

**United Nations University**  
Institute for the Advanced Study of Sustainability

**2020 Annual Report**



UNITED NATIONS  
UNIVERSITY

UNU-IAS

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UNU is committed to the ideals and practices of environmental sustainability, and is an ISO140001 certified institution.

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## United Nations University

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**THE GLOBAL GOALS**  
For Sustainable Development

## Director's Message



2020 was a year of unprecedented challenges, with the impacts of COVID-19 deeply affecting people, communities, and organisations across the globe. Yet it also saw remarkable innovation, resilience, and solidarity as we all responded to the crisis and adapted to the “new normal”.

Reflecting on this unique period, an overriding lesson is the importance of systems thinking – the ability to analyse complex systems across environmental, social, and economic domains. The pandemic has shown that we can no longer afford to think and act in siloes. This goes beyond addressing the impacts of COVID-19, to tackle the urgent crises that were already threatening humanity. We must

ensure that “building back better” is an integral part of efforts to create more sustainable, resilient, and inclusive societies. In this way, the pandemic should serve as a catalyst for the transformative change that is urgently needed if we are to overcome the climate emergency and live in harmony with nature.

The academic community has a critical role to play in this, by informing evidence-based policymaking and educating future generations. Indeed, responses to COVID-19 have prompted greater recognition of the need to incorporate scientific expertise in decision-making and broader public debate.

As a research and teaching institute working for sustainability, UNU-IAS is advancing these efforts through policy-oriented research to address the deep and interconnected impacts of COVID-19 across society, and inform integrated solutions. We have already begun to develop new research specifically focused on COVID-19, mobilising our networks in education, biodiversity, governance, technology and other areas.

During 2020 UNU-IAS continued to advance policy dialogue on the Sustainable Development Goals (SDGs) and other agendas of high priority for the UN system and Member States. One of the highlights was our contribution to the UN High-Level Political Forum on Sustainable Development (HLPF; 7-16 July), through a series of side events presenting UNU-IAS expertise across the SDGs. We also made important contributions to the development of new global frameworks for biodiversity (the Post-2020 Global Biodiversity Framework) and education for sustainable development (ESD for 2030).

Working closely with UN partners, UNU-IAS furthered efforts towards achieving the SDGs in Asia and the Pacific through our Mayors Academy for Sustainable Urban Development. In Japan we advanced localisation of the SDGs through policy recommendations for the national government and close collaboration with Kanazawa City.

A key achievement during the year was the launch of the SDG-Universities Platform (SDG-UP), which brings together an initial 28 member universities across Japan to contribute towards achieving the SDGs. The platform has already fostered exchange of good practices and collaboration through a series of workshops since its launch in August.

We also strengthened the UNU-IAS postgraduate degree programmes, with the introduction of new courses on international development and environmental science. Eleven master's students and three doctoral students graduated during the year, and in September we welcomed 17 new students – the largest intake in the institute's history. In response to COVID-19 we adopted new teaching modalities, with all instruction and supervision delivered online or through hybrid arrangements from the Spring semester onwards.

2020 was also a significant year for the institutional development of UNU-IAS. A comprehensive external evaluation of the institute was conducted for the first time, together with an in-depth internal stocktaking process. We reflected the outcomes in collectively forging a new vision and strategy for the institute, formulating the UNU-IAS Strategic Plan 2020-2024 through an inclusive process with valuable guidance and support from our advisory Board.

In implementing all of these activities UNU-IAS faced extremely challenging circumstances due to COVID-19. Thanks to the commitment, creativity, and teamwork of our personnel and students, we overcame these difficulties and delivered a year of success and progress.

I would like to extend my sincere thanks to all of our partners, donors, and other stakeholders for your collaboration and support for our research, policy engagement, events, and other activities. We also deeply appreciate your vital contributions to our degree programmes through providing expertise and scholarships.

As the world tackles the multiple crises of COVID-19, climate change, and biodiversity loss, among others, the mission of UNU-IAS is more important than ever. In further developing our work during 2021 we will be exploring the many new opportunities that have emerged, while continuing to mobilise knowledge and inform policymaking for sustainable development. Working together we can rise to meet these challenges and help to realise the global transformation towards sustainability that is so urgently needed.

**Shinobu (Yume) Yamaguchi**

Director, UNU-IAS

# About UNU-IAS

The United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS) is a research and teaching institute dedicated to realising a sustainable future for people and our planet. Based in Tokyo, Japan, UNU-IAS serves the international community by producing evidence-based knowledge and solutions to inform policymaking and address priority issues for the UN system.

Through policy-oriented research and capacity development the institute drives progress in four thematic areas: governance for sustainable development, biodiversity & society, water & resource management, and innovation & education. UNU-IAS creates new value by integrating expertise across these areas, in both academia and policymaking, to mobilise knowledge for sustainability and advance the global effort to achieve the Sustainable Development Goals (SDGs) by 2030. It applies innovative approaches and research methods to challenge conventional thinking and develop creative solutions to emerging issues of global concern. The institute's research, education, and training engage a global network of scholars and partner institutions, driving interconnectedness between policymakers and the science and academic communities to realise sustainable solutions. Through field-based research, including an operating unit in Kanazawa City (Ishikawa Prefecture, Japan), UNU-IAS is developing models for localising the SDGs and other global agendas by building multi-stakeholder partnerships.

UNU-IAS postgraduate education advances the broader transformation towards sustainability in society – producing the policymakers and researchers of tomorrow, who will be at the forefront of global efforts for sustainability. The institute offers master's and doctoral degrees, postdoctoral fellowships, and innovative short courses, in close collaboration with leading universities in Japan and other countries.

## Thematic Areas

### 1. Governance for Sustainable Development

Advancing sustainable development depends on translating the global vision of the SDGs and related agendas into practice, and ensuring their effective implementation. UNU-IAS mobilises knowledge, expertise, and partnerships to strengthen governance and policymaking processes for sustainable development and localise these urgent global agendas.

### 2. Biodiversity & Society

Action on biodiversity is urgently needed to sustain a healthy planet and the lives that it supports. UNU-IAS advances human-environment solutions to accelerate transformational change toward living in harmony with nature. The institute's research provides evidence-based inputs for implementing the Post-2020 Global Biodiversity Framework, with a focus on sustainable management of production landscapes and seascapes.

