

United Nations University
Institute for the Advanced Study of Sustainability

2019 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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THE GLOBAL GOALS
For Sustainable Development

Director's Message



It is my great pleasure to introduce this report as the new Director of UNU-IAS. Since joining the institute in Autumn 2019, I have seen its diverse activities in both research and education. As Director I am fortunate to be building on the strong foundations developed by UNU-IAS since its inception in 2014. Throughout my career I have witnessed UN initiatives lead to remarkable progress in human development and other spheres. Leading the institute now presents a unique opportunity to accelerate the global effort towards achieving the Sustainable Development Goals (SDGs), helping to build a more sustainable future for all.

2019 was an important year in contributing to major international policy frameworks. Among the many highlights, UNU-IAS played an active role in formulating the Post-2020 Global Biodiversity Framework, and contributed to scientific assessments of biodiversity by the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). Guidelines were produced for the incorporation of landscape management approaches in national biodiversity strategies and plans. Research on climate change and disaster risk reduction (DRR) contributed to reports of the Intergovernmental Panel on Climate Change (IPCC) and UNEP, and produced publications in leading scientific journals. The institute also strengthened capacity for DRR in ASEAN countries through training disaster management officials.

UNU-IAS provided policy input for the next global framework on Education for Sustainable Development, "ESD for 2030", which will be launched in June 2020. The institute's ESD networks, including the 147 Regional Centres of Expertise on ESD (RCEs) fostered local solutions for sustainability across the globe. UNU-IAS advanced implementation of the 2030 Agenda for Sustainable Development through policy dialogue and work on localisation. This included the launch of the Mayors Academy for Sustainable Urban Development in the Asia-Pacific, an innovative new training initiative with UN and civil society partners. In promoting local use of biocultural resources, the institute's Operating Unit in Kanazawa City, Ishikawa Prefecture, Japan (OUIK) developed its research collaboration with Stockholm Resilience Centre on green infrastructure.

The institute continued to educate the next generation of policymakers and researchers through its master's and doctoral programmes, short courses, and capacity building initiatives. At the 7th Tokyo International Conference on African Development (TICAD VII), students from our Global Leadership Training Programme in Africa contributed on health, education, and economic transformation. The quality and diversity of student research were showcased through the first ever Sustainability Science Research Symposium, which was organised with our partner universities in Japan.

UNU-IAS also delivered expert training for officials of the Government of Japan, as part of a three-day UNU course in December. Our researchers led interactive workshops on ESD, the SDGs, and climate change, with 22 participants from the Ministry of Foreign Affairs and the Ministry of Education, Culture, Sports, Science and Technology, among others.

2020 and Beyond

Building on these activities and achievements, I am excited to lead our institute into this new era. We have a great opportunity to further the potential of UNU-IAS, advancing research and education on sustainability for the benefit of our common future.

Our work in the months and years ahead will be focused on the effort to achieve the SDGs by 2030, addressing many of the goals and developing synergies between them. With new global policy frameworks due to be adopted for education and biodiversity, we will be actively contributing to these international processes. In addressing other key agendas including climate change and DRR, UNU-IAS will be developing new research areas such as innovation and technology for resilience.

We will be strengthening our postgraduate degrees by expanding the range of courses for our students, our partner institutions, and broader audiences. With increasing interest among Japanese universities in incorporating the SDGs in their research and education, UNU-IAS will develop the SDGs and University Platform. A series of workshops will highlight good practices and discuss further opportunities for universities to contribute on the SDGs. This will also instil the values, knowledge, and understanding of sustainability for future generations.

These activities will be developed under a new strategic direction. In particular, to enhance the impact of our work it is critical that we foster expanded partnerships with research institutions, Member States, and civil society organisations. We will mobilise these networks across the globe in developing evidence-based policies and programmes.

In my first few months leading UNU-IAS, it has been a privilege to work with its researchers, staff, and students, whose commitment and contributions I deeply appreciate. I would also like to acknowledge and thank the institute's many partners, donors, and friends for their support and cooperation.

As we enter this exciting new phase in the evolution of UNU-IAS, I am very much looking forward to working with you all in pursuit of a more sustainable future for people and our planet.

Shinobu (Yume) Yamaguchi

Director, UNU-IAS

About UNU-IAS

The United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS) is a leading research and teaching institute based in Tokyo, Japan. Its mission is to advance efforts towards a more sustainable future, through policy-oriented research and capacity development focused on sustainability. UNU-IAS serves the international community through valuable and innovative contributions to high-level policymaking and debates, addressing priority issues for the UN system.

