 2014 to 2016, and became Vice President of the University of Tokyo in 2018. She is currently Executive Vice President for International Affairs and Public Relations, at the University of Tokyo.



# Short Speech 1 OSAWA Mari

# **Biography**

Doctor of Economics, Emeritus Professor, former Director of the Institute of Social Science, and former Executive Director and Vice President of the University of Tokyo. Member of the Science Council of Japan. She specializes in comparative gender analysis of social policies. She has worked as visiting professor at the Berlin Free University, Ruhr-University of Bochum and Gender and Development Studies Program of Asian Institute of Technology, as well as a Mercator Fellow of DFG (Deutsche Forschungsgemeinschaft). Her English publications include: Tsujimura, Miyoko, and Mari Osawa (eds.) Gender Equality in Multicultural Societies: Gender,



Diversity, and Conviviality in the Age of Globalization, Tohoku University Press, 2010; Social Security in Contemporary Japan,

A comparative analysis, Routledge/University of Tokyo Series 2011; "Japan's Postwar Model of Economic Development has Rendered Japanese Society Vulnerable to Crises and Disasters", Tohoku University Global COE on Gender Equality and Multicultural Conviviality in the Age of Globalization GEMC Journal, Vol. 8, 2013, pp. 22-40; "A Reverse-Functioning System: Japan's Social Security System and Tax Progression in the Early Twenty-First Century," Huerlimann, Gisela, Elliot Brownlee and Eisaku Ide (eds.) Worlds of Taxation; The Political Economy of Taxing, Spending, and Redistribution Since 1945, Palgrave Macmillan, 2018, pp. 245-267.

# **Abstract**

"Challenges of Global Inclusion for amid-COVID-19 Societies, focusing on poverty and gender equality"

Seen from the current amid-COVID-19 situations, among targets of the SDG 3 (Ensure health for all), emerging infectious diseases are relatively slighted, particularly for developed countries. We have now learned enough to realize that the central concept of world disaster risk reduction framework, which defines "disaster risk arises when hazards interact with physical, social, economic and environmental vulnerabilities", is applicable to the COVID-19 pandemic. Poverty and gender disparity are crucial as root causes of such vulnerabilities. Although SGD 1 (End poverty) is repeatedly emphasized as "the greatest global challenge", and the target 1.b states the sound policy should be based on "pro-poor and gender sensitive" strategies, this paper argues, from a perspective of gender analysis of social policies, that SGD 1 is more indivisibly connected with SDG 3 and SDG 5 (Gender equality) than the SDGs document suggests.

The majority of the poor are globally women and girls, and particularly in Japan. 'High income' countries which have quite high poverty rates such as the US and Japan, as well as some 'middle income' populous countries like China and India, where over 70 % of the global absolute poor live, have to seriously strengthen their tax effort and promote gender equality, in order to substantially reduce poverty and vulnerabilities.

# Short Speech 2 Leena Srivastava

# **Biography**

Leena Srivastava is the Deputy Director General – Science of the International Institute for Applied Systems Analysis (IIASA), Vienna. Prior to this, she was the Vice Chancellor of the TERI School of Advanced Studies, New Delhi – an interdisciplinary higher education institution, focused on sustainable development – since 2012. She has over three decades of research experience in the areas of energy, environment and climate change policies at The Energy and Resources Institute (TERI), including nearly nine years as its Executive Director.

She is a member of various committees and boards both at the international and national levels. She served as the Co-Chair of the Science Advisory Group for the



UNSG's Global Climate Action Summit and is, currently, a Co-Chair on the Science Advisory Committee of Future Earth as well as a Member of the Asian Development Bank (ADB) President's Advisory Group on Climate and Sustainable Development, among others.

In 2008, the Prime Minister of the Republic of France awarded Dr Srivastava with the Knight of the Order of Academic Palms (Chevalier dans l'Ordre des Palmes Academiques). She also received a Certificate of Recognition from the Prime Minister of India, Dr Manmohan Singh, and the Intergovernmental Panel on Climate Change (IPCC) for her contribution to the work of the IPCC. She was also invited to be a Richard von Weizsacker Fellow of the Robert Bosch Stiftung in 2012/13.