### 3. Water & Resource Management

Water is at the core of sustainable development, linking livelihoods, health, ecosystems, and infrastructure. Ensuring access to clean water and sanitation for all requires a transformation in the way we manage water resources. UNU-IAS is developing sustainable, decentralised approaches to overcome the water crisis, enhance resilience, and help build decarbonised, circular economies.

### 4. Innovation & Education

Building more sustainable societies relies fundamentally on fostering creative, innovative solutions and empowering individuals through education. UNU-IAS accelerates knowledge generation and lifelong learning for a sustainability transformation, through policy-oriented research, capacity development, and partnerships.

#### An Institute of the United Nations University

UNU-IAS is an institute of the United Nations University (UNU) with a specific mandate to address sustainability issues. UNU is a global think tank and postgraduate teaching organisation comprising 14 institutes, located in 12 different countries.

#### Organisation

UNU-IAS was inaugurated on 1 January 2014. The institute is based at the global headquarters of UNU in Tokyo, and also has an operating unit located in Kanazawa City in Ishikawa Prefecture, Japan (UNU-IAS OUIK).

#### Staffing

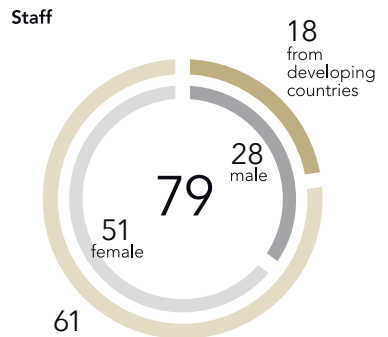
As of December 2020, UNU-IAS had a staff of 79, comprising nationals of 17 different countries. Women constituted 65% of UNU-IAS staff. UNU-IAS is committed to achieving gender balance and ensuring gender equality. UNU employment practices also strive to ensure equality of opportunity and treatment for persons with disabilities and to prevent any form of disability-based exclusion or discrimination.

#### Financing

UNU-IAS is financed entirely by voluntary contributions from governments, agencies, international organisations, and other sources. A list of major financial contributors is provided on page 25.

#### Board

The role of the UNU-IAS Board is to provide guidance on the strategic orientation of the institute and its academic and policy work, and ensure scientific excellence. The Board advises on management issues such as budgeting and staffing, and reviews the institute's activity reports, strategic plans, and work programmes. During 2020, meetings of the Board were held on 6 March and 19-20 November. A list of Board members is provided on page 25.









## RESEARCH

### COVID-19 Impacts & Responses

COVID-19 has affected all aspects of society, crossing sectors and boundaries, underlining the interconnected nature of the pandemic and broader sustainability challenges. It has led to the first increase in global poverty in decades and threatens to stall or even reverse progress on the SDGs.

As the global pandemic disrupted international policy processes and many planned activities, UNU-IAS developed new research specifically focused on COVID-19. This seeks to enhance understanding of its deep and interconnected impacts across society, informing policy solutions to overcome the crisis and advance the broader transformation towards sustainability.

#### Education

UNU-IAS mobilised its networks on education for sustainable development (ESD) to explore responses in the education sector. Surveys were conducted at the global level through the Regional Centres of Expertise on ESD (RCEs) network, and in the Asia-Pacific region with member universities of the Promotion of Sustainability in Postgraduate Education and Research Network (ProSPER.Net).

#### Integrated Approaches

Researchers of UNU-IAS, the UNU Institute for Environment & Human Security (UNU-EHS), and the UNU Institute for Integrated Management of Material Fluxes and of Resources (UNU-FLORES) collaborated to produce a policy paper on COVID-19 and the 2030 Agenda (forthcoming, 2021). It underlines the interrelated, systemic impacts and future risks of both pandemics and environmental crises, advocating for integrated approaches to ensure a green, inclusive, and resilient recovery from COVID-19.

#### Resilience

An open-access article published in the journal *Progress in Disaster Science* examines responses to COVID-19 and provides recommendations for applying disaster resilience strategies. The article, *Building Resilience against Biological Hazards & Pandemics: COVID-19 and its Implications for the Sendai Framework*, argues that strategies and approaches outlined in the Sendai Framework for Disaster Risk Reduction can enhance responses to global pandemics such as COVID-19.







**PROJECT**

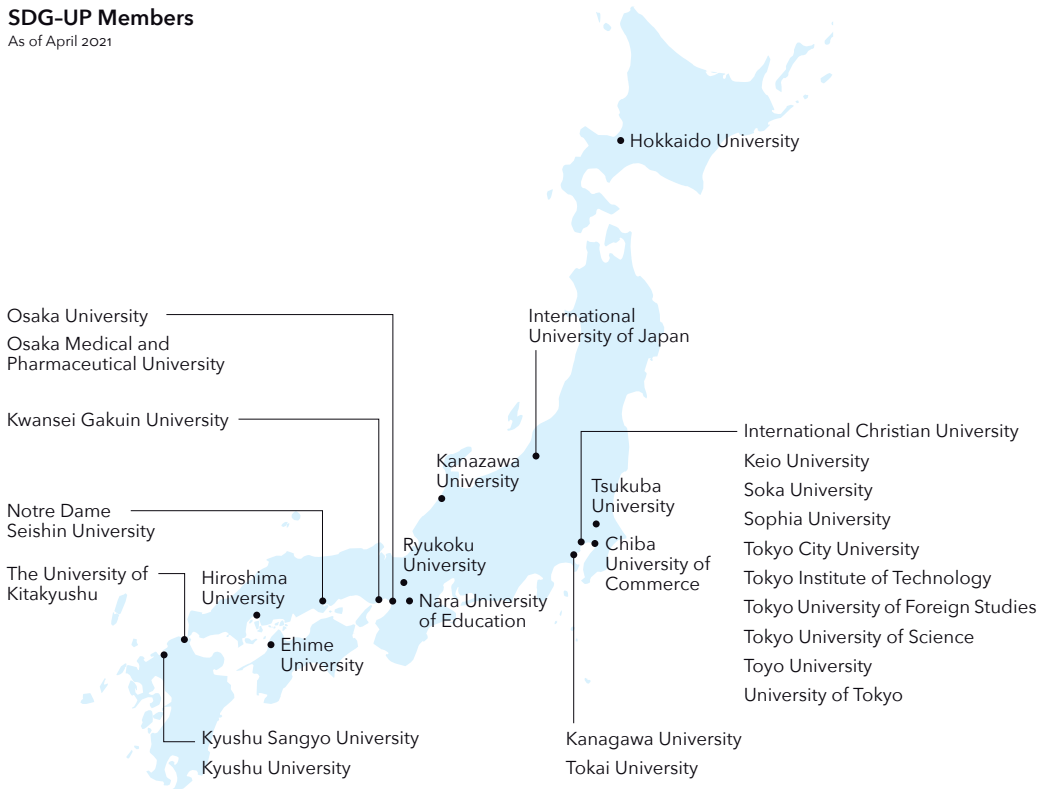
**SDG-Universities Platform (SDG-UP)**

UNU-IAS established this new initiative to enhance cooperation between Japanese universities for the SDGs. It engages an initial 28 universities across Japan as members of the platform to contribute towards achieving the SDGs both locally and internationally, increasing their presence in the international sphere. As a solution-oriented platform, its activities centre around a series of workshops that highlight good practices and develop collaboration. The initiative is supported by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan.