The activities of the institute are in three thematic areas: sustainable societies, natural capital and biodiversity, and global change and resilience. UNU-IAS applies advanced research methodologies and innovative approaches to challenge conventional thinking and develop creative solutions to emerging issues of global concern in these areas. The institute's research, education, and training combine expertise from a wide range of areas related to sustainability, and engage a global network of scholars and partner institutions.

Through postgraduate teaching UNU-IAS produces 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 Sustainable Societies

Exploring transformations through which societies can become more environmentally, socially, and economically sustainable

2 Natural Capital and Biodiversity

Promoting the sustainable use of biodiversity and ecosystems to secure their benefits for current and future generations

3 Global Change and Resilience

Developing approaches to address climate change, build community resilience, and reduce disaster risks

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 (OUIK; see page 14). OUIK engages in research and policy development focusing on the sustainable use of biocultural diversity. It was established in April 2008 with support from the governments of Ishikawa Prefecture and Kanazawa City.

* UNU-IAS was formed through the consolidation of two previous UNU institutes: the UNU Institute of Advanced Studies (based in Yokohama), and the UNU Institute for Sustainability and Peace (based in Tokyo). UNU-IAS builds on the strong foundations of these two previous institutes, and of more than 40 years of UNU academic work.

Staffing

As of December 2019, UNU-IAS had a staff of 59, comprising nationals of 11 different countries. Women constituted 68% 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.

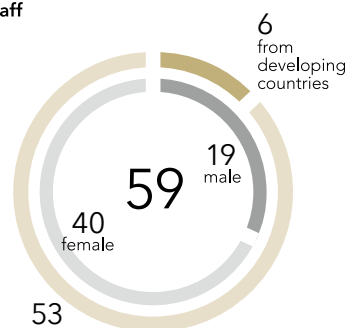
Financing

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. The board meets once a year, with the 2019 meeting held on 31 October – 1 November. A list of board members is provided on page 25.

Staff



Highlights



SUSTAINABLE DEVELOPMENT

The 2030 Agenda on Sustainable Development

During 2019 UNU-IAS research and policy development continued to advance implementation of the 2030 Agenda and efforts to achieve the Sustainable Development Goals (SDGs). Side events at the High-Level Political Forum on Sustainable Development (HLPF) in July and September presented the institute's research on landscape management and Governance for Sustainable Development (GSD). A UNU-IAS Policy Brief (No. 18) provided recommendations for accelerating progress on the SDGs, based on analysis of 99 recent Voluntary National Reviews by UN Member States.

At the regional level, UNU-IAS worked with the UN Economic and Social Commission for Asia and the Pacific (UN-ESCAP) and the Government of Indonesia to produce tailored guidelines for multi-stakeholder partnerships on the SDGs in the country. UNU-IAS, UN-ESCAP, UN-Habitat, and other partners launched the Mayors Academy for Sustainable Urban Development in the Asia-Pacific, to build a network of local leaders. Mayors from across the region joined training sessions at the Asia-Pacific Urban Forum (Bangkok, October) and the 10th World Urban Forum (Abu Dhabi, February 2020), among others.

The institute's Education for Sustainable Development (ESD) project provided policy inputs for the formulation of the next global framework, ESD for 2030. As part of the project UNU-IAS organised events across the globe focused on harnessing education for the SDGs. Research on Water for Sustainable

Development (WSD) was presented at World Water Week in Stockholm, through a side event on water security jointly organised with two other UNU institutes. WSD workshops engaged local stakeholders in Indonesia and Nepal, with further case study locations identified in India and the Philippines.

Read more:

Governance for Sustainable Development ► pg. 11

Education for Sustainable Development ► pg. 11

Water for Sustainable Development ► pg. 12

BIODIVERSITY AND ECOSYSTEMS

The Convention on Biological Diversity (CBD) and the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES)

The UNU-IAS Natural Capital and Biodiversity (NCB) programme informed and supported efforts by Member States to achieve the Aichi Biodiversity Targets by 2020, as well as the formulation of the Post-2020 Global Biodiversity Framework. Through its International Satoyama Initiative (ISI) project, UNU-IAS submitted three proposals to the CBD Secretariat focused on the contents and structure of the post-2020 framework. An ISI expert workshop was held in Kumamoto, Japan in September, and the project actively contributed to CBD regional and thematic consultations throughout the year. UNU-IAS continued to play a key role in IPBES assessments, providing scientific inputs for the Global Assessment on Biodiversity and Ecosystem Services adopted in May at the Seventh IPBES Plenary in Paris.

NCB analysis of national biodiversity strategies and plans produced a manual for policymakers to incorporate landscape management approaches, which was launched in July. The programme's research on future scenarios for biodiversity and ecosystem services in Japan produced a special feature of the journal *Sustainability Science* in January, and a Springer e-book in February 2020. Other publications included the fifth issue of the Satoyama Initiative Thematic Review, focused on multiple values associated with sustainable landscapes and seascapes.

