

First Lead Author Meeting

IPCC Working Group II contribution to the Sixth Assessment Report – Durban, South Africa

Outreach event, University of KwaZulu Natal, Durban

Tuesday, 22 January, 18:30 – 20:15

Unite Building, Howard College Campus, University of KwaZulu Natal, Durban

Panellists' short biographies

Bronwyn Hayward, University of Canterbury, New Zealand

- Coordinating Lead Author WGIAR6 Chapter 6 “Cities, settlements and key infrastructure”
- Lead Author SR15 Chapter 5 “Sustainable development, poverty eradication, and reducing inequalities”

Bronwyn Hayward is Associate Professor in the Department of Political Science and International Relations and Director of The Sustainable Citizenship and Civic Imagination Research group. Her research focuses on the intersection of sustainable development, youth, climate change and citizenship.

Bronwyn is a Coordinating Lead Author for the Intergovernmental Panel on Climate Change AR6 report (cities & infrastructure) and was a lead author for the 2018 Special Report on 1.5 (Sustainable development & Poverty eradication). She is co-primary investigator with University of Surrey's ESRC funded CUSP: Centre for Understanding Sustainable Prosperity, she leads the CYCLES Children and Youth in Cities lifestyle Evaluation study in 7 world cities.

She was an Erskine Fellow with University College, Oxford, UK 2017. Recent books are Sea Change: Climate politics and New Zealand (BWB, 2017) and Children, Citizenship and Environment (Routledge, 2012).

She served on the International Social Sciences Council steering committee - Transformative Research, as a co-researcher with University of Oslo, Voices of the Future project, a lead author on UNEP's global survey of 18-35 year olds lifestyles and sustainability, and as a trustee for the UK Foundation for Democracy and Sustainability. Outside academia Bronwyn worked for children's TV, as a Ministerial appointment to the NZ Broadcasting Standards Authority & as a trustee for the SPARK Foundation & Give A Little. She was inaugural joint winner of UC Arts Conscience & Critic of Society Research Award 2014 and a Kiwibank NZer of the year Local Hero 2019.

Key research interests

- Children and youth politics
- Climate change
- Urban governance and planning
- Resilience
- Social research
- Citizenship and civics education
- New Zealand politics
- Environmental policy

Qualifications & Memberships

- Bachelor of Arts (Honours) (University of Otago)
- Master of Arts (University of Otago)
- Doctor of Philosophy (University of Otago)
- University of Oslo (Teaching/Research Organisation): Co-Investigator, Voices of the Future: Values and Visions of Norwegian Youth on Climate change
- Foundation for Democracy and Sustainable Development (FDSD) (Community Organisation/NGO): Trustee, London, UK
- University of Surrey (Teaching/Research Organisation): Visiting Fellow, RESOLVE Research Group on Lifestyles Values and Environment
- University of Surrey (Teaching/Research Organisation): Visiting Fellow, Sustainable Lifestyles Research Group (SLRG)
- Royal Society of New Zealand (RSNZ) (Professional Organisation): Member
- New Zealand Political Studies Association (NZPSA) (Professional Organisation): Executive member 2003-2007
- Aotearoa/New Zealand Women and Politics Network (Professional Organisation): Foundation Editor of the network's research newsletter 1987-1995 and editor 2008

<https://www.canterbury.ac.nz/arts/contact-us/people/bronwyn-hayward.html>

Aromar Revi, Indian Institute for Human Settlements

- **Coordinating Lead Author WGIAR6 Chapter 18 “Climate resilient development pathways”**
- **Coordinating Lead Author SR15 Chapter 4 “Strengthening and implementing the global response to the threat of climate change**

Aromar Revi is the founding Director of the Indian Institute for Human Settlements (IIHS). For over a decade, he has helped built IIHS into one of the world's leading urban education, research, capacity building and advisory institutions located in the Global South, focusing on the multi-dimensional challenges and opportunities of sustainable urbanisation.