SDG-UP was launched on 28 August through an online symposium with more than 530 participants, including experts from academia, the private sector, and local government. It was featured in the Weekly Toyo Keizai magazine. The first SDG-UP workshop was organised on 30 October, discussing multilateral cooperation and the role of universities. The second workshop (11 November) discussed impact evaluation in the context of the SDGs, featuring the Times Higher Education Impact Rankings.

**SDG-UP Members**

As of April 2021



# Research & Policy Development

UNU-IAS generates interdisciplinary scientific knowledge to inform policy-making, advancing the global effort to achieve the Sustainable Development Goals (SDGs) by 2030. Our research and policy development activities address specific goals as well as the interconnections between them, helping to translate the global agenda into action at the regional, national, and local levels. Combining in-house expertise with a diverse network of partner institutions, UNU-IAS bridges the developing and developed worlds and strengthens the links between science and policy that will be critical for achieving the SDGs.

Adopted by the UN General Assembly in 2015, the 2030 Agenda for Sustainable Development and its 17 SDGs inspire global action to overcome the world's related challenges — from hunger and poverty to equality and peace. Governments, businesses, civil society, and the UN system are working together to achieve the goals by 2030, and improve the lives of people everywhere.





# 1 Governance for Sustainable Development

## RESEARCH

### Localising the SDGs

UNU-IAS research advanced local implementation of the 2030 Agenda, developing an analytical framework to evaluate mainstreaming of the SDGs. Outcomes were presented in a symposium on 10 November, in collaboration with the University of Tokyo, the National Institute for Environmental Studies, Japan (NIES), the Japan Committee for International Institute for Applied Systems Analysis (IIASA), and Future Earth Japan.

Drawing on this research UNU-IAS contributed to localisation efforts in Japan, providing expertise for a government initiative that selected 93 “SDGs Future Cities” during 2018-2020. This informed research published in the journal *Sustainability Science*. Collaboration between the UNU-IAS Operating Unit Ishikawa/Kanazawa (OUIK) and Kanazawa City contributed to the city’s selection in July as an SDGs Future City and a “Municipal SDGs Model Project”.

UNU-IAS continued to work with community stakeholders in Kanazawa including businesses, educational institutions, and local municipalities to promote the SDGs in the region. In July it produced an SDGs action plan for the city (“Kanazawa Future Scenario”) as part of the IMAGINE KANAZAWA 2030 initiative – a partnership with Kanazawa City and the NGO Junior Chamber International (JCI) Kanazawa. An OUIK symposium on 30 September launched a new project to develop local SDGs indicators for the city. Seven SDGs Café events engaged the local community on topics such as public transport, sports, sustainable investment, and energy.

Analysis of successful localisation cases in Ghent (Belgium), Malmö (Sweden), and Mannheim (Germany) was conducted by the institute’s Global Environment Outreach Centre (GEOC) and IDEA Consultant Inc. A report and policy recommendations were submitted to the Ministry of the Environment of Japan (MOEJ) in March, and subsequently featured by MOEJ in a booklet on ICT for localising the SDGs.

## POLICY ENGAGEMENT

### SDGs & COVID-19 Response in Japan

UNU-IAS contributed to a set of recommendations for incorporating the SDGs as a guiding principle in Japan’s COVID-19 response and recovery, which were submitted to Prime Minister Shinzo Abe on 30 July. They were produced by the SDGs Promotion Roundtable, organised by the Cabinet Office of Japan, in which UNU-IAS serves as a member representing the UN community.

## POLICY BRIEF

### Implementing the 2030 Agenda in the Arab World

This brief provides recommendations on governance in Arab countries for the design and implementation of local strategies to achieve the SDGs. The brief, *Local Implementation of the 2030 Agenda in the Arab World: Addressing Constraints & Maximising Opportunities*, is based on the results of Voluntary National Reviews (VNRs) submitted by 15 Arab countries between 2016 and 2019.

## RESEARCH

### **Global Goals & National Development Plans**

This research is exploring how national development planning has shifted to incorporate the SDGs. Analysis was conducted of six recently adopted national development plans (Bangladesh, Egypt, Malaysia, Oman, Qatar, and Tanzania). Preliminary findings were presented at the International SDG Research Symposium Global Goals 2020, hosted by Utrecht University (9-11 June, online).

## CAPACITY BUILDING

### **Mayors Academy for Sustainable Urban Development**

UNU-IAS is building a network of mayors in Asia and the Pacific to strengthen leadership for sustainable urban development, in collaboration with the UN Economic and Social Commission for Asia and the Pacific (UNESCAP), UN-Habitat, and other partners. The Mayors Academy fosters peer learning and cooperation, and provides a framework for planning and action towards adoption of more sustainable development pathways. Sessions were organised during the Tenth World Urban Forum in Abu Dhabi (9, 11 February), in which 12 mayors presented their progress and discussed development financing frameworks, and technology and innovation for urban transformation. A new cohort of 16 mayors joined the academy in November.

## EVENT

### **Sports & SDGs**

The symposium SDGs Localisation through Sports and the 2020 Tokyo Olympics and Paralympics Host Towns (18 February) engaged local governments in Japan, highlighting action on sports and sustainability implemented by the 2020 Tokyo Olympics and Paralympics Host Towns. It was organised by GEOC, in collaboration with the Ministry of the Environment of Japan (MOEJ).

## PUBLICATION

### **30 Innovations Linking Disaster Risk Reduction with SDGs**

This publication explores 30 innovations that demonstrate the strong linkages between disaster risk reduction (DRR) and the SDGs, focusing on ten sectors: emergency response, gender, health, agriculture, water, children, education, disabilities, livelihoods, and early warning. It was produced in collaboration with the Association of Pacific Rim Universities (APRU), which comprises 51 leading research universities.