The UNU-IAS Operating Unit Ishikawa/Kanazawa (OUIK) worked to localise the SDGs and continued to support policy development on the sustainable use of biological and cultural resources. The unit engaged community stakeholders through events such as an SDGs Café series, and published a practical guidebook on the SDGs for local governments.

Read more:

Ecosystem Service Assessment ► pg. 13

International Satoyama Initiative ► pg. 13

Operating Unit Ishikawa/Kanazawa ► pg. 14

CLIMATE CHANGE & DISASTER RISK REDUCTION (DRR)

The Paris Agreement on Climate Change and the Sendai Framework for DRR

UNU-IAS research and expertise inform assessments of climate change impacts at the national, regional, and global levels, providing key scientific inputs for policymaking. During 2019 the institute's researchers contributed to reports of the Intergovernmental Panel on Climate Change (IPCC) and UNEP, including the sixth edition of the Global Environment Outlook (GEO-6) released in March. Key publications included an article in the journal *Science* following up on the IPCC Special Report on Global Warming of 1.5°C, and a report showcasing 30 innovative technologies and approaches for better understanding and managing disaster risks.

The institute developed capacity for disaster management in developing countries, through a training programme implemented in October for 18 officials from the national disaster management agencies of all ten ASEAN countries. Participants engaged in knowledge exchange with public- and private-sector institutions in Japan and presented at a UNU-IAS public event on resilient infrastructure as part of the global campaign for International Day for DRR.

A project supporting 10 developing countries in Asia to monitor persistent organic pollutants (POPs) was completed, with a conference session organised in Kyoto in August. It produced a region-wide synthesis report, and a UNU-IAS Policy Brief (No. 17) providing recommendations for improving POPs management and monitoring. Other research during 2019 included the formulation of strategies for adaptation to sea level rise in urban atolls, as part of the UNU-IAS Grant for Global Sustainability (GGS) project. Completed in March, it also developed environmental measures to control coral excavation, in response to a request from the local government.

Read more:

Assessment of Disaster and Climate Change Impacts ► pg. 15

Building Disaster Management Capacity ► pg. 15

Monitoring & Management of POPs ► pg. 16

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.



THE GLOBAL GOALS
For Sustainable Development



1 Sustainable Societies

Governance for Sustainable Development (GSD)

This project addresses policymaking processes and governance structures for achieving the Sustainable Development Goals (SDGs). It seeks to strengthen governance at the national and sub-national levels, including multi-stakeholder partnerships to mobilise knowledge, expertise, technology, and financial resources for the SDGs.

A GSD side event at the SDG Summit (High-Level Political Forum on Sustainable Development; HLPF, New York, 23 September) discussed government initiatives and stakeholder partnerships for achieving the SDGs. Recommendations on accelerating SDG progress were presented through a UNU-IAS Policy Brief (No. 18), based on analysis of 99 recent Voluntary National Reviews (VNRs). In the Asia-Pacific region, the GSD project advanced the implementation and localisation of the 2030 Agenda in close collaboration with the UN Economic and Social Commission for Asia and the Pacific (UN-ESCAP). UNU-IAS and UN-ESCAP produced tailored guidelines with the Government of Indonesia for developing multi-stakeholder partnerships on the SDGs, building on regional guidelines that were jointly developed in 2018.

As part of the GSD project, the Mayors Academy for Sustainable Urban Development was launched at the Asia-Pacific Urban Forum (Bangkok, 15 October). With partners including UN-ESCAP and UN-Habitat, it aims to create and support a network of local leaders and mayors in the Asia-Pacific region who will be committed to sustainable urban development. Further training was held in Bangkok (2-5 December) and in Abu Dhabi at the 10th World Urban Forum (9 & 11 February 2020). The GSD project also contributed to advancing the 2030 Agenda at the national and local levels, through research on an integrated implementation methodology for the SDGs. Outcomes included an academic article analysing case studies of Indonesia and Japan, and presentations at a symposium on policy-oriented research for achieving the SDGs (Tokyo, 1 November).

Education for Sustainable Development (ESD)

The ESD project seeks to generate, accelerate, and mainstream education on sustainable development. Its capacity development programmes for policymakers, young professionals, youth, and practitioners spur knowledge generation and learning for transformation. The project comprises two flagship initiatives — a global network of 174 Regional Centres of Expertise on ESD (RCEs), and an alliance of 47 higher education institutions in the Asia-Pacific region, the Promotion of Sustainability in Postgraduate Education and Research Network (ProSPER.Net).

