United Nations University

Institute for the Advanced Study of Sustainability

2015 Annual Report



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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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Director's Message



Throughout 2015 UNU-IAS made important contributions to global processes, including those that culminated in the adoption of the 2030 Agenda for Sustainable Development, the Paris Agreement and the Sendai Framework for Disaster Risk Reduction (DRR). Marking UNU's 40th anniversary, the university was honoured to host a visit by Their Majesties the Emperor and Empress of Japan in October, and organized a special symposium in November on implementation of the 2030 Agenda. Building on this excellent progress, we will be moving forward by further advancing our research, policy development and capacity building activities during 2016 and beyond.

The UNU-IAS Board held its second meeting in October, adopting a new strategic plan for the institute that provides guidance for the development and implementation of our activities in the coming years. The plan emphasizes sustainability science, which will continue to serve as the overarching framework for our work. It also focuses on combining academic excellence and policy-relevant research. Our approach will be to generate interdisciplinary knowledge to address issues that are high on the international agenda, producing science-based inputs to inform policymaking. We will be implementing this strategy with a focus on three specific policy areas.

The first of these is the 2030 Agenda. UNU-IAS will be working on the multi-level institutional architecture that will be needed for its implementation, including linkages between science and policy. We will also support education and knowledge generation for the Sustainable Development Goals (SDGs), and develop policy tools for sustainable urban water environments.

DIRECTOR'S MESSAGE

Our second targeted policy area is biodiversity and ecosystem services. The institute will continue to advance efforts towards achieving the Aichi Biodiversity Targets of the Convention on Biological Diversity (CBD), by assisting member states in implementation and providing policy inputs based on analysis of local case studies from our global networks. We will contribute to national, regional and global assessments for the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) and develop strategies for participatory scenario building.

In the third policy area of climate change and DRR, our research will contribute to implementation of the Paris Agreement by advancing international cooperation on low carbon technology, and by building an integrated strategy for adaptation in semi-arid Africa. UNU-IAS will also be working on implementation of the Sendai Framework, through research on risk communication and disaster recovery.

The UNU-IAS postgraduate degree programmes are now well established and will continue to develop, with enhanced opportunities provided for students through joint teaching with other leading universities such as the University of Tokyo, Sophia University and International Christian University. The postgraduate programmes received accreditation in March, awarded by the National Institution for Academic Degrees and University Evaluation (NIAD-UE) of Japan after an extensive evaluation process.

Focusing on these priorities, the research, policy development and capacity building activities of UNU-IAS will further advance global efforts towards a more sustainable future. We are fully committed to supporting international processes that are tackling immense challenges, such as the 2030 Agenda and the Paris Agreement.

With this opportunity I would like to acknowledge and thank all of the friends, partners and donors of UNU-IAS, as well as our staff, fellows and students, for their support and commitment. In the two years since our institute was established we have made substantial progress, and with your support I very much look forward to leading the further development and success of the institute during 2016 and beyond.

Kazuhiko (Kazu) Takemoto Director, UNU-IAS March 2016

DIRECTOR'S MESSAGE

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 and its social, economic and environmental dimensions. 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 develops international leaders with the interdisciplinary understanding and technical skills needed to advance creative solutions to problems of 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.

Our Approach

UNU-IAS research, education and training are directed towards issues of high policy relevance for the United Nations and its Member States. Our work is interdisciplinary, forward thinking and strategic, aiming to identify future sustainability challenges for policymakers. Collaborative partnerships are a critical foundation and distinguishing feature of all UNU-IAS work, combining in-house expertise with a global network of partner institutions.

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 organization comprising 13 institutes and programmes, located in 12 different countries.



ABOUT UNU-IAS 5

Organization

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 13). 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.

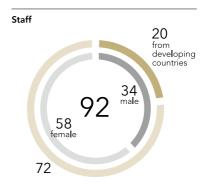
* UNU-IAS was formed through the consolidation of two previous UNU institutes: the UNU Institute of Advanced Studies (based in Yokohama), and the UNU Institute for Sustainability and Peace (based in Tokyo). UNU-IAS builds on the strong foundations of these two previous institutes, and of more than 40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

Staffing

As of December 2015, UNU-IAS had a staff of 92. Of these, 20 were developing country nationals, and by gender the staff comprised 34 men and 58 women.

Financing

UNU-IAS is financed entirely by voluntary contributions from governments, agencies, international organizations 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 2015 meeting held on 23–24 October. A list of board members is provided on page 25.

ABOUT UNU-IAS 6

Highlights



SUSTAINABLE DEVELOPMENT

The 2030 Agenda on Sustainable Development

UNU-IAS contributed to the formulation and implementation of the new global 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs), which were adopted by the UN General Assembly in September. The UNU-IAS Governance for Sustainable Development (GSD) project developed research on institutional structures for achieving the SDGs, and worked with Member States on establishing their national targets. Implemented in close collaboration with partners such as the Sustainable Development Solutions Network (SDSN) and Future Earth, the project has also been designing links between science and policy for the follow-up and review process of the 2030 Agenda.