He is an alumnus of IIT-Delhi and the Law and Management schools of the University of Delhi. He is an international educator, practice and thought leader, with 33 years of interdisciplinary experience in public policy and governance, sustainable development, human settlements, global environmental and technological change. Aromar is amongst the most cited urban scholars in the world across multiple fields, with over 75 publications and 8,000 citations: urbanisation (#6), climate adaptation (#4), infrastructure (#8), sustainable development (#24), and public policy (#48). He is the Editor of the interdisciplinary international journal *Urbanisation* (Sage) and on the editorial Boards of the *International Journal of Urban Sustainable Development* (Taylor & Francis), *Urban Climate* (Elsevier) and *Nature Sustainable Earth* (Springer-BMC).

Aromar is a global expert on implementing Sustainable Development; and Co-Chair of the UN Sustainable Development Solutions Network (SDSN), where he led a successful global campaign for an urban Sustainable Development Goal (SDG 11) as part of the UN's 2030 development agenda, which brought major global urban institutions and over 300 cities and organisations together. He has addressed special sessions of the UN Open Working Group on the SDGs and the 71st General Assembly special session on the New Urban Agenda on the theme of Sustainable Cities, in 2014 and 2017.

Aromar's recent research and policy work lie at the interface of sustainability and climate science; and the emerging discipline of 'urban science', that he is helping define internationally. He is a member of the UCL-Nature Sustainability Expert Panel on urban research and global sustainability. In 2016, curated by him, UNSDSN & the SDG Academy launched the first 75-session global Massive Open Online Course (MOOC) on Sustainable Cities & SDG 11, featuring 30 of the world's leading urbanists. Over 10,000 participants from 110 countries registered for this course.

Aromar is one of the world's leading experts on global environmental change, especially climate change. He is a Coordinating Lead Author of the 2018 IPCC Special Report on Global Warming of

1.5 °C that will define potential implementation pathways for the Paris Climate accord. He was earlier a Coordinating Lead Author of the IPCC Assessment Report 5 on Urban Areas that established the role of cities and regions in addressing climate risks. He is a co-PI of a large international Climate Adaptation Research Programme that spans India and Africa.

He is one of South Asia's most experienced risk and disaster management professionals having led teams to plan & execute rehabilitation programmes for ten major earthquake, cyclone and flood events affecting over 5 million people; and was a member of the Advisory Board of UNISDR's Scientific & Technical Advisory Group (STAG) and its bi-annual Global Assessment of Risk, from 2008.

Aromar is a member of the Managing Board of Cities Alliance, the global partnership for sustainable cities and urban poverty reduction. He has been a long-standing Board member of the Balaton Group that pioneered the development of sustainability. He was a Fellow of the India China Institute at the New School University, where he worked on long-range development pathways for the two countries.

He has been a senior advisor to multiple ministries of the Government of India, since the late 1980s; and has consulted with a wide range of international development institutions, national and transnational firms on economic, environmental and social change at global, regional and urban scales. This includes extensive in-country and regional experience across key UN, multilateral and bilateral agencies.

He has also led and managed sensitive multi-stakeholder political and development negotiations. The most recent was for the Government of India, in 2014, as a member of the Sivaramakrishnan Committee, around the demarcation of the erstwhile state Andhra Pradesh. Over a four month period, Aromar Revi led a complex process of structuring a \$ 75 billion investment plan for infrastructure and development across all districts and cities; helped identify options for a new state capital and conducted stakeholder negotiations and public consultations across the state.

Aromar Revi has made significant contributions to human settlements development in India, for which he was elected an Ashoka Fellow in 1990. This includes a key role in the design of India's national public housing programme that facilitates the building of over 2 million rural houses a year; infrastructure planning, upgrading and institutional reform in multiple million-plus cities. Aromar has served on high-level committees of the Government of India, and was responsible for the development of housing and urban development plans for two-thirds of India's states in the 1990s.

Aromar Revi has delivered over 200 keynote addresses, speeches, seminars, TV and public appearances, across the world over the last two decades. This includes twice addressing UN member states in New York and at TEDx Palais des Nations in Geneva on Sustainable Cities. He delivered the first Kapuscinski Development lecture in Africa; the Khemka Distinguished lecture on India's Urbanisation at the University of Pennsylvania in September 2015; the annual Curtin University lecture on Sustainability in May 2016. In 2017, he opened the Going Global Higher Education Summit in London on the University and the City and the EcoCity World Summit, 2017 in Melbourne.