The project continued to advance the global ESD agenda as a member of UNESCO's Partner Networks for the Global Action Programme (GAP) on ESD. It provided policy inputs for the formulation of the post-GAP framework for the period 2020-2030, contributing to UNESCO conferences held in Viet Nam (Hanoi, 2-3 July) and the Republic of Korea (Tongyeong, 25-27 September), among others. Two ESD workshops were organised at the 10th World Environmental Education Congress (Bangkok, 3-7 November), focusing on climate action in education, and community engagement.

In harnessing education for the SDGs, the ESD project shared research findings on local implementation through a side event at the Sixth Asia-Pacific Forum on Sustainable Development 2019 (Bangkok, 27 March). A session at the 11th International Forum for Sustainable Asia and the Pacific (ISAP2019; Yokohama, 30 July) explored the future role of ESD in achieving the SDGs. The project's training activities included the 2019 ProSPER.Net Leadership Programme (Quezon City, Philippines, 24–30 November), which brought together 20 participants from the Asia-Pacific region to learn about disaster risk reduction (DRR) and management in the context of sustainable development. The 2019 ProSPER.Net Young Researchers' School (Yogyakarta, Indonesia, 3–12 March) engaged 21 participants on issues of ecosystem-based DRR and climate adaptation.

Water for Sustainable Development (WSD)

This interdisciplinary project explores the social, economic, and environmental consequences of changes in the quality, quantity, and movement of water. It aims to advance efforts to achieve SDG 6 (clean water & sanitation) and other goals through improved management of water environments, by developing scientific modelling tools and policy options. The project focuses on selected locations in the Asia-Pacific region whose economic activity is tied to watersheds, especially where agriculture, industries, or services linked to nature are the main source of income.

A case study in Bali, Indonesia was completed, with a workshop presenting key findings to policymakers, private sector representatives, and community leaders (26 September). The project's second case study is under way in Nepal, with a workshop in Pokhara municipality engaging over 30 local stakeholders (18 April), and data collection completed in February 2020. Partnerships were negotiated for a further research location in India, with a total of five case studies planned for the project.

WSD research was presented at World Water Week (Stockholm, 25–30 August), through a side event organised with the UNU Institute for Water, Environment, and Health (UNU-INWEH) and the UNU Institute for Integrated Management of Material Fluxes and of Resources (UNU-FLORES). It developed further collaboration with UNU institutes, including a new project on wastewater reuse in the private sector, and with the UN-Water network – securing a role for UNU-IAS in the formulation of the 2021 World Water Development Report.

Grant for Global Sustainability (GGS) — Research on Education & Gender

Through the GGS project UNU-IAS supports research contributing to the 2030 Agenda, awarding grants financed by the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT). Seven research initiatives have been supported, under themes set by UNU-IAS including inclusive education, women's empowerment and gender, and earth system challenges. A monthly online seminar exchanges knowledge between GGS universities, discussing how local GGS research can inform international policy discussions and help to achieve the SDGs.

In the third term of GGS (March 2018 – April 2020), research by the University of Tokyo (UTokyo) Graduate School of Education aims to develop a common international framework and indicators to monitor the progress, learning outcomes, and impact on society of ESD initiatives. During 2019 analysis was conducted of ESD awareness among teachers in Yokohama, to establish a monitoring framework and indicators. The third term also includes research by the UTokyo Graduate School of Medicine in Cambodia, focused on improving maternal and child health and well-being through gender mainstreaming. Data analysis revealed that the coverage rate of maternal and child health differs based on the service types, work style (home-based or neighbourhood) of father and mothers, and participation in public health insurance.



2 Natural Capital and Biodiversity

Ecosystem Service Assessment (ESA)

UNU-IAS research on ecosystem services — the benefits provided by biodiversity to human well-being — advances scientific assessment of these services and develops models to support policymaking for their conservation and sustainable use. Since January 2017, with the support from the Ministry of Environment, Japan (MOEJ), the Predicting and Assessing Natural Capital and Ecosystem Services through an Integrated Social-Ecological System Approach (PANCES) project has been developing national-level future scenarios in Japan. Project meetings were held on Ishigaki Island, Okinawa, and in Tokyo in February, May, September and December, as well as monthly working group meetings engaging key MOEJ policymakers. Publications included a special feature of the journal *Sustainability Science* with 14 peer-reviewed articles, a PANCES policy brief targeting policymakers at the national and local levels, and the e-book “Managing Socio-ecological Production Landscapes and Seascapes for Sustainable Communities in Asia” (Springer, 2020).

UNU-IAS continued to contribute to IPBES assessments, knowledge generation, capacity building, and policy support. The institute provided scientific inputs for the Global Assessment Report on Biodiversity and Ecosystem Services that was adopted at the Seventh IPBES Plenary (Paris, 29 April – 4 May).