## PROJECT

### **EU-Japan.AI**

This new project (full title: Advancing Collaboration & Exchange of Knowledge Between the EU and Japan for AI-Driven Innovation in Manufacturing) seeks to establish, stimulate, and support long-term cooperation between the EU and Japan on artificial intelligence (AI) in manufacturing. The project is funded under the EU Horizon 2020 scheme, with the partners comprising six universities and research institutions in Austria, Greece, Japan, Slovenia, and Spain.





## 2 Biodiversity & Society

### POLICY ENGAGEMENT

#### Post-2020 Global Biodiversity Framework

UNU-IAS has been contributing to the development of the new global policy framework for biodiversity, resulting in inclusion of its evidence-based positions in drafts of the framework. The institute organised an open meeting engaging Parties to the Convention on Biological Diversity (CBD) in discussion on landscape approaches (23 February), and provided inputs to the Second Meeting of the Open-Ended Working Group (OEWG 2; 24–29 February).

At the UN Biodiversity Summit (30 September), UNU-IAS delivered a video message calling for engagement of the science community for an ambitious and effective new framework that emphasises human-nature relationships. The institute led UNU's contribution to a 17-agency team drafting a common approach for the UN system to integrate biodiversity and nature-based solutions into policies and programmes.

### RESEARCH

#### Landscape Approaches

Through analysis of over 200 case studies in 20 developing countries UNU-IAS has developed best practice for landscape approaches – frameworks for inclusive, adaptive co-management of a given area that will play a key role in achieving the 2050 vision for biodiversity, as well as the global goals. These local community-based projects have been supported through Community Development and Knowledge Management for the Satoyama Initiative (COMDEKS), a collaboration with UNDP, the CBD Secretariat, and the Ministry of the Environment of Japan (MOEJ).

UNU-IAS organised a side event of the UN High-Level Political Forum on Sustainable Development (HLPF; 16 July – see *In Focus*) that showcased its research on landscape approaches. A UNU-IAS Policy Brief (No. 21) was published, providing recommendations for policymakers to take advantage of landscape approaches in implementing the Post-2020 Global Biodiversity Framework.

### NETWORK

#### International Partnership for the Satoyama Initiative (IPSI)

UNU-IAS hosts the secretariat of this network, comprising over 270 member organisations across the globe dedicated to realising societies in harmony with nature. It draws on this diverse evidence base in contributing to global policy agendas for biodiversity, conducting research, and building capacity. Through the network UNU-IAS promotes landscape approaches to biodiversity and human well-being, based on the concept of “socio-ecological production landscapes and seascapes” (SEPLS) – areas where sustainable production activities and resource management can result in societies in harmony with nature.

Meetings of the IPSI Steering Committee were organised in June and December, approving 13 new members and developing the partnership's strategic plan for the next decade of biodiversity policy. UNU-IAS organised an IPSI Case Study Workshop (22-26 June) to develop research for publication in the next issue of the Satoyama Initiative Thematic Review on the theme *Transformative Change through the Multiple Benefits of SEPLS* (vol. 6; forthcoming in 2021). The Satoyama Development Mechanism, an IPSI initiative, provided seed funding for six projects in Ghana, Malawi, Nepal, the Philippines, and Uganda. A thematic session was held as part of the International Forum for Sustainable Asia and the Pacific 2020 (12 November), showcasing IPSI and how SEPLS can contribute to transformative change.

## PUBLICATION

### Indicators for Agricultural Heritage Systems

An article published in the journal *Sustainability* (volume 12, issue 14) illustrates the importance of continuing traditional farming practices and cultural heritage in conserving Globally Important Agricultural Heritage Systems (GIAHS) in Japan. The article, *Enhancing Sustainability in Traditional Agriculture: Indicators for Monitoring GIAHS in Japan*, proposes indicators for monitoring the conservation of heritage sites.

## RESEARCH

### Sustainable Urban Nature

This project aims to create a sustainable model for urban nature, through conservation reflecting links between biological and cultural diversity, as well as transforming vacant plots and empty houses into greenspaces. The UNU-IAS Operating Unit Ishikawa/Kanazawa (OUIK) has analysed changes in nature, land use, and vacant housing in Kanazawa over the past 50 years using map data and surveys of 2,500 households. The research engaged local residents and students, with findings presented at international conferences.

## EVENT

### The UN Decade on Biodiversity & Beyond

An online symposium engaged 278 participants in discussing progress made during the UN Decade on Biodiversity and looking ahead to the next 10 years (16 May). Discussions emphasised the need for promote multi-sectoral and interdisciplinary collaboration, recognise the multifaceted value of biodiversity, and consider COVID-19 as a catalyst for transformative change.

## EVENT

### Green Recovery


UNU-IAS organised the online symposium Sustainable Lifestyles for a Green Recovery: COVID-19 and the SDGs (6 October), in collaboration with GEOC, MOEJ, and Sophia University. It focused on mainstreaming biodiversity and the relevance of landscape approaches to green recovery and building back better.

## EVENT SERIES

### Noto Satoumi Movement

This webinar series organised by UNU-IAS OUIK explores *satoumi* – marine-coastal ecosystems – in the context of the Noto peninsula in Ishikawa Prefecture, Japan, which is designated as a Globally Important Agricultural Heritage Systems (GIAHS) site. Webinars during 2020 engaged experts and local stakeholders in discussion on marine pollution (6 June) and marine biodiversity (16 September).





## 3 Water & Resource Management

### POLICY ENGAGEMENT

#### UN-Water

This interagency mechanism coordinates the efforts of UN entities and international organisations working on water and sanitation issues. UNU-IAS contributed to the flagship report of UN-Water, the World Water Development Report 2021 (published March 2021), drawing from its research on water and well-being in Nepal. Focusing on the theme “Valuing Water”, the report illustrates that the inability to recognise the value of water is the main cause of water waste and misuse. UNU-IAS also strengthened collaboration with other UNU institutes on water issues through the UNU Water Network, serving as its co-chair from July.

### RESEARCH

#### Water for Sustainable Development

This project explores the direct and indirect interlinkages between water and the economy. It advances efforts to achieve SDG 6 (clean water & sanitation) and other goals through improved management of water environments, by developing an analytical tool and policy options. The project focuses on selected locations in Asia where agriculture, industries, or services linked to nature are the main source of income.