Aromar Revi has led 120 major research and consulting & assignments in India and internationally; has deep governance, institutional development, management and implementation experience, across public, private and academic institutions; has published over 75 peer reviewed publications and books, which are cited over 8,000 times; lectured & taught at over 60 of the world's leading Universities and think tanks across 6 continents; has travelled extensively to over 55 countries, including 19 of the G-20; helped structure, design & review development investments of over \$8 billion; worked on 3 of the world's 10 largest cities; across urban and rural areas in all of India's 29 states and in multiple international projects across over a dozen countries.

<https://ihs.co.in/about/board-founding-members/aromar-revi>

Guéladio Cissé, Swiss Tropical and Public Health Institute (Swiss TPH), University of Basel

- Coordinating Lead Author WGIAR6 Chapter 7 “Health, wellbeing and the changing structure of communities”

Professional activities at Swiss TPH

- Research and teaching on water, sanitation and hygiene (WASH) multifaceted challenges in face of global change (water quality, wastewater management, waste recovery and reuse, urban agriculture, nutrition, adaptation to climate change and health, disaster risk reduction, ecosystems and ecosystem services, air pollution);
- Assessment of vulnerabilities and health risks at household and community levels using ecohealth approach, eco-epidemiology, health risks and impact assessments;
- Support and promotion of integrated approaches for improving WASH and beyond for reduction of diseases, better health and wellbeing, particularly in urban contexts (underprivileged urban and peri-urban environments);
- Teaching activities and younger researchers supervision in Switzerland and Africa.

Higher education and qualifications

2014: Habilitation as Research Professor (Directeur de Recherche) in sanitary engineering, CAMES (Council of Higher Education for Africa and Madagascar);

2005: Associate Research Professor (Maître de recherche) 2005

2013: Certificate of Advanced Studies on “Disaster Risk Reduction”, Swiss Federal Institute of Technology in Lausanne (EPFL), Lausanne, Switzerland

1997: PhD in Sanitary Engineering (water quality, environmental epidemiology, GIS, qualitative research), EPFL, Lausanne, Switzerland

1993: MSc in Environmental Sciences (ecology, ecotoxicology, water pollution, air pollution, soil protection), EPFL, Lausanne, Switzerland

1986: Post graduate certificate in Sanitary Engineering, EPFL, Lausanne, Switzerland.

1985: Civil Engineering Diploma, INFORBA Engineering School, Rouiba, Algeria

Current and past professional positions

7/2015 - : Head of Unit, Ecosystem Health Sciences Unit, Department of Epidemiology and Public Health, Swiss TPH, Basel, Switzerland

2009 - : Project and Research Group Leader, Swiss TPH, Basel, Switzerland.

2004 -2009: Managing Director, Swiss Centre for Scientific Research in Cote d’Ivoire (CSRS), Abidjan

2001 - 2004: Deputy Director, CSRS, Abidjan, Côte d’Ivoire; Acting Director: July 2002 – Feb 2013

2001 - 2009: Regional Coordinator in JACS West Africa of the Program NCCR North South on sustainable development and global change (SNF and SDC funded program), CSRS

2000 - 2009: Group Leader of the Research Axis “Urban Environment and Health”, CSRS

1997 - 1999: Head of the Sanitary Engineering Department, EIER, Ouagadougou, Burkina Faso

1996 - 1999: Lecturer in sanitary engineering and environmental epidemiology, Department of Sanitary Engineering, EIER, Ouagadougou, Burkina Faso

1994 - 1999: Research project coordinator on Wastewater Use in Urban Agriculture in Sahelian Context, EIER.

Selected Projects

- CDRI-CSRS-CC - Ecohealth and adaptation to climate change in water and health sectors in West
- Connecting the Dots. Teaching, Research and Services in the Great Lakes Region
- Joint South Africa and Swiss Chair in Global Environmental Health
- SDC-WHO-RR&R - SDC-WHO-RR&R - Resource Recovery & Reuse: From Research to Implementation
- Vegetables go to School: Improving Nutrition through Agricultural Diversification

<https://www.swisstph.ch/en/staff/profile/people/queladio-cisse>

Christopher Trisos, National Socio-Environmental Synthesis Center (SESYNC), University of Maryland, USA

- **Coordinating Lead Author WGIAR6 Chapter 9 “Africa”**

As an ecologist, I aim to do science to help both people and the planet. I grew up in South Africa and completed my undergraduate degree in ecology and economics at the University of Cape Town. My core research interest is understanding biodiversity change. My PhD research at the University of Oxford used ecology and evolutionary biology to explain biodiversity patterns in South American birds. I recognise that environmental problems are also social problems, and enjoy working in interdisciplinary teams. My focus at SESYNC is to understand how changes in human systems are connected to changes in ecological systems.