International Satoyama Initiative (ISI)

Through research, networking, capacity building, and policy contributions, this project furthers understanding of 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. It hosts the secretariat of the 258-member International Partnership for the Satoyama Initiative (IPSI) and draws on the partnership’s diverse evidence base in contributing to the Convention on Biological Diversity (CBD), IPBES, and related global policy agendas.

The ISI project has been engaged in processes under the CBD to develop the Post-2020 Global Biodiversity Framework, through its contributions to regional and thematic consultations. An ISI expert workshop in Kumamoto, Japan, was recognised as part of this process and organised in conjunction with the Eighth IPSI Global Conference (3–6 September). As outputs of this workshop, recommendations were submitted for improving the contents and structure of the framework, which emphasised the need to include landscape approaches — on the grounds that they can foster transformative change due to the connections between people and nature. These outputs were further shared through a side event at CBD meetings in Montreal (27 November). An ISI side event was organised at the HLPF (New York, 15 July), presenting lessons from the Satoyama Initiative on community-based landscape management.

The fifth issue of the Satoyama Initiative Thematic Review was published in collaboration with the Institute for Global Environmental Strategies (IGES, Japan), presenting case studies from IPSI members on the

theme of “Understanding the multiple values associated with sustainable use in SEPLS”. Research with the CBD Secretariat and the UTokyo Institute for Future Initiatives produced a manual for integrating landscape approaches in National Biodiversity Strategies and Action Plans (NBSAPs) and related policies. The draft manual was shared at an ISI workshop in Tokyo (25–26 July) and several CBD meetings, and will be further developed ahead of the next UN Biodiversity Conference (CBD COP15).

Agricultural Heritage Systems

This project analyses the characteristics and sustainability of sites designated by the FAO as Globally Important Agricultural Heritage Systems (GIAHS) and develops conservation management indicators. In collaboration with the Rural Development Administration (RDA) of the Republic of Korea, it aims to develop a guidance manual for the monitoring and evaluation of GIAHS. A public symposium in Ishikawa, Japan (30 October) reported findings on the role of GIAHS in achieving the SDGs, and on how the SDGs can be used in the monitoring and evaluation of GIAHS conservation — an emerging area of international research on GIAHS. The publication “Sustainability in Traditional Agriculture: Japan’s Socio-Ecological Production Landscapes and Seascapes designated as GIAHS” was produced through collaboration between UNU-IAS PhD candidates and UTokyo.



Operating Unit Ishikawa/Kanazawa (OUIK)

This UNU-IAS unit supports policy development for the integrated conservation and sustainable use of biological and cultural resources, working closely with the governments of Ishikawa Prefecture and Kanazawa City in Japan, as well as international partners such as the CBD Secretariat, FAO, and UNESCO. The unit has also developed collaboration with Stockholm Resilience Centre on joint research and publications focusing on biocultural diversity.

OUIK has been localising the SDGs by working with a wide range of community stakeholders including businesses, educational institutions, and local municipalities. During 2019 the unit organised numerous collaborative workshops, seminars, field visits, and lectures designed to promote citizen involvement in the SDGs, including an SDGs stakeholders meeting for the Hokuriku region of Japan (17 December). OUIK published a practical guidebook on the SDGs for local governments and organised a series of “SDGs Cafés” to engage the local community on topics ranging from climate change action, community development and culture, to an SDGs action plan for Kanazawa. The unit presented research on sustainable conservation of cultural landscapes at the International Federation of Landscape Architects (IFLA) Conference in Seoul, Republic of Korea (16–20 November).

Research on sustainable cities produced the book “Restoring Kinship with Nature through Japanese Gardens”, the fifth in the OUIK Biocultural Diversity series, which was launched in Kanazawa on 6 July.



3 Global Change and Resilience

Assessment of Disaster and Climate Change Impacts

The research and expertise of UNU-IAS contribute to assessments of climate change impacts at the national, regional, and global levels, providing key scientific inputs for policymaking. The institute's interdisciplinary approach and global networks bring valuable perspectives and insights to these processes, focusing on topics such as adaptation, vulnerability, and impacts on natural and human systems. During 2019 UNU-IAS contributed to reports of the Intergovernmental Panel on Climate Change (IPCC) and UNEP, including the sixth edition of the Global Environment Outlook (GEO-6) released in March.

Key publications during 2019 included the journal article "The human imperative of stabilizing global climate change at 1.5°C" (*Science* 365), and a report on "Thirty Innovations for Disaster Risk Reduction".

Building Disaster Management Capacity

UNU-IAS developed and implemented a capacity-building programme for 18 officials from the national disaster management agencies/ministries of all ten ASEAN countries (21–29 October). Organised in collaboration with the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre), it engaged participants in knowledge exchange with government ministries, research institutions, private companies, and civil society organisations within Japan. The participants also delivered presentations at a UNU-IAS public event (29 October), as part of the global campaign for International Day for DRR, focusing on resilient critical infrastructure.