During 2015 the GSD project organized workshops in Lund and in Bonn, as well as a series of public events in Japan throughout the year. In early 2016 UNU-IAS and SDSN held a symposium and workshop in Kuala Lumpur, exploring how the SDGs could be translated into national contexts, as well as the role of science, technology and innovation. UNU-IAS also contributed to the 2030 Agenda through its Education for Sustainable Development (ESD) project, which helped to establish the work plan for the Partner Networks of the Global Action Programme (GAP) on ESD and collaborated with the Asian Development Bank on e-learning for policymakers.

Read more:

Governance for Sustainable Development > pg. 10 Education for Sustainable Development > pg. 10

HIGHLIGHTS 7

BIODIVERSITY AND ECOSYSTEMS

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

During 2015 UNU-IAS advanced efforts to achieve the Aichi Biodiversity Targets of CBD and developed the scientific assessment process of IPBES. The institute assisted the CBD Secretariat in reviewing National Biodiversity Strategies and Action Plans (NBSAPs) submitted by CBD Member States, and supported local communities in implementing the CBD agenda through a toolkit providing indicators of resilience in socio-ecological production landscapes and seascapes. UNU-IAS made important contributions to the IPBES assessment process, serving as part of the authoring team for the Asia-Pacific regional assessment and hosting its first authors' meeting in August. As the Secretariat of the 184-member International Partnership for the Satoyama Initiative (IPSI), UNU-IAS has been compiling case studies from IPSI members to contribute to processes of CBD and IPBES.

UNU-IAS also launched a major initiative with the Global Environment Facility (GEF), providing a new model for the institute to collaborate with leading international funding organizations. The GEF-Satoyama project mobilizes GEF funding in selected biodiversity hotspots in Africa, Asia and Latin America, in collaboration with Conservation International and the Institute for Global Environmental Strategies (IGES).

Read more: Scientific Assessments of IPBES > pg. 12 International Satoyama Initiative > pq. 12



Prof. Johan Rockström, Director of the Stockholm Resilience Centre, speaks at UNU on the 2030 Agenda and planetary boundaries.

HIGHLIGHTS

CLIMATE CHANGE

The Paris Agreement

UNU-IAS contributed to international debates and policy processes related to climate change, including the Paris Agreement that was adopted by parties to the UN Framework Convention on Climate Change (UNFCCC) in December 2015. The institute launched its new Low Carbon Technology Transfer (LCT) project in June, which has been advancing strategies and building partnerships for diffusion of low carbon technology to developing countries. LCT meetings and workshops were organized in Berlin, London and Yokohama, and initial findings presented in a side event at the Paris Climate Change Conference. UNU-IAS also addressed climate change adaptation through research in Ghana, focused on building an integrated strategy for resilience in semi-arid regions across Sub-Saharan Africa. Findings from the project Enhancing Resilience to Climate and Ecosystem Changes in Semi-Arid Africa (CECAR-Africa) were shared through a workshop in Tamale, Ghana in August, which also developed links with policymakers and communities for implementation of its recommendations.

Read more:

Low Carbon Technology Transfer > pg. 15 CECAR-Africa > pg. 14

DISASTER RISK REDUCTION (DRR)

The Sendai Framework on DRR 2015-2030

UNU-IAS played a prominent role at the Third UN World Conference on DRR in Sendai, Japan (WCDRR, 14–18 March), and in the development of the Sendai Framework for Disaster Risk Reduction 2015–2030 that was adopted at the conference. UNU-IAS organized four official side events, focusing on ecosystem-based DRR, water cycle management, the role of education in DRR, and socio-economic challenges in the disaster recovery process. The UNU-IAS Fukushima Global Communication (FGC) programme, which addresses the human and social impacts of the March 2011 disasters in Japan, produced a series of publications contributing to the conference, and FGC policy recommendations were included in the final text of the Sendai Framework document. An FGC research workshop on risk communication and nuclear accidents was held in November, resulting in publication of 14 working papers.

Read more:

Fukushima Global Communication programme > pg. 14 University Network for Climate and Ecosystems Change Adaptation Research in Asia > pg. 16

HIGHLIGHTS

Research & Policy Development

- 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



Governance for Sustainable Development (GSD)

This project develops governance structures for implementation of the 2030 Agenda for Sustainable Development that was adopted by UN Member States in September 2015, helping to translate this global vision into practice and achieve its 17 Sustainable Development Goals (SDGs). The project builds links between science and policy for the SDGs, focusing on processes for follow-up and review. GSD research during 2015 highlighted the need for vertical institutional linkages for effective implementation of the SDGs, and the role of regional institutions.