She has a Masters in Economics from the University of Hyderabad and a Ph.D in Energy Economics from the Indian Institute of Science in Bangalore, India.

# **Abstract**

"Bouncing Forward Equitably: Insights from IIASA/ISC Post-COVID Initiative"

The words 'transformation' and a 'new normal' are now used commonly across society. There is a recognition that the systems we have designed to provide socio-economic development need transformative changes – changes that would also address environmental and climate concerns at the same time. Apart from recognizing the unsustainability of, and vulnerability created by, existing systems, society has also woken up to the possibility of a different way of life and living. Supporting and accelerating these potentially desirable systemic transformations towards an equitable, just and sustainable society will require concerted action from multiple stakeholders and unprecedented redesign of coherent policy frameworks.

Several countries have presented examples of failed systems – from the poor health and related infrastructures and capacities to the gaping holes in the provision of comprehensive social security nets. But also, of enormous opportunities to bounce forward towards a digitalized, service driven economy that could address itself to the SDGs more comprehensively than before – addressing in particular the urgent need to create jobs, provide more equal opportunities thereby reducing inequalities and protecting the environment! The greatest challenge in effecting this would be the agility to re-orient governance as well as science systems. What can we do to grab these opportunities?

# Short Speech 3 USUI Emiko

## **Biography**

Emiko Usui is a Professor of Economics and the Director of the Center for Intergenerational Studies at the Institute of Economic Research, Hitotsubashi University, Japan. She is an associate member of the Science Council of Japan. She received her B.A. in Economics from the University of Tokyo in 1997 and her Ph.D. in Economics from Northwestern University in 2002. Her research interests cover labor economics, including gender issues, fertility, elderly employment, education, and intergenerational links in skills.



At this Conference, she will present her recent research on the gender differences in medical specialties and board certifications. This research effort has been motivated by her previous and ongoing interest in understanding the mechanism of gender occupational segregation. She has utilized a job search model and demonstrated that a higher percentage of women in an occupation has a substantial negative effect on the wages in the US. Her results suggest that non-wage amenities in predominantly female jobs do not fully compensate for the wage differences between predominantly female jobs and predominantly male jobs. She has also used a hedonic search model to understand why men and women tend to work in different occupations and why jobs with more women pay less.

# **Abstract**

"Career Development of Female Physicians in Japan: Gender Differences in Obtaining Board Certification"

Using the National Survey of Physicians, Dentists and Pharmacists, we examine the gender differences among physicians in obtaining board certification in Japan. In male-dominated specialties (e.g., surgery, neurosurgery, orthopedic surgery, and urology), female physicians are (1) less likely to obtain basic specialty certificates in their initially chosen specialties and (2) less likely to secure any basic specialty certificate. By contrast, in female-dominated specialties (e.g., obstetrics and gynecology, pediatrics, and anesthesiology), female physicians are (1) more likely to acquire basic specialty certificates in their initially chosen specialties to secure any basic specialty certificate. In most specialties, but (2) just as likely as males to secure any basic specialty certificates acquired by mid-career qualified physicians. Enabling female physicians to remain in male-dominated specialties and encouraging them to secure subspecialty certificates in all basic fields are crucial for the career advancement of female physicians in Japan.

# Discussion MACHIMURA Takashi

MACHIMURA Takashi is Professor of Sociology at Hitotsubashi University, Graduate School of Social Sciences in Tokyo. He earned his Ph.D. from the University of Tokyo. His current research themes include global city, urban social movement, mega-projects and mega-events, and development history in postwar Japan. His works appear in International Journal of Urban and Regional Research, and several books in English. His books include Anti-nuclear Social Movements after Fukushima Accident (co-editor with Keiichi Sato, 2016), Structure and Mentality in Developmentalism: Dam Construction in Postwar Japan (2011) and



What is Civic-initiative Society?: Conflicting Public Sphere in the Decision Making Process of Aichi EXPO 2005, (co-editor, 2005), in Japanese. Currently he is President of Japan Sociological Society, and a member of Science Council of Japan.