Grant for Global Sustainability — Research on Adaptation to Sea-Level Rise

In the second term of the GGS project (see page 12), research implemented by Ibaraki University focused on strategies for adaptation to sea level rise in urban atolls. Completed in March, it developed and implemented environmental measures and technologies to conserve and rehabilitate natural processes of island formation in Majuro Atoll, the Marshall Islands. The research also developed methods to reduce pollution loads in septic tanks and sewage pipelines, and a model to predict their effects on water quality in lagoons. In response to a request from the local government, environmental measures were developed to control coral excavation, among others. The progress and outcomes of the research were presented and discussed with other GGS partners through the GGS-SDGs monthly online seminar in March.

Ecosystem-Based Disaster Risk Reduction

UNU-IAS is exploring the capacity of ecosystems to mitigate disasters and support local communities in adapting to disaster risks, through research on ecosystem-based disaster risk reduction (eco-DRR). It seeks to develop practical, nature-based solutions for implementation of eco-DRR in local communities based on visualisation of disaster risks, evaluation of multiple ecosystem functionalities, and scenario analysis.

Monitoring and Management of Persistent Organic Pollutants in Asia (POPs)

This project provided 10 developing countries in Asia with scientific knowledge and technology to monitor persistent organic pollutants (POPs) in the environment, and established monitoring networks. It was completed in 2019, with results and achievements presented in a special session at the 39th International Symposium on Halogenated Persistent Organic Pollutants (DIOXIN2019) in Kyoto, Japan (26 August). Recommendations were disseminated to policymakers through a UNU-IAS Policy Brief (No. 17), focusing on how to improve POPs management and monitoring at both local and international levels. Based on monitoring reports from each of the participating countries, UNU-IAS produced a synthesis report on region-wide analysis of PFCs in the environment. The project also supported participating countries in their reporting under the Stockholm Convention on POPs.





Postgraduate Education & Capacity Development

UNU-IAS educates the policymakers and researchers of tomorrow through various teaching and training courses. These future leaders are equipped with the knowledge and adaptive capability of paving 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 are also available for 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.

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 students also have access to the library collections of several leading Japanese universities, as well as the Japan International Cooperation Agency (JICA), through cooperation agreements.

A range of scholarships are provided to support outstanding students. In 2019 the new Resona Bank scholarship was established, supporting one master's degree student.

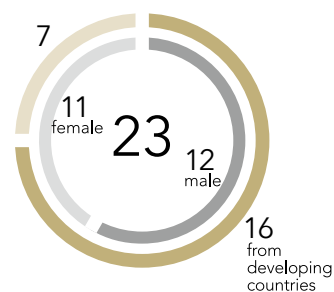
As a new initiative in 2019 UNU-IAS students planned and organised the first Sustainability Research Symposium, on the theme "To 2030 and Beyond: Visions of the Future through Sustainability Science Research" (4 July). Students of UNU-IAS and partner universities presented and discussed their research with more than 80 people from academia, the private sector, governments and NGOs.

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 99 graduates since September 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, and a master's thesis. Students are eligible for a joint diploma

MSc in Sustainability



Student Enrolment (as of December 2019)

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 was launched toward the end of 2019 with the UTokyo Department of Urban Engineering (part of the Graduate School of Engineering). Under the three-year programme students who are admitted by both universities will 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.

Ten students successfully completed the Master of Science in Sustainability programme in July. Nine new students were enrolled in the programme in September, of whom eight are receiving scholarships — two Japan Foundation for the UNU scholarships, two Asian Development Bank scholarships, two UNU Rector's Scholarships, one Resona Bank scholarship, and one GI Bill scholarship.

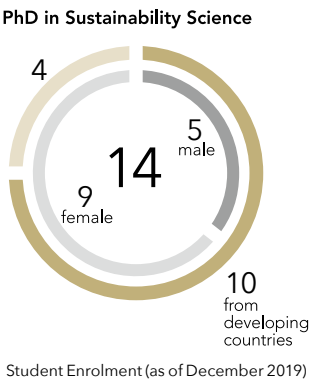
On 6-7 April UNU-IAS co-organised a simulation exercise engaging 50 students from four UNU institutes, including three UNU-IAS master's degree students. The participants took on roles as UN Member States and international organisations, in a scenario involving the UN Peacebuilding Commission addressing conflict in Colombia and the Sahel region. Building on the first simulation held the previous year, the 2019 exercise was hosted by the UNU Maastricht Economic and Social Research Institute on Innovation and Technology (UNU-MERIT), and co-organised by the UNU Institute on Comparative Integration Studies (UNU-CRIS; Bruges), the UNU Institute for Environment and Human Security (UNU-EHS; Bonn), UNU-MERIT, and UNU-IAS.