My research projects ask

1. What are the potential impacts of climate change and climate engineering technologies on biodiversity?
2. Do cities help or harm biodiversity?
3. How do we combine ecology and economics to sustainably manage connected human and ecological systems?

<https://www.sesync.org/users/ctrisos>

Rashieda Davids, University of KwaZulu-Natal

- **Research Project Manager for the Sustainable and Healthy Food Systems**

Rashieda Davids is a Research Project Manager for the Sustainable and Healthy Food Systems (SHEFS) project, a transdisciplinary, multi-institution, international programme that aims to provide research evidence from food system-environment-health nexus, for policy improvements towards sustainable food systems. She is based at the University of KwaZulu-Natal (UKZN), where in addition to her coordination of the SHEFS UKZN project team and activities, she is doing research on the food system-environment-health nexus, with foci on ecosystem services, social-ecological systems, community and sustainable development, transdisciplinarity and organizational learning.

Prior to working in the research sector, Rashieda worked in the private and government sectors, where her roles included facilitating sustainable development and planning, environmental project management, environmental impact assessment, biodiversity planning and stewardship. Some of her key roles include serving as Research Coordinator of the Durban Research Action Partnership; Chair of multi stakeholder environmental management fora; participation in the establishment of the Environmental Assessment Practitioners Association of South Africa (EAPASA); selection and qualification as a registered Environmental Assessor for EAPASA and EXCO Member: Education Portfolio of the South African Black Technical & Allied Careers Organisation (SABTACO).

Rashieda's reflections from the private, government and research sectors highlighted the integration challenges which inhibit sustainability achievements, and fueled her interest in transdisciplinarity to bridge the science-action gap. Being passionate about both people and the environment, she was naturally drawn to research and practice in social-ecological systems and ecosystem services planning and management, which was the focus of her MSc Geography, and presently, of her PhD in Environmental Science. Rashieda believes in working to make a difference and hopes that through doing collaborative research, she contributes towards cultivating mutually beneficial relationships between humans and the environment at grassroots and governance levels.

Dr Andrew Alan Mather Pr. Eng., eThekweni Municipality

- **Project Executive: Coastal and Catchment Policy**

Andrew graduated from the University of KwaZulu-Natal with a Bachelor of Science in Civil Engineering. He was employed by the eThekweni Municipality (then the Durban City Council) and worked as an engineer in the field of river and hydraulic engineering. In 1993 he was promoted to a

managerial position responsible for the stormwater engineering branch. At the same time he obtained an Honours Bachelor of Commerce (Business Management) from the University of South Africa.

In 1997 he was appointed as the manager of the Rivers and Coastal Engineering branch. He was then promoted to the position of Director: Drainage and Coastal Engineering department in 1998. His Director responsibilities included the stormwater maintenance branch, the Durban sand bypass scheme, three civil design offices for coastal engineering, stormwater engineering and in-house client projects, an urban design and landscape planning branch. A total of 210 staff and an annual capital budget of R560 million (2018 equivalent).

In 2003 he took up a strategic management position in the Office of the City Manager as Project Executive: Coastal and Catchment Policy, Co-ordination and Management. His current responsibilities include, the development of coastal and catchment policies, input into national and provincial legislation, municipal bylaws, implementation of the Integrated Coastal Management Act at municipal level, as well as the development of strategic public and private developments.

He is responsible for the Unit civil engineering mentorship programme where graduates are prepared for professional registration. There are currently over 120 staff on this programme. He is currently an external final year examiner at the University of KwaZulu-Natal. He is a registered Professional Engineer and is a member of several institutions.

He has authored several papers mainly on coastal and sea level rise related topics and obtained his PhD on "The risks, management and adaptation to sea level rise and coastal erosion along the Southern and eastern African coastline". He has been an expert reviewer for the IPCC's chapter on "coastal and low lying areas" in the Fifth Assessment Report (AR5).

For more information please contact

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