During 2020 case study research was completed in Bali, Indonesia and Kaski, Nepal, with the development of analytical frameworks and future scenarios. New case studies were launched in Vishakhapatnam, India (May) and Rayong, Thailand (August) through initial data collection. With in-person activities curtailed due to COVID-19, research plans were modified to focus on producing an analytical tool for policymakers, which will build capacity in developing countries in the region.

### POLICY DIALOGUE

#### Water & Sustainable Economic Development in Asia

Engaging 110 participants from across Asia, this webinar discussed water-related challenges facing developing countries in the region (18 December). Organised with Pokhara University (Nepal), it considered connections between water and sustainability in a global context, and examined the specific cases of Bali, Indonesia and Kaski District, Nepal. Speakers stressed the role of water quality in economic development, the need to strengthen local government capacity for collecting hydrological data, and the importance of water governance and equitable access to water. The webinar was featured by five national newspapers in Nepal.

## CAPACITY BUILDING

### Sustainable Water Management in India

UNU-IAS organised an online workshop with Andhra University in India (10 October), focused on management of water resources in Visakhapatnam District. It facilitated exchange of perspectives and experiences between UNU-IAS researchers and over 100 local scholars and practitioners, from the Andhra Pradesh government, universities, and the private sector. The workshop received coverage in seven newspapers in India, including The Hindu and the Times of India.

## RESEARCH

### Wastewater Reuse for Smart Cities

Launched in April, this project promotes the practice of wastewater reuse by developing a comprehensive framework that will serve as an assessment mechanism for companies when they consider the reuse of wastewater in their value chains. The project, Framework for Organisational Decision-Making Process in Water Reuse for Smart Cities (SMART-WaterDomain), is a collaboration with the UNU Institute for Integrated Management of Material Fluxes and of Resources (UNU-FLORES) and universities in five European countries. It is supported by a joint funding scheme of EU countries and the Japan Science and Technology Agency (JST).

## PUBLICATION

### Manufacturing & Water Pollution

An article in the journal *Water, Air, and Soil Pollution* (volume 231, issue 12) presented outcomes from case study research in Nepal on the direct and indirect links between water pollution and production in manufacturing. It categorises sectors by their impacts on pollution and provides recommendations for policymakers and practitioners in the country to implement pollution-reduction measures (full title: An Extended Input-Output Model to Analyse Links Between Manufacturing and Water Pollution in Nepal).



## 4 Innovation & Education



### POLICY ENGAGEMENT

#### ESD for 2030

UNU-IAS has been closely involved in the formulation of the new global framework on education for sustainable development, ESD for 2030. During 2020 the institute contributed examples of best practice and competencies, and recommended indicators for the framework, in close cooperation with UNESCO. In producing these policy inputs UNU-IAS mobilised knowledge through its ESD partnerships, including the global network of RCEs and ProSPER.Net (see across).

The institute contributed to building partnerships between the UN system and academia that will be critical for implementing the ESD for 2030 agenda. UNU-IAS plays a leading role in the Higher Education Sustainability Initiative (HESI), and co-organised a HESI special event of the HLPF (see *In Focus*) that developed a common direction towards redesigning higher education for sustainable development. UNU-IAS also joined the International Advisory Board of UNESCO's flagship initiative Futures of Education, which aims to catalyse a global debate on how knowledge and learning can shape the future of humanity and the planet.

### RESEARCH

#### Responses to COVID-19

UNU-IAS conducted research on the response of the education sector to the COVID-19 pandemic through its ESD networks. A survey in the Asia-Pacific region engaged member universities of ProSPER.Net (see across), with findings published in the International Association of Universities (IAU) report *Regional/National Perspectives on the Impact of COVID-19 on Higher Education* in August. A global survey of 175 RCEs analysed their roles and practices, and a more detailed survey focused specifically on RCEs in the Asia-Pacific region on their roles in local communities.

### PUBLICATION

#### Five Years of Innovative ESD Projects

One of the 10 most viewed UNU publications during 2020, this report showcases some of the contributions that RCEs have made towards achieving the SDGs through education at the local and regional levels. *RCE Contributions to a More Sustainable World: Celebrating Five Years of Innovative Projects on ESD (2015-2019)* features 12 projects that have received RCE Awards for addressing local sustainable development challenges through innovative solutions. They highlight how distinct capacities, expertise, and resources have been mobilised for transformative learning to foster sustainable development.

### PUBLICATION

#### Multi-stakeholder ESD in Local Communities

This joint publication with UNESCO presents a variety of innovative approaches for ESD through multi-stakeholder partnerships at the local level, featuring 11 case studies from RCEs. *Multi-stakeholder Approaches to ESD in Local Communities: Towards Achieving the SDGs in Asia* underlines that local

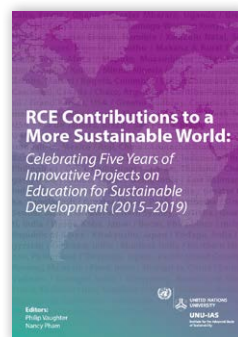
communities are the driving force of a sustainable society. It explores links between sustainability initiatives focused on natural systems, such as combating biodiversity loss and climate change – and those addressing social systems, encompassing issues such as health, well-being, hunger, and gender equality. In doing so it promotes an approach that is at the core of the new ESD for 2030 framework.

## NETWORK

### Regional Centres of Expertise on ESD (RCEs)

The RCEs network is a platform for facilitating multi-stakeholder collaboration at the local level to contribute towards achieving a sustainable society. As the secretariat of the RCEs network, comprising 179 RCEs across the globe, during 2020 UNU-IAS supported RCEs to organise regional meetings for Africa, the Asia-Pacific, the Americas, and Europe. They exchanged experiences and lessons on issues caused and exacerbated by the COVID-19 pandemic.

Two seminars were organised focusing on Africa, on the topics of COVID-19 and community-based resilience. An additional priority area for 2020 was capacity building on the SDGs for youth in Japan, through a range of activities mobilising UNU-IAS networks throughout the country. In the 2nd Japanese RCE Youth Meeting (Kobe, 1-2 February), 25 young participants created project proposals for ESD at the local level, which were shared at the SDGs Forum 2020 in Nagoya, Japan (22 February). Based on insights gathered from RCEs, UNU-IAS provided inputs to the UNFCCC Regional Dialogue on Action for Climate Empowerment for Asia Pacific and for the Americas (26 August), which developed policy guidelines for Member States on implementing Article 6 of the convention.