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 11 graduates since September 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.

One student successfully completed the PhD in Sustainability Science programme during 2019. Three new students were enrolled in September, of whom two are recipients of a scholarship from JFUNDU.



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.

UNU Intensive Core Courses

Held at UNU-IAS in Tokyo (2-27 September), these courses have been organised annually by UNU since 2000. The 26 participants included students of the UNU-IAS postgraduate degree programmes, students from partner universities, and individuals from other institutions. The 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.

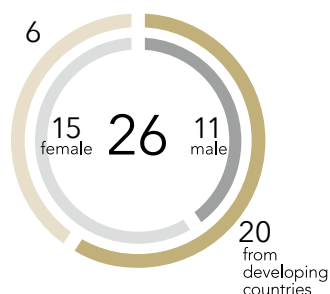
Three courses were offered over the four-week period:

1. The UN System and Sustainable Development
2. Global Change and Planetary Boundaries
3. Natural Capital and Biodiversity

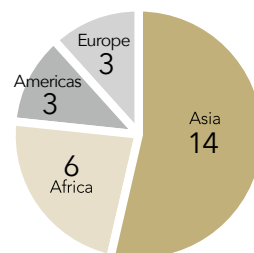
UNU Global Seminar 35th Shonan Session — “Global Actions against International Terrorism”

This seminar has been organised each year since 1985 in Shonan, Japan, with the aim of enhancing awareness among students of the role of the United Nations in addressing global issues. The 35th session focused on the topic “Global Actions against International Terrorism”, engaging 91 students from various universities across Japan (26-29 August). Keynote lectures were delivered by experts from the National Defense Academy, Japan and the UN Counter-Terrorism Committee Executive Directorate. The session was organised by UNU-IAS and the Kanagawa International Foundation (KIF), in cooperation with 10 Japanese universities.

Intensive Core Courses
Students, 2019



Intensive Core Courses
Students by Region, 2019

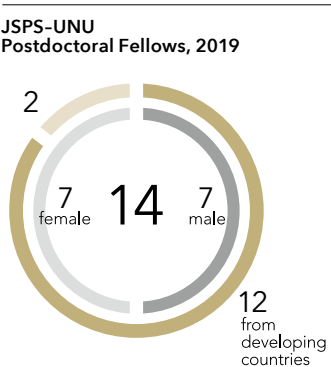


Fellowships

JSPS-UNU Postdoctoral Fellowships

UNU-IAS offers Postdoctoral Fellowships to provide 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 institute’s research agenda. 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.

The 24-month JSPS-UNU Postdoctoral Fellowships are jointly organised by UNU and the Japan Society for the Promotion of Science (JSPS). In 2019 JSPS-UNU Postdoctoral Fellows conducted research on diverse policy-relevant topics, such as climate change & disaster risk reduction, gender & the SDGs, sustainable water management, resilience and ecosystem services assessment, socio-ecological production landscapes, and governance for sustainable development.



Project-based Capacity Development



Global Leadership Training Programme in Africa (GLTP)

With the support of MEXT, the GLTP project provides the opportunity for graduate students in Japan to conduct fieldwork at partner institutions in Africa. The aim of the programme is to enhance skills and knowledge of Japanese postgraduate students toward solving sustainable development challenges in Africa. In 2019, 10 students were selected to study at five institutes in Kenya, Malawi, South Africa, Uganda, and Zambia. A final reporting session was organised by UNU-IAS and held on 21 June, which allowed for students to share their research findings and field experiences.



As part of the GLTP project, UNU-IAS organised a side event at the Seventh Tokyo International Conference on African Development (TICAD 7; Yokohama, 30 August), presenting the outcomes of the project to date, together with publication of a summary report. The report structured the study results of all 57 GLTP graduates to date under the three pillars of the TICAD 6 Nairobi Declaration: (i) economic transformation, (ii) resilient health systems, and (iii) social stability for shared prosperity.

A collection of overlapping, semi-transparent geometric shapes in various colors including yellow, green, blue, and red, located in the top right corner of the page.

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.