A GSD workshop in Lund (8–9 March) explored SDG-related implementation challenges, focusing on governance issues such as domestic–international linkages and the role of the science–policy interface. These issues were further addressed through a public symposium at UNU-IAS (24 October), which focused on incorporating scientific inputs into the implementation of the 2030 Agenda. UNU-IAS also organized a workshop at the UNU Institute for Environment and Human Security (UNU-EHS) in Bonn, bringing together 21 researchers from 11 UNU institutes to develop research collaboration on the SDGs (5–6 March). Working closely with the Sustainable Development Solutions Network (SDSN) and the Institute for Global Environmental Strategies (IGES), the GSD project co-hosted a plenary session at the Seventh International Forum for Sustainable Asia and the Pacific (ISAP 2015) in which prominent speakers discussed the challenges that must be overcome in order to achieve the SDGs (28 July).

UNU-IAS co-organized a symposium and workshop with SDSN in Kuala Lumpur as part of the GSD project (29 February – 1 March 2016), which focused on how the SDGs could be translated into national contexts. The symposium discussed national implementation and the role of science, technology and innovation, and the subsequent workshop addressed national preparedness for delivery of the SDGs, stakeholder roles, follow-up and review processes, and links between global, national and regional implementation.

Education for Sustainable Development (ESD)

UNU-IAS has been promoting and advancing the ESD agenda since 2003 through its ESD project, in close collaboration with UNESCO. UNU-IAS is contributing to the Global Action Programme (GAP) on ESD as a member of its Partner Networks. The institute participated in the first meeting of the Partner Networks in Paris (26–27 May), helping to develop the collaborative work plan for GAP Priority Action Areas. In early 2015 the ESD project developed a new strategic direction and action plan aimed at contributing to the implementation of the SDGs by bridging the gap between learning and development. The project has been implementing this plan through its two flagship initiatives, the global multi-stakeholder Regional Centres of Expertise (RCE) on ESD network — which expanded to 138 members during 2015 — and the Promotion of Sustainability in Postgraduate Education and Research Network (ProSPER.Net). RCE conferences in the Philippines (March), Sweden (July), Uganda (October) and the United States (August) developed strategies for education on implementing the SDGs, and ProSPER.Net trained young experts through a symposium in Yokohama (27 July) and a leadership programme in Sabah, Malaysia (23–29 August).

The ESD project has been working with the Asian Development Bank on the Asia Leadership Programme on Sustainable Development and Climate Change for policymakers, providing technical advice and expertise on its e-learning components. The project also contributed to the Sustainable Lifestyle and Education Programme of the UN 10-Year Framework Programme on Sustainable Consumption and Production (10YFP) and the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES).



Education for Sustainable Development in Africa (ESDA)

The ESDA project promotes capacity building for sustainability in Africa, by supporting development of three collaborative master's degree programmes established by eight leading African universities. It includes a Next-Generation Researcher (NGR) initiative, which supports collaboration on sustainable development by young scholars in Africa and Asia.

A roundtable discussion at the 2015 Annual Meeting of the Global Research Council in Tokyo explored ways of building education and research capacity in Africa, organized by the ESDA project together with the Japan Society for the Promotion of Science and the National Research Foundation of South Africa (26 May). The NGR initiative was also presented at the Fifth World Sustainability Forum in Basel (7–9 September).

Water and Urban Initiative (WUI)

The WUI project contributes to sustainable urban development by creating scientific tools to forecast the future state of urban water environments, including water quality and urban flooding. WUI research estimates the benefits of establishing and improving sustainable water environments in urban areas, with a particular focus on rapidly developing Asian cities. The project builds capacities for improving urban water environments in developing countries in Asia, addressing population growth, urbanization and low-carbon approaches.

In 2015 the case studies of Nanjing, China and Medan, Indonesia were added to four cities selected in 2014. A feasibility study on further case studies was initiated in India. Stakeholder meetings and workshops were organized in the case study cities to develop understanding of various water environment problems by analysing local water conditions and related policies and measures. Several WUI events were organized during 2015, including a session at the International Conference on Sustainability Science in Tokyo (23 January) and the Japan Water Style Summit in collaboration with the Government of Japan and CDP, which promoted collaboration between the private sector and local governments to improve water management (22 October). The project participated in international events including the Sixth Asia-Pacific Urban Forum (19–21 October) and the Habitat-III Asia Pacific Regional Meeting (21–22 October), both held in Jakarta.



International Satoyama Initiative (ISI)

This project promotes the maintenance and rebuilding of socio-ecological production landscapes and seascapes (SEPLS) for the benefit of biodiversity and human well-being. As the secretariat of the 184-member International Partnership for the Satoyama Initiative (IPSI), the ISI project organized a regional workshop in Accra, Ghana (10–12 August) and several international workshops and conferences. The Sixth IPSI Global Conference (IPSI-6), held in Siem Reap, Cambodia (12–14 January 2016), featured presentations on management of SEPLS and contributed to an interim review of the IPSI Plan of Action 2013–2018. The ISI project analysed 80 case studies from IPSI members, publishing the results in a report providing lessons for sustainable management of production landscapes and seascapes. The first issue of the Satoyama Initiative Thematic Review publication series was also launched, presenting case studies on the theme of enhancing knowledge to improve management of SEPLS.