# Short Speech 4 Daya Reddy

## **Biography**

Daya Reddy was born in Port Elizabeth, South Africa. He is a graduate of the Universities of Cape Town and Cambridge, and currently holds the South African Research Chair in Computational Mechanics in the mathematics department at the University of Cape Town. Much of his work is concerned with mathematical analysis and computational simulation in solid and fluid mechanics, and is motivated by applications in areas such as materials science and biomechanics.

Daya Reddy has made wide and significant contributions to scientific leadership and organisation both nationally and internationally



He is a former President of the Academy of Science of South Africa, and is currently President of the International Science Council (ISC), the largest representative non-governmental scientific organization globally. He also recently concluded two terms as co-chair of the Policy arm of the InterAcademy Partnership (IAP). Daya Reddy was a founder member in 2003 of AIMS, the African Institute for Mathematical Sciences (AIMS), a pan-African network with centres for graduate education, research and outreach currently in five African countries. He chairs the AIMS South Africa Council. Daya Reddy is a Fellow of TWAS, The World Academy of Sciences, and of the African Mathematical Society, the Order of Mapungubwe, awarded by the President of South Africa for distinguished contributions to science, and of the Georg Forster Research Award from the Alexander von Humboldt Foundation in Germany.

## **Abstract**

The Covid-19 pandemic has had a devastating impact globally. There has been disproportionate impact on those who are already marginalised, thereby emphasising existing inequalities, and severely retarding progress towards achieving many of the SDG goals At the same time the pandemic has brought out the best in some, with multiple acts of solidarity and compassion, and close scientific collaboration across national boundaries. The public has been witness to the importance of science in addressing the pandemic, and the mechanics of science advising policymakers. Scientists will have an especially important role in the post-pandemic period of recovery and transformation in advising policymakers. An equally important responsibility will be to promote scientific literacy, in order that society at large is better able to engage with the linkages between scientific developments, their role in addressing major challenges, and the impact of resulting policies on the lives of individuals and communities. In these ways scientists can contribute towards building a society that is more resilient, as well as being more socially inclusive and cohesive.

## DAY<sub>2</sub>

# Short Speech 5 Elisa Reis

# **Biography**

Elisa Reis is current Vice-President of the International Science Council (ISC). She has as a Ph.D. in Political Science (MIT, 1980) and is Professor of Political Sociology at the Universidade Federal do Rio de Janeiro (UFRJ-Brazil) where she is also chair of the Interdisciplinary Research Network for the Study of Social Inequality (NIED). She is fellow member of the Brazilian Academy of Sciences and of the Academy of Science for the Developing World (TWAS). She has received scholarships, among others, from the Brazilian National Research Council (CNPq.), the Research Council of the State of Rio de Janeiro (FAPERJ), The Fulbright Commission, the Italian Consiglio Nazionale delle Ricerche, to carry out research in several countries.



Former chair of the Research Committee on Sociological Theory of the International Sociological Association. Her major research interests are elite perceptions of poverty and inequality; current transformations of nation-states; and the evolving patterns of interaction between state, market and civil society. The author of more than one hundred articles published in Brazil and elsewhere, she has held visiting professorships at the University of California San Diego, Massachusetts Institute of Technology, Ludwig Maximilian University Munich, and Columbia University.

## Abstract

"Science and the Dramatic Need to Reframe the Development Pattern"

The notion of sustainable development brings to the fore the need to conceive of development beyond strictly short-run utilitarian terms. That development cannot be limited to GDP growth, is not a new idea. Let us recall, for example, Sen's emphasis on fostering human capabilities or the abundant scientific evidence that unless we change the prevailing patterns of growth, humankind will seriously compromise the planet's future. Yet,

the ongoing pandemic has introduced such a dose of realism to the plea for human development that the need to reframe the development pattern acquires a dramatic sense of urgency.