Over 70 public events were organised during 2019, including:

- Building Vibrant Communities and Dynamic Partnerships for the SDGs (1 January)
- World Water Day 2019 Symposium: The World's Water in the Era of the SDGs (22 March)
- International Day for Biodiversity Symposium: Biodiversity, Food, & Health (11 May)
- World Innovation Symposium on Human Behaviour: In Pursuit of Achieving the SDGs (24 May)
- International Forum for Sustainable Asia and the Pacific (ISAP 2019; 30-31 July)
- How Can Creative Cultures Help the Sustainability of Cities? (16 October)
- Achieving SDGs through the Conservation of GIAHS (30 October)
- The Future of Policy-Oriented Research for Achieving the SDGs (1 November)
- When Climate & Conflicts Collide – Expert Talk & Film Screening (22 November)
- Future Expectation for RCEs with ESD for 2030 (23 November)
- 15th ASEF Classroom Network Conference: “ESD and AI: the Role and Readiness of Teachers” (25-29 November)
- Climate & SDGs Synergy Approach – Achieving Decarbonised Society & Securing Human Well-being (11 December)

Publications

Publications by UNU-IAS researchers in 2019 included 41 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.

Recent UNU-IAS Policy Briefs include:

- “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)
- “Governance and National Implementation of the 2030 Agenda: Lessons from Voluntary National Reviews” (No. 18, 2019)
- “Managing Persistent Organic Pollutants in the Asia-Pacific Region: A Multi-Level Approach” (No. 17, 2019)

Books

Recent books produced by UNU-IAS researchers include:

- Sharing Ecosystem Services: Building More Sustainable and Resilient Society (Springer Singapore)
- Thirty Innovations for Disaster Risk Reduction (Keio University, UNU-IAS, UTokyo, and CWS Japan)
- Thirty Innovations Linking DRR with SDGs (Keio University, UNU-IAS, UTokyo, and CWS Japan)

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. The journal creates a transdisciplinary academic structure and discovery process that fuses the natural sciences, social sciences, and humanities. It has developed a profile as one of the leading journals in the field, with an impact factor of 4.669 (2018 data) and a global ranking of 18th in the Sustainable Development category (Google Scholar). A total of 128 articles were published in 2019, and special features produced on the topics “Future Scenarios for Socio-ecological Production Landscapes and Seascapes”, “Sense of Place in Social-ecological Systems”, “The Politics of Making and Un-making Sustainable Futures”, and “Theoretical Traditions in Social Values for Sustainability”.

Global Environment Outreach Centre (GEOC)

This joint initiative of UNU-IAS and the Ministry of the Environment of Japan (MOEJ) aims to support 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.

GEOC events during 2019 included the following:

- Seminar on Solutions to the Problem of Plastic Waste (25 January)
- 4th National Youth Environmental Activity Presentation Contest (10 February)
- International Day for Biodiversity Symposium: Biodiversity, Food, and Health (11 May)
- Symposium on Sustainable Consumption & Production: Transforming our Future through Ethical Consumption (10 October)

Online Outreach

During 2019 the UNU-IAS website (ias.unu.edu) received 410,000 pageviews, with the top countries for visitors including India, Indonesia, Japan, Nigeria, and the United States. UNU-IAS also increased its social media presence, with over 7,300 “likes” on Facebook and 2,400 followers on Twitter in 2019.

Media Coverage

UNU-IAS activities were featured by media outlets including The Conversation (UK), The Hindu (India), The Japan Times, The Straits Times (Singapore), and the Yomiuri Shimbun (Japan). The institute’s Operating Unit Ishikawa/Kanazawa (OUIK) also received local coverage in the Hokkoku Shimbun newspaper, among others.

UNU-IAS Board Members, 2019

Dr. Tanya Abrahamse (South Africa) VICE-CHAIR

Chair, Global Biodiversity Information Facility (GBIF) Governing Board

Prof. Carl Folke (Sweden)

Science Director of the Stockholm Resilience Centre at Stockholm University and Director of the Beijer Institute of the Royal Swedish Academy of Sciences

Mr. Mitsuo Kojima (Japan)

Representative Director, Lombard Odier Trust (Japan) Limited and Head, LOIM Tokyo

Prof. Maria Ivanova (Bulgaria)

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

Prof. Takashi Onishi (Japan) CHAIR

President of Toyohashi University of Technology

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.

The 2019 meeting of the UNU-IAS Board was held on 31 October – 1 November in Tokyo.

Financial Support

Contributions over USD 20,000

- ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)
- Asian Development Bank (ADB)
- Ishikawa Prefectural Government
- Japan Foundation for the United Nations University (JFUNDU)
- Japan Society for the Promotion of Science (JSPS)
- Kanagawa International Foundation (KIF)
- Kanazawa City
- Keio University
- Ministry of Education, Culture, Sports, Science and Technology, Government of Japan (MEXT)
- Ministry of the Environment, Government of Japan (MOEJ)
- National Institute for Environment Studies (NIFES)
- Resona Holdings, Inc.
- Rural Development Administration of the Republic of Korea (RDA KOREA)
- United Nations Environment Programme (UNEP)
- University of Tokyo

End of Report