In late 2015 UNU-IAS initiated work as part of the new GEF-Satoyama Project — a collaboration with Conservation International and the Institute for Global Environmental Strategies (IGES) focusing on conservation, sustainable use of biodiversity and ecosystem services, and human well-being in SEPLS in selected biodiversity hotspots in Africa, Asia and Latin America.

Scientific Assessments of the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES)

Since 2011, UNU-IAS has led the development of the scientific assessment process for IPBES through a series of national expert workshops, in collaboration with UNESCO, UNEP and the governments of Japan, the Republic of Korea and South Africa. UNU-IAS and UNESCO organized a workshop focusing on participatory scenarios that engaged 25 leading experts to provide further inputs for the IPBES assessment process (15–17 June). The institute also hosted an international workshop in Tokyo (17–19 June) to launch ScenNet, a global capacity building network focused on biodiversity and ecosystem services scenarios. Four UNU-IAS experts were nominated as lead authors for the IPBES Asia-Pacific Regional Assessment, a critical evaluation of the state of knowledge in biodiversity and ecosystem services in the region. The institute also helped to launch this assessment by hosting the first authors' meeting, bringing together over 130 selected experts (17–21 August).

Tradeoff Analysis and Local Governance Model of Satoyama Ecosystem Services

This project analyses the local governance of ecosystem services, focusing on satoyama (socio-ecological production landscapes) in Japan's Noto peninsula. The International Symposium on Rural Food System, Sharing Network, and Ecosystem Services in Socio-ecological Production Landscapes in Tokyo (20 February) shared the project's research findings and discussed the sustainable use of ecosystem services in both developing and developed countries. A household survey was carried out in Nanao City, Japan, to investigate uses of ecosystem services and changes in rural industries and livelihoods. Project findings were shared at international conferences and with local governments in the Noto peninsula, some of which

incorporated these findings into policy. The outputs of the project have also contributed to national and international ecosystem services assessments, including those of IPBES.

Agrodiversity and Sustainability

Agrodiversity refers to the ways in which farmers use environmental diversity, integrating biological, technological and institutional components that offer flexibility and resilience in adapting to climate and ecosystem changes. This project focuses on the potential of agrodiversity in forest management to address climate change and biodiversity loss in the mountainous regions of mainland Southeast Asia. A workshop in Jinghong City, China brought together experts from China, India, the Lao People's Democratic Republic, Myanmar and Thailand to identify and develop best practices for sustainable forest management and rehabilitation (17–18 November). Research explored the potential benefits of coastal forests for adaptation to climate change, with a field survey conducted in Okinawa, Japan (21–25 August) focusing on fukugi trees. The final project results were compiled in December.

Operating Unit Ishikawa/Kanazawa (OUIK)

Since its establishment in 2008, OUIK has been supporting policy developments in the field of biodiversity conservation and utilization, working closely with the governments of Ishikawa Prefecture and Kanazawa City in Japan, as well as UNU's global partners. The OUIK symposium Introducing the Ishikawa–Kanazawa Biocultural Region (28 May) built upon the unit's research into how ecosystem services are associated with interrelated cultural and biological diversity at the local level. With speakers from UNESCO and the Secretariat of the Convention on Biological Diversity (CBD), the symposium considered the Ishikawa Kanazawa Biocultural Region as a model for regional revitalization through the use of local biocultural heritage in Asia. The outcomes of the symposium were later adopted as part of the new regional strategy for biodiversity conservation of Kanazawa City, for which OUIK provided expert advice. During 2015 OUIK also produced several publications on biocultural diversity, and organized a short training course on environmental communication for participants from Sabah, Malaysia. The symposium Sustainable Development Goals and Human Resource Development Policy at the Regional Level (26 November) was hosted by OUIK in collaboration with the UNU-IAS Governance for Sustainable Development project (see page 10), which generated new proposals on linking the global goals and local policy.

Biodiplomacy Initiative

This project provides technical inputs to CBD processes and advice for member countries on developing effective policies for access and benefit sharing (ABS). It also coordinates the Biodiversity and Community

Health Initiative (BaCH), a partnership working at the nexus of biodiversity and health to advance poverty reduction and sustainable development. During 2015 the initiative contributed to new guidelines related to the Nagoya Protocol on Access and Benefit Sharing and the emerging agenda of biodiversity and human health, as well as information documents for CBD on the development dimensions of biodiversity. Members of the Biodiplomacy Initiative also delivered training to policymakers and practitioners in South Asia as part of an UNCTAD course on Biodiversity and Traditional Knowledge, and organized peer learning workshops for practitioners and local implementers on biodiversity management issues related to health, ABS and traditional knowledge.



3 Global Change and Resilience

Enhancing Resilience to Climate and Ecosystem Changes in Semi-Arid Africa (CECAR-Africa)

Working with the UNU Institute for Natural Resources in Africa (UNU-INRA) and other leading research institutes in Ghana and Japan, CECAR-Africa aims to combine climate change and ecosystem change research to build an integrated resilience enhancement strategy, or the "Ghana model".