However, a sense of urgency is not a guarantee that consensus will automatically emerge to enforce with greater determination a sustainable pattern of growth. While disputes over priority measures are present everywhere, this is a time when the perception of positive and negative public goods are quite visible, something that opens a short-term window of opportunity to strengthen social cohesion and increase social resilience. To take advantage of such opportunity in order to foster collective support to sustainable goals requires multiple sorts of leadership. Science knowledge, responsive policies, and active support of civil society are key ingredients here.

As a community of scientists let us explore how can we act to maximize our contribution to this goal. Without giving up disciplinarian specialization, I suggest that we must move towards a much more integrated way to deal with natural and social phenomena. The idea of an insurmountable barrier between explanatory and interpretative modes of knowledge prevents us from grasping the actual interaction between natural processes and social behavior. It does not help either to take social science as a still immature knowledge endeavor pursuing the path of natural science. Both of these parti pris thwart fruitful dialogues providing rather a myopic view of history, nature and culture. Combining the specificities of natural and social sciences we are better equipped to confront the urgent challenges facing humankind.

# Short Speech 6 Martin Kohli

# **Biography**

Martin Kohli was born in Solothurn (Switzerland) and studied in Geneva, Cologne, and Berne, where he obtained his doctorate. After a few years at the Ministry of Education of the Canton of Zurich and as Assistant Professor at the University of Constance (completed by his habilitation) he went to the Free University of Berlin as Professor of Sociology (1977-2007). From 2004-2012 he held the Chair of Sociology at the European University Institute (EUI) in Florence (Italy). Since 2012 he is Emeritus Professor at the EUI and Distinguished Bremen Professor at the Bremen International Graduate School



of Social Sciences (BIGSSS).He has been a Member or Fellow of the Institute for Advanced Study (Princeton), the Collegium Budapest, and the Hanse Institute for Advanced Study (Delmenhorst/Bremen).

He has also been a Visiting Professor or Researcher at Harvard University, Stanford University, Columbia University, the University of North Carolina, and the University of California, Berkeley. He is a member of the Berlin-Brandenburg Academy of Sciences and the Austrian Academy of Sciences, and from 1997-99 served as President of the European Sociological Association.

## **Abstract**

"Generational cleavages as a challenge to social inclusion in a globalized world"

Cleavages among age groups and generations have become one of the most salient areas of potential social conflict. This is due to rapid social change, welfare state expansion, and population aging. Globalization (migration of people and capital) also contributes to the salience of age and generational cleavages, as does the current pandemic (through differential vulnerability to Covid-19 and to the economic lockdowns).

I present some empirical evidence for age/generational differences (economic wellbeing, attitudes toward welfare policies, and political behavior), and ask how these differences are likely to be mobilized into cleavages and conflicts. I then discuss the social institutions that create inclusion across these cleavages (such as welfare states and family/kinship) and the current threats to these institutions. I draw some lines of comparison within the OECD world (Europe, East Asia and North America).

# Discussion / Closing Remarks TAKEUCHI Kazuhiko

Prof. TAKEUCHI obtained M.Agr. and PhD from the Graduate School of Agriculture, the University of Tokyo. From 2016, he has served as a Senior Visiting Professor at United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS). He was Director and a Project Professor of Integrated Research System for Sustainability Science (IR3S) at the University of Tokyo from 2017 to 2019. He has served as President, Institute for Global Environmental Strategies (IGES) since July 2017. He took up the position as Project Professor of the Institute for Future Initiatives (IFI) at the University of Tokyo in April 2019. He has served, inter alia, as a Vice-President of the Science Council of Japan,



Chair of the Central Environmental Council, Government of Japan, Editor-in-Chief of the journal Sustainability Science (Springer Nature). He specializes in landscape ecology, environmental studies, and sustainability science. He engages in research and outreach activities on creating eco-friendly environments for a harmonious coexistence of people and nature, especially focusing on Asia and Africa. Recently, he has been working toward establishing a global foundation for developing the field of sustainability science aiming to build a sustainable society.