## EVENT

### Transformative Change through Reframing Education

UNU-IAS, UNESCO, and the UNESCO Institute for Lifelong Learning organised a panel session as part of the 64th Annual Conference of the Comparative & International Education Society (CIES), on the theme "education beyond the human" (8 April). It explored four aspects of ESD: localisation, the role of environmental education in promoting human-nature co-existence, digitalisation of education and value systems in Asia, and promoting transversal skills in schools and beyond.

## NETWORK

### Promotion of Sustainability in Postgraduate Education & Research Network (ProSPER.Net)

This alliance of 50 higher education institutions in the Asia-Pacific region works to integrate sustainable development into curriculums and research. As its secretariat UNU-IAS organised the network's General Assembly and Board Meeting (15 October), which approved three new member universities: Sree Sankaracharya University of Sanskrit (India), Sophia University (Japan) and Universiti Teknologi Petronas (Malaysia).

Joint research by the network included new projects on disaster education, local implementation of the 2030 Agenda, and small island developing states (SIDS) threatened by climate change. UNU-IAS organised the ProSPER.Net Webinar on Sustainability in Higher Education (16 October), which brought together over 160 participants to discuss the challenges and opportunities of COVID-19 for higher education institutions, and options for science communities to "build back better" in order to accelerate action on the SDGs.

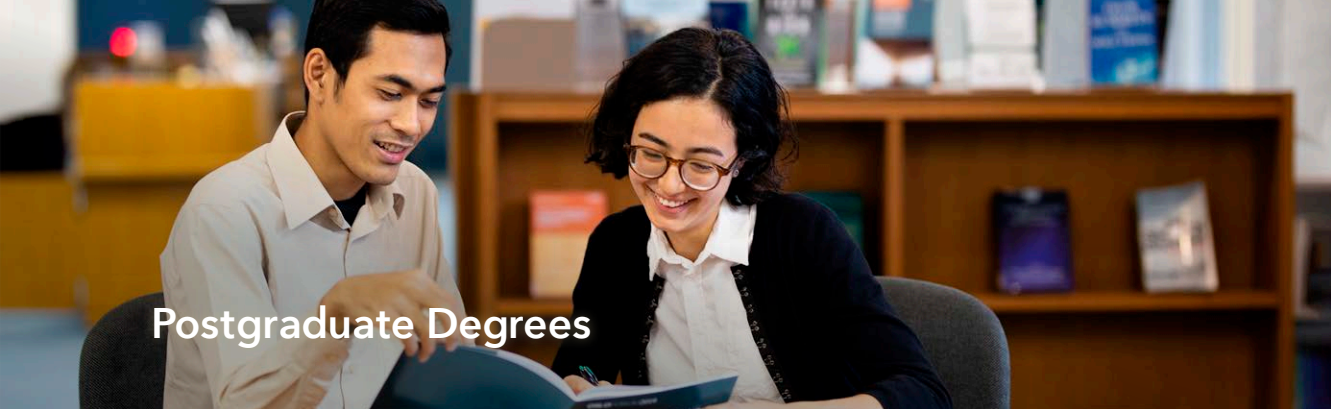


# Postgraduate Education

UNU-IAS educates the policymakers and researchers of tomorrow through a variety of teaching and training courses. They equip future leaders with the knowledge and adaptive capabilities to pave the way in global efforts towards a more sustainable future. The institute offers Master's and PhD degree programmes, and short intensive courses conducted in collaboration with leading universities in Japan and other countries. Postdoctoral fellowships provide recent PhD graduates with opportunities to contribute and engage in extended research as part of the institute's projects.

UNU-IAS students and fellows benefit from the unique learning environment of a global university within the UN system, with access to leading scholars and practitioners, as well as international events. Active engagement in UNU-IAS research projects develops applied skills, while networks and partner institutions provide opportunities for field experience in developing countries.





# Postgraduate Degrees

UNU-IAS offers an MSc in Sustainability and a PhD in Sustainability Science. The courses are taught by a diverse faculty comprising both UNU-IAS academic staff and visiting scholars from other leading academic institutions in Japan and international organisations. They are the only programmes of UNU that confer standalone postgraduate degrees.

Studying at a global university within the UN system brings unique opportunities to interact with leading researchers, policymakers, diplomats, and practitioners, and to participate in high-level international events. At the same time, the global networks of UNU-IAS enable students to engage in collaborative research and gain practical experience. The institute’s location in central Tokyo, at the heart of the city’s international community, brings a wide variety of enriching educational opportunities and cultural experiences.

Exchange agreements allow the transfer of credits with the University of Tokyo (UTokyo), International Christian University (ICU), and Sophia University. UNU-IAS has also been implementing joint diploma programmes with Sophia University and UTokyo (see below). A range of scholarships are provided to support outstanding students, from the Japan Foundation for the UNU (jfUNU), the UNU Office of the Rector, UNU-IAS, Asian Development Bank (ADB), and Resona Bank.

UNU-IAS delivered 15 courses during the academic year 2019-2020. As part of the institute’s response to COVID19, from April all courses and supervision were delivered online or through hybrid arrangements.

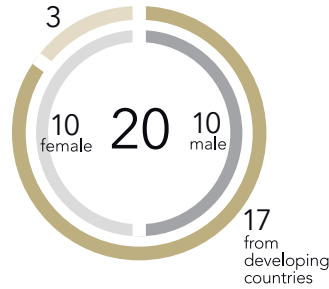
The new course *Environmental Science for Sustainability* was added to the curriculum for the MSc and PhD programmes. It develops understanding of global issues in the field of environmental science including climate change, water, solid waste, air pollution, land use, agriculture, energy, biodiversity and natural resources, as well as links between these issues.

### MSc in Sustainability

The UNU-IAS *Master of Science in Sustainability* equips students with the knowledge and skills necessary to contribute to solving challenges of sustainability. Designed for recent graduates, professionals and practitioners, the two-year programme addresses sustainability through an interdisciplinary approach, engaging the global network of UNU-IAS partner institutions. To date, the programme and its antecedents have produced 110 graduates since 2010.

Students enrolled in this programme can take courses at UNU-IAS and partner universities in Japan. Successful completion of the programme requires students to earn at least 30 credits, including compulsory courses, specialised elective courses, research seminars,

### MSc in Sustainability



Student Enrolment (as of December 2020)



and a master's thesis. Students are eligible for a Joint Diploma in Sustainability Science offered by UNU-IAS and the UTokyo Graduate School of Frontier Sciences, and a joint diploma programme with Sophia University.