A "matchmaking" workshop was held in Tamale, Ghana (6–7 August), to share interim research findings with potential end-users including government ministries, local governments, international organizations, civil society organizations and local communities. The workshop discussed ways of reflecting these findings in policy, including recommendations on mainstreaming resilience issues in education. CECAR-Africa research was also compiled for publication in a new e-book, *Building Integrated Resilience Strategy against Climate and Ecosystem Changes for Sub-Saharan Africa* (expected Summer 2016). The project's annual Joint Coordination Committee meeting was held in Accra, Ghana (4 August), bringing together the funders and partner institutions as well as government ministries. Research by UNU-IAS postgraduate students plays an important role in the project, and during 2015 one PhD student and two MSc students working on CECAR-Africa successfully completed their courses.

Fukushima Global Communication (FGC) Programme

This research initiative examines the human and social impacts of the March 2011 triple disasters in Japan, and related issues of disaster recovery and risk communication from an international perspective. It contributed to the development of the Sendai Framework for Disaster Risk Reduction (DRR) that was adopted at the Third UN World Conference on DRR in Sendai, Japan (March), and organized a panel discussion at the conference focusing on the transition from disaster response to longer-term recovery. The FGC programme produced a series of publications in the lead-up to the conference, including a UNU-IAS Policy Brief (No.1, 2015) on durable solutions to displacement and five FGC Working Papers. Research fieldwork with displaced communities in Japan (June–July) explored challenges in restoring livelihoods after disasters, with research findings and policy recommendations published in a second UNU-IAS Policy Brief (No. 2, 2015).

The programme conducted an extensive literature review focusing on risk communication in the context of nuclear accidents, published as an FGC Working Paper. This research was further developed through a workshop at UNU-IAS engaging leading international experts in related fields (12–13 November), which considered lessons from Fukushima Daiichi and other cases such as Chernobyl and Three Mile Island. A series of 14 FGC Working Papers resulting from the workshop were published in December.

Low Carbon Technology Transfer (LCT)

Launched in June, this project seeks to advance strategies and build partnerships for diffusion of low carbon technology to developing countries, with a particular focus on Asia. In doing so, it contributes to implementation of the Paris Agreement on climate change. The LCT project, a collaboration with the Institute for Global Environmental Strategies (IGES) and the Asian Institute of Technology, analyses existing international cooperation on low carbon technology and the strategies of developed countries in this area.

The project brought together experts from France, Germany, Japan and the United Kingdom for a meeting in Yokohama to explore various dimensions and models of low carbon technology transfer (26–27 July). A session was held at the Seventh International Forum for Sustainable Asia and the Pacific (ISAP 2015) to introduce the project, attracting over 300 participants. Local workshops were also organized in Berlin (12 November) and London (17 November). Initial findings from these research activities were then presented in an LCT side event at the Paris Climate Change Conference (3 December), which also considered future challenges and opportunities for technology transfer under the framework of the Paris Agreement.

Rice Terrace Farming Systems

This research project developed ecosystem-based adaptation measures to strengthen the resilience of rice terrace farming systems in Hani (China) and Ifugao (the Philippines) to climate change and reduce the risk of flood and drought. Completed in December, the project produced six working papers.

It proposed a development strategy for the Hani rice terraces centred on water security, and an integrated approach to enhance livelihoods and manage water for the Ifugao rice terraces. Three UNU-IAS master's degree students produced theses based on case studies from this project, and presented them at a public forum in Manila (30 July). The Asia-Pacific Network for Global Change Research (APN), which funded the project, selected it as one of two showcase projects featured at the organization's 20th anniversary conference (13–17 January 2016).



University Network for Climate and Ecosystems Change Adaptation Research in Asia (UN-CECAR)

UNU-IAS serves as the secretariat of UN-CECAR, a platform for collaborative research, education and capacity development by over 20 leading Asian universities. The network aims to enhance education and research on adaptation to climate change and ecosystems change, and to advance the emerging field of sustainability science. UN-CECAR contributed to the Third UN World Conference on Disaster Risk Reduction (DRR) in Sendai, Japan through two side events (15 March). One of these promoted a holistic approach to urban water management, and was co-organized with the UNESCO-IHE Institute for Water Education.

The other side event launched the International Network for Advancing Transdisciplinary Education (INATE), which develops local, multidisciplinary research on DRR. INATE research on integrated water management in Northern Sri Lanka was initiated through a workshop and fieldwork by UNU-IAS researchers and students (7–11 August), working closely with engineers from the Department of Irrigation, Sri Lanka. Further fieldwork was conducted in the North Eastern province of Sri Lanka (17–20 October). UN-CECAR also conducted fieldwork on loss and damage estimation in Sri Lanka (25–29 March) and launched new research in Cambodia to assess the CO2 absorption capacity of forests (2–3 November). The Annual UN-CECAR Conference and a strategic planning meeting were held at the Australian National University in Melbourne (11–13 July), in which participants agreed to open the hybrid curriculums developed by the network to a wider global community, and implementation criteria for INATE projects were developed.

Climate Change Adaptation through Optimal Stormwater Capture Measures: Towards a New Paradigm for Urban Water Security

This project investigates the trends of increasing urban floods and depleting ground water tables, and looks at water capture measures such as infiltration trenches, storage systems, rainfall harvesting and urban drainage systems for coping with climate change. It focuses on the local water cycles in Bangkok, Hanoi and Tokyo, and engages UNU-IAS postgraduate students in field research at each of these study areas. During 2015 data were collected for assessing the impact of climate change on rainfall and flooding, and frequency curves developed to predict future rainfall intensity.

Monitoring and Management of Persistent Organic Pollutants in Asia

This project provides 10 developing countries in Asia with scientific knowledge and technology to monitor persistent organic pollutants (POPs) in the environment, and builds monitoring networks to strengthen governance and policies for sustainable development. The project has been implemented since 1996, receiving technical assistance from Shimadzu Corporation. During 2015, analysis sessions were held at Chonnam National University in the Republic of Korea, and at the Shimadzu Corporation Office in Singapore (August–September). Data from all participating countries were compiled by UNU-IAS in September, to be submitted for the Stockholm Convention Global Monitoring Plan. A project meeting in Singapore (12–13 November) concluded the sixth phase of the project and launched its seventh phase, which will be completed in November 2018.

Postgraduate Education & Capacity Development

UNU-IAS education and capacity development aim to produce international leaders with the interdisciplinary understanding and technical skills needed to advance creative solutions to problems of sustainability. The institute offers master's and PhD degree programmes, as well as a range of short courses, in close collaboration with leading universities in Japan and other countries. UNU-IAS postdoctoral fellowships provide recent PhD graduates with opportunities to engage in further research and contribute to 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 postgraduate degree programmes strengthen the capacities of academic and scientific communities around the globe, particularly in developing countries. The degrees are taught by a diverse faculty comprising both UNU-IAS academic staff and guest lecturers from other leading academic institutions and international organizations. Exchange agreements allow the transfer of credits with the University of Tokyo, International Christian University (ICU), Sophia University and Yokohama National University. Agreements with ICU, Sophia University, the National Graduate Institute for Policy Studies (GRIPS), Aoyama Gakuin University, Ochanomizu University and Temple University allow students access to the libraries and online collections of each institution.

On 26 March UNU-IAS was awarded accreditation by the National Institution for Academic Degrees and University Evaluation (NIAD-UE) of Japan for a period of 7 years, after a comprehensive evaluation of the postgraduate degree programmes conducted during 2014.

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. The programme was launched in September 2014, building on the previous master's degree programmes of the two institutes that merged to form UNU-IAS (see Organization, page 5), which together have produced 71 graduates since September 2010.

Students can study courses from UNU-IAS and partner universities in Japan, and are eligible for a joint diploma on Sustainability offered by UNU-IAS and the University of Tokyo Graduate School of Frontier Sciences (UT-GSFS). Successful completion of the programme requires students to earn at least 30 credits, including compulsory courses, specialized elective courses, research seminars and a master's thesis.

In September, seven new students were enrolled in the Master of Science in Sustainability programme, with three receiving scholarships provided by the Japan Foundation for UNU (JFUNU), and one receiving an Asian Development Bank scholarship. These scholarships are provided for outstanding students from developing countries with a need for financial assistance. Eight master's degree students successfully completed the programme in 2015, graduating in July.



Student Enrolment (as of December 2015)

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 problems. Students are required to earn 14 credits and complete a PhD dissertation in one of several UNU-IAS research themes, focusing on global change and sustainability. A joint PhD diploma on Sustainability, developed by UNU-IAS and the University of Tokyo Graduate School of Frontier Sciences (UT-GSFS), is also available to students of the programme.

In September, four new students were enrolled in the PhD in Sustainability Science, two of whom are receiving scholarships from JFUNU. The first three students of the programme completed their studies in 2015, graduating in July.

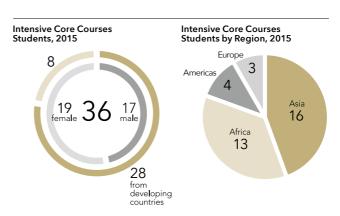
Short-term Courses

These short courses provide innovative standalone study opportunities for professionals, while serving as core components of the UNU-IAS postgraduate degree programmes and providing credits towards degrees at partner universities.

UNU Intensive Core Courses

A total of 36 students participated in these five-week courses at UNU-IAS in Tokyo (7 September – 9 October). The participants included professionals and postgraduate students from other institutions, as well as students of the UNU-IAS master's and doctoral degree programmes, for which the Intensive Core Courses serve as core components. The courses have been organized annually by UNU since 2000.

Though advanced in nature, the courses are designed to be accessible to students and professionals who are not necessarily specialists in the relevant fields. 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.



Building Resilience to Climate Change (BRCC)

Two BRCC courses were organized as part of the University Network for Climate and Ecosystems Change Adaptation Research (UN-CECAR), a framework for collaborative research, education and capacity development. The courses were held from 14 July to 5 August, with 72 students participating. Teaching was conducted through video-conferencing between UNU-IAS and five partner institutes: Chulalongkorn University, the Indian Institute of Technology, the National University of Malaysia, the University of Tokyo and Vietnam National University.