A double master's degree with the UTokyo Department of Urban Engineering (part of the Graduate School of Engineering) is offered as a three-year programme. Students who are admitted by both universities study for two years at UTokyo, obtaining a Master of Engineering degree, and then spend a final year at UNU-IAS, obtaining a Master of Science in Sustainability degree.

Eleven students successfully completed the Master of Science in Sustainability programme, graduating in July. Ten new students were enrolled in the programme in September, of whom seven are receiving scholarships – two JfUNU scholarships, two ADB scholarships, two UNU Rector's Scholarships, and one Resona Bank scholarship.

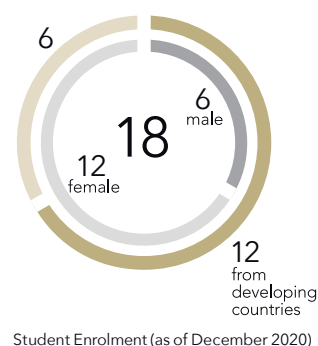
### PhD in Sustainability Science

The UNU-IAS *PhD in Sustainability Science* aims to develop leading researchers in the interdisciplinary field of sustainability science. The three-year programme seeks to promote a better understanding of sustainability challenges by incorporating global change perspectives, specifically those related to climate change and biodiversity. Through coursework and problem-oriented research, students develop critical thinking and problem-solving skills, as well as the technical literacy required to address sustainability challenges. To date, the programme has produced 13 graduates since 2012.

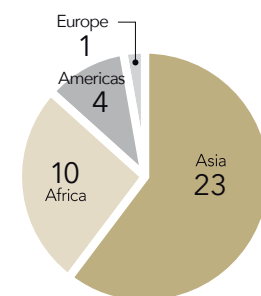
Students are required to earn 14 credits and complete a PhD dissertation under one of several UNU-IAS research themes focusing on global change and sustainability. A Joint Diploma in Sustainability Science, developed by UNU-IAS and the UTokyo Graduate School of Frontier Sciences, is available to students of the programme, as well as a joint diploma with Sophia University.

Three students successfully completed the PhD in Sustainability Science programme during 2020. Seven new students were enrolled in September, of whom two are recipients of a scholarship from JfUNU.

### PhD in Sustainability Science



### Students by Region of Origin, 2020



# Short-term Courses

These short courses provide innovative stand-alone study opportunities for professionals. Many of them also serve as core components of the UNU-IAS postgraduate degree programmes and provide credits towards degrees at partner universities.

## Intensive Core Courses

Organised by UNU-IAS each September, the IC courses are unique in their extensive engagement of invited scholars and practitioners as guest lecturers, many of whom are experienced UN professionals, to provide students with insights into relevant policy issues and practical challenges. The 2020 Intensive Core (IC) Courses were held on 1-29 September, providing 37 students from 23 countries (24 from Asia, 8 from Africa, 3 from the Americas, and 2 from Europe) with opportunities to learn about essential theories and multilateral approaches to issues of sustainability and development, from interdisciplinary perspectives.

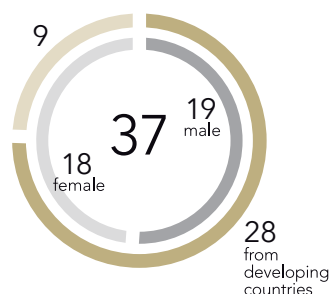
A new course was launched, Principles of International Development Projects, which educates students in the design, implementation, and evaluation of projects in developing countries. It includes a practical exercise in which groups of students develop their own project proposals to meet the development needs of specific countries, considering their economic, social, and political contexts.

Three courses were offered over the four-week period:

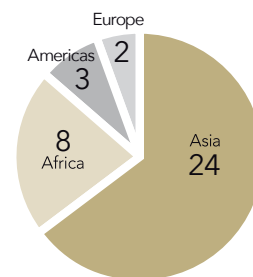
1. The UN System and Sustainable Development
2. Global Change and Planetary Boundaries
3. Principles of International Development Projects

An additional course “Principles of Sustainable Finance, ESG Investing, and SDG Business Management” was developed for implementation in 2021, which will be organised as an evening class for participants from businesses and government.

Intensive Core Courses Students, 2020



Intensive Core Courses Students by Region, 2020





# Capacity Development

## PROJECT

### **Global Leadership Training Programme in Africa (GLTP)**

This initiative facilitates knowledge exchange between Japan and Africa to contribute towards solving sustainable development challenges on the continent. It provides opportunities for postgraduate students from Japan to conduct fieldwork at partner institutions in Africa. Since its launch in 2013, GLTP has supported 66 students in their studies in 13 different African countries, with a diverse range of research topics. In 2020 UNU-IAS conducted a comprehensive analysis of their findings, revealing that most have contributed towards achieving SDG 2 (zero hunger) and SDG 13 (climate action), followed by SDGs 4 (quality education), 6 (clean water & sanitation), 1 (no poverty), 11 (sustainable cities & communities), and 12 (responsible consumption & production). The analysis underlined the success of GLTP in building skills and networks for localising the SDGs in Africa. As of April 2021 GLTP alumni were employed in the private sector (36%), universities and research institutes (34%), governments and international organisations (26%), and non-profit organisations (4%).

## RESEARCH

### **Grant for Global Sustainability (GGS)**

This initiative builds collaboration with research and educational institutions in Japan to contribute to the 2030 Agenda. It focuses on four themes: inclusive education, resilience, earth system challenges, and gender equality, integrating the results into UNU-IAS programmes and policy engagement. Seven projects have been implemented since 2015, with grants financed by the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT). A workshop on 2 October evaluated the results of projects on skills training in Africa (Nagoya University), biodiversity indicators for forest certification in Indonesia and Malaysia (Kyoto University), and adaptation to rising sea levels in the Marshall Islands (Ibaraki University).

## FELLOWSHIP

### **JSPS-UNU Postdoctoral Fellowship**

This initiative provides young scholars and policymakers, especially those from the developing world, with opportunities to pursue advanced research and training that is of direct relevance to the research agenda of UNU-IAS. The 24-month fellowships are jointly organised by UNU-IAS and the Japan Society for the Promotion of Science (JSPS). Fellows participate in UNU-IAS lectures, seminars, workshops, and conferences, and benefit from the institute's close institutional links with key universities and think tanks in Japan and around the world. During 2020, fellows conducted research on a wide range of topics including socio-ecological production landscapes, sustainable management and use of water, and multi-stakeholder partnerships for the SDGs.