Climate Change Downscaling and Adaptation Approaches

Held in Colombo, Sri Lanka, this UN-CECAR course focused on the use of climate projection techniques for short-term weather forecasts (30 March – 10 April). Participants included the Regional Climate Model (RegCM) development team from the International Centre for Theoretical Physics (ICTP) in Italy, and former students of the course from the University of Tokyo were among the instructors.

UNU Global Seminar — Shonan Session

The UNU Global Seminar — Shonan Session has been held annually since 1985 in Shonan, Japan, aiming to enhance awareness about global issues and the role of the United Nations in addressing them. The 31st session was held from 31 August to 3 September, on the topic "UN Global Issues, Post-2015 Agenda: Improving the Quality of Life". A total of 89 undergraduate and postgraduate students from Japanese universities participated, with keynote lectures delivered by Prof. Rihito Kimura (Professor Emeritus of Bioethics and Law, Waseda University) and Mr. Alex Ross (Director, WHO Kobe Centre). The session is organized by UNU-IAS and the Kanagawa International Foundation, in cooperation with 10 universities within Japan and with the support of the Japan Foundation for UNU (JFUNU).

UNU-Kirin Fellowship Programme

Each year the UNU-Kirin Fellowship Programme provides fellows from countries in Asia with training at the National Food Research Institute (NFRI) in Tsukuba, Japan over 12 months. In April five students from China, India, Indonesia, Thailand and Viet Nam successfully completed their training, and five students from Bangladesh, Cambodia, Indonesia, Thailand and Viet Nam commenced their training. The programme has been organized by UNU and the Kirin Holdings Company Limited since 1993.

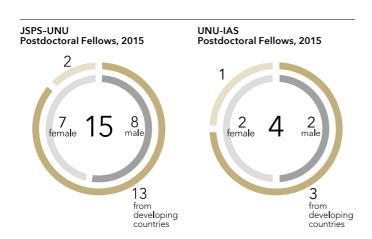
Fellowships

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 organized by UNU and the Japan Society for the Promotion of Science (JSPS). JSPS-UNU Postdoctoral Fellows in 2015 conducted research on diverse policy-relevant topics, such as sustainable development governance, ecosystem assessment, agricultural management, urban water environments and low carbon technology.



UNU-IAS Postdoctoral Fellowships are also awarded each year for a period of 12 months, starting in September. During 2015 research by these fellows contributed to several UNU-IAS projects, on topics including urban development and climate co-benefits, urban water environments in Asia and governance for sustainable development.



Project-based Capacity Development

Global Leadership Training Programme in Africa (GLTP)

This programme aims to train global leaders who can contribute to solving challenges in Africa, by providing Japanese postgraduate students with internship opportunities at partner institutions in Ghana, Kenya, Nigeria, South Africa and Zambia. A reporting workshop was organized in Tokyo for students who participated in the 2014 programme to share their research and experiences (25 June). Ten new students selected in April have begun their studies in Africa.

On-the-Job Research Capacity Building for Food Security and Environmental Conservation in Developing Countries (OJCB)

This initiative supports capacity building projects by leading scientists in developing countries, providing on-the-job training for young researchers. Funded by the Ministry of Agriculture, Forestry and Fisheries of Japan, and coordinated by UNU-IAS, it aims to increase agricultural productivity through innovation, strengthen research capacity and build networks for cooperation between researchers — ultimately contributing towards food security and environmental conservation in developing countries. In August, 10 new projects were selected for implementation involving 27 young researchers, to be completed by 31 May 2016.



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 also introducing non-specialist audiences to its efforts to address current and emerging issues.

UNU CAFÉ Event Series

Launched by UNU-IAS in 2014, UNU CAFÉ is a discussion series held in Japanese for students and recent graduates interested in working for international organizations or in a global context. These events, held at UNU headquarters in Tokyo, feature active members of the international community who share their experiences and engage in discussions with the audience.

UNU CAFÉ speakers in 2015 included:

- Ms. Yoriko Kawaguchi, former Minister of Foreign Affairs and former Minister of the Environment of Japan, 12 February
- Ms. Mihoko Kumamoto, United Nations Institute for Training and Research, 12 May
- Ms. Yoko Watanabe, Global Environment Facility, 8 July
- Mr. Kenro Oshidari, former WFP Regional Director for Asia, 26 November

"Mandela & I" Lecture Series

Organized in cooperation with the South African Embassy in Tokyo, this lecture series aims to share the lessons and legacies of Nelson Mandela. In 2015 four sessions were held as part of this series.

Publications

Publications by UNU-IAS researchers in 2014 included books, chapters in edited volumes, articles in peerreviewed scientific journals, special issues of journals, policy briefs, working papers, articles in magazines and newspapers, website articles, conference papers and proceedings, and videos and podcasts. A selection of these is listed below.

Policy Briefs & Reports

UNU-IAS policy briefs and research reports published during 2015 included:

- "Restoring Livelihoods after Disasters: The Case of Fukushima's Nuclear Evacuees"
- "Tackling Prolonged Displacement: Lessons on Durable Solutions from Fukushima"
- "The Co-benefits Approach at the Local Level: Legal Perspectives"
- "IPSI Case Study Review: A Review of 80 Case Studies under the International Partnership for the Satoyama Initiative (IPSI)."
- "Enhancing Knowledge for Better Management of Socio-ecological Production Landscapes and Seascapes (SEPLS)"

Working Papers

A total of 28 working papers were published, through three UNU-IAS project-based series:

- Fukushima Global Communication Programme Working Paper Series
- Rice Terrace Farming Systems Working Paper Series
- Water and Urban Initiative Working Paper Series

Sustainability Science Journal

The scientific journal *Sustainability Science* is a collaborative initiative of UNU-IAS and the Integrated Research System for Sustainability Science (IR3S) of the University of Tokyo, published by Springer. In 2015 its 10th volume was published, featuring a special feature on socially sustainable degrowth and an analysis of transdisciplinary academic processes. The latest Impact Factor rating for the journal was 3.119 (in 2014).

Online Outreach

During 2015 the UNU-IAS website (ias.unu.edu) received 0.5 million pageviews, with the top countries for visitors including Japan, the United States, India, Germany, the United Kingdom, Kenya and Nigeria. During the year UNU-IAS also increased its social media presence, receiving over 4,000 "likes" on Facebook and building a new group of online followers through its Twitter account.

Videos

The UNU-IAS International Satoyama Initiative produced videos documenting people engaged in community recovery after the 2011 Great East Japan Earthquake and tsunami. A promotional video was also created by the UNU-IAS Water and Urban Initiative to highlight the value of water in urban environments. All UNU-IAS videos are available on YouTube.

Media Coverage

UNU-IAS work was featured by major global media outlets, including *Bloomberg*, the *Nikkei Asian Review* and the *New York Times*. Numerous Japanese media outlets also covered the institute's activities, such as the *Environmental News* and *Mainichi* newspapers, and several television news programmes.

Global Environment Outreach Centre (GEOC)

This joint initiative of UNU-IAS and the Ministry of the Environment of Japan (MOEJ) aims to engage with civil society organizations and foster multi-stakeholder partnerships for the realization of a sustainable society. It plays an important role in the communications and outreach efforts of UNU-IAS.

GEOC events during 2015 included the following:

- Sixth World Parks Congress Report Back Seminar (24 February)
- Mainstreaming Ecosystem-based Disaster Risk Reduction and Reconstruction: Lessons Learned from 3.11 for the World and the Future a side event at the Third UN World Conference on Disaster Risk Reduction in Sendai, Japan (14 March)
- Connecting and Supporting Forests, the Countryside, Rivers and the Sea a symposium marking the International Day for Biological Diversity (30 May)
- Japan Water Style Summit (22 October)
- Sustainable Development Goals and Partnerships the Global Agenda in the Future of Corporate Social Responsibility (7 December)

UNU-IAS Board Members, 2015

Dr. Tanya Abrahamse (South Africa), Chief Executive Officer of the South African National Biodiversity Institute

Prof. Carl Folke (Sweden), Founder and Science Director of the Stockholm Resilience Centre at Stockholm University and Director of the Beijer Institute of the Royal Swedish Academy of Sciences

Prof. Maria Ivanova (Bulgaria), Associate Professor of Global Governance and Co-Director of the Center for Governance and Sustainability at the University of Massachusetts Boston

Prof. Takashi Onishi (Japan), President of Toyohashi University of Technology and President of the Science Council of Japan

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 2015 meeting of the UNU-IAS Board was held on 23–24 October in Tokyo.

Financial Support

- Asia-Pacific Network for Sustainable Forest Management and Rehabilitation (APFNet)
- Asia-Pacific Network for Global Change Research (APN)
- Asian Development Bank
- City of Kanazawa
- Department of the Environment, Government of Australia
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
- European Union
- Ibaraki University
- Ink Cartridge "Satogaeri" Project
- Institute for Global Environmental Strategies (IGES)
- Ishikawa Prefectural Government
- Japan Educational Exchanges and Services
- Japan Foundation for UNU
- Japan Science and Technology Agency
- Japan Society for the Promotion of Science

- Kanagawa International Foundation
- Kirin Holdings Company, Ltd.
- Ministry of Agriculture, Forestry and Fisheries, Government of Japan
- Ministry of Education, Culture, Sports,
 Science & Technology, Government of Japan
- Ministry of the Environment, Government of Japan
- National Environment Management Authority, Government of Kenya
- Nuclear Regulation Authority, Government of Japan
- The Christensen Fund
- The University of Tokyo
- United Nations Environment Programme (UNEP)
- United Nations Industrial Development Organization (UNIDO)
- United Nations Educational, Scientific and Cultural Organization (UNESCO)
- United States Environmental Protection Agency