# Communications & Outreach

UNU-IAS disseminates information about its research and activities through public events held in Tokyo and around the globe, as well as through print and electronic media. These efforts seek to inform policymakers, practitioners, and scholars about relevant UNU-IAS research, while introducing broader audiences to its efforts in addressing current and emerging issues, increasing engagement and forming partnerships for the SDGs.

## Public Events

UNU-IAS conferences, symposiums, workshops, and seminars bring together a diverse array of international experts, businesspeople, community leaders, and students to discuss topics related to sustainability. Held at UNU headquarters in Tokyo, and in other locations across the globe, these events advance debate, raise public awareness, and develop networks for research and policy development.

Sixty-seven public events were organised during 2020, engaging over 6,400 participants. In addition to the events featured in the preceding sections, they included:

- World Wetlands Day 2020, “Wetlands & Biodiversity” (1 February)
- 5th National Youth Environmental Activity Presentation Contest & Workshop (9-10 February)
- Creating Shared Value in Local Communities by utilising Science, Technology and Innovation (13 February)
- Online Reporting Session on the Results of the 2nd Meeting of the Open-Ended Working Group on the Post-2020 Global Biodiversity Framework (26 March)
- Climate Action and Disaster Risk Reduction (30 June)
- Sustainable Lifestyles for a Green Recovery: COVID-19 & the SDGs (6 October)
- Building Back Better with Globally Important Agricultural Heritage Systems (GIAHS) from the COVID-19 Pandemic (6 November)

## Publications

Publications by UNU-IAS researchers in 2020 included 36 articles in peer-reviewed scientific journals, as well as policy briefs, working papers, books, articles in magazines and newspapers, website articles, conference papers, videos, and podcasts. A selection of these is listed below.

### *UNU-IAS Policy Briefs*

Launched in 2015, the UNU-IAS Policy Brief series presents analysis and policy recommendations for addressing sustainability challenges, in an accessible format. Each brief informs high-level debates, enhances research uptake, and provides actionable recommendations for decision makers at the global, national, and local levels.

- Building Local Resilience Platforms for Disaster Risk Reduction (No. 22, 2021)
- Landscape Approaches for the Post-2020 Biodiversity Agenda: Perspectives from Socio-Ecological Production Landscapes & Seascapes (No. 21, 2020)
- Sustainable Land Management in Asia: Applying a Land-Use Function Approach (No. 20, 2020)
- “Local Implementation of the 2030 Agenda in the Arab World: Addressing Constraints & Maximising Opportunities” (No. 19, 2020)

## **Books**

Recent books produced by UNU-IAS researchers include:

- *Climate Change Research, Policy and Actions in Indonesia* (Springer, Cham; October 2020)
- *Thirty Innovations Linking DRR with SDGs* (UNU-IAS et al.; March 2020)
- *Sharing Ecosystem Services: Building More Sustainable and Resilient Society* (Springer Singapore; January 2020)

## **Sustainability Science Journal**

The scientific journal *Sustainability Science* is a collaborative initiative of UNU-IAS and the UTokyo Institute for Future Initiatives (IFI), published by Springer. It has developed a profile as one of the leading journals in the field, with an impact factor of 5.301 (2019 data) and a global ranking of 15th in the Sustainable Development category (Google Scholar). A total of 123 articles were published in 2020, and special features produced on topics such as interactions between SDGs, sustainable landscape management, and the "blue economy".

## **Global Environment Outreach Centre (GEOC)**

This joint initiative of UNU-IAS and the Ministry of the Environment of Japan (MOEJ) supports activities in various social sectors towards sustainability within and beyond Japan, through the establishment and maintenance of multi-stakeholder partnerships. It plays an important role in the communications and outreach efforts of UNU-IAS.

During 2020 the centre organised seven public events and supported a further three, addressing a range of topics of relevance to policymakers, civil society, businesses, and UN organisations. These include the Post-2020 Global Biodiversity Framework, the role of sports in achieving the SDGs, localisation of the SDGs through action by youth, and green recovery. In addition, the centre implemented the online campaign #Biodiversity2020 to promote action on biodiversity, which shared information on over 80 relevant activities including UNU-IAS events, videos, and articles.

## **Online Outreach**

During 2020 the UNU-IAS website ([ias.unu.edu](http://ias.unu.edu)) received 375,000 pageviews, with the top countries for visitors including India, Japan, Kenya, Nigeria, and the United States. UNU-IAS also increased its social media presence, with over 7,700 "likes" on Facebook and 3,000 followers on Twitter in 2020.

## **Media Coverage**

UNU-IAS activities were featured by media outlets including Toyo Keizai Inc., Kyodo News, The Japan Times, The Yomiuri Shimbun, The Himalayan Times, The Hindu, and The Times of India. The institute's Operating Unit Ishikawa/Kanazawa (OUIK) also received local coverage in NHK News, the Hokuriku Chunichi Shimbun, and the Hokkoku Shimbun, among others.

# UNU-IAS Board Members, 2020

**Prof. Maria Ivanova** (Bulgaria) CHAIR

Associate Professor of Global Governance and Director of the Center for Governance and Sustainability at the University of Massachusetts Boston

**Mr. Mitsuo Kojima** (Japan)

President & Representative Director, Affirmative Investment Management Japan Inc.

**Dr. Philip Osano** (Kenya) VICE-CHAIR

Centre Director, Stockholm Environment Institute Africa

**Ms. Helene Von Reis** (Sweden)

President CEO & CSO (Chief Sustainability Officer), IKEA Japan K.K.

Members of the UNU-IAS Board serve in their individual capacity, and are appointed by the Rector of UNU, in consultation with the UNU Council. The Rector of UNU and the Director of UNU-IAS are *ex-officio* members of the Board.

During 2020, meetings of the Board were held on 6 March and 19-20 November, in Tokyo and through videoconferencing.

## Financial Support

Contributions over USD 20,000

- ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)
- Asian Development Bank
- Government of Japan – Ministry of Education, Culture, Sports, Science and Technology (MEXT)
- Government of Japan – Ministry of the Environment (MOEJ)
- Ishikawa Prefecture
- Japan Society for the Promotion of Science (JSPS)
- Kanazawa City
- Keio University, Keio Research Institute at SFC
- National Institute for Environmental Studies (NIES)
- Resona Holdings, Inc
- Rural Development Administration of the Republic of Korea (RDA KOREA)
- The Japan Foundation for the United Nations University (jfUNU)
- University of Tokyo

***End of Report***