

## Monte Cassim

Special Aide to the Chancellor, Ritsumeikan Trust,  
Executive Director, Kyoto Museum of World Peace and  
Professor (Health, Environment and Life Science), Ritsumeikan Center for Sustainability Science



### Experience and Career

Monte Cassim has been appointed Special Aide to the Chancellor of Ritsumeikan from 1 January 2013. Prior to that, for nine years he was Vice-Chancellor of Ritsumeikan Trust from 2004-2012 and President of Ritsumeikan Asia Pacific University for six of them, from 2004–09. In April 2012, he was appointed Executive Director of the Kyoto Museum of World Peace at Ritsumeikan University. As Professor of Policy Science (1994–to date), he specializes in environmental science and health informatics at the university's Research Center for Sustainability Science.

Cassim is also currently on the Board of Executive Trustees of the Nara Institute of Science and Technology (NAIST) and the Akita International University (AIU). He is also on the Board of Councillors of the Okinawa Institute of Science and Technology (OIST). He is involved in Japanese endeavours to establish universities overseas in collaboration with host country governments and currently serves on the Strategic Working Group of the Egypt-Japan University of Science and Technology (E-JUST). As Advisor to the Board of Trustees of the Japan-Vietnam Economic Forum (JVEF) since 2010, he now heads the Concept Development Survey Team of JVEF's Working Group to establish a Japan-Vietnam University (JVU) in Hanoi in collaboration with Vietnam National University. He is also on the Board of the Abu Dhabi-Japan Educational Council (ADJEC) and is on the International Advisory Board of Edu-Alliance, an Abu Dhabi based think tank supporting the human development of Emirati nationals in today's globalized environment.

He is a member of the Board of Trustees of the Sasakawa Peace Foundation, is on the Board of Councillors of the International House of Japan, the Japan Center for Cooperation with the Middle East, the Alliance Forum Foundation and an Executive Trustee of the Kyoto United Nations Association. As Advisor to the "Hyaku-nen Keiei no Kai" (Association of 100-Years of Corporate Management), he is engaged in a project to inventorize these enterprises and analyze the secrets underlying their longevity together with the Ministry of Economics, Trade and Industry (METI), Teikoku Data Bank and the Nikkan Kogyo Shinbun. In April 2013, he was appointed as Advisor to J.C. Services Ltd., an energy and infrastructure technology development, operation and management services company located in Tokyo and Osaka, and its affiliated think-tank, E&T Research Institute. This last is currently engaged in a "smart community" development feasibility study in Sri Lanka under a Japanese Ministry of Economics, Trade and Industry (METI).

His affiliation with the non-profit sector includes founding "Tools for Self-Reliance, Japan" in 1993, where he remains as a Director (International Projects) to this day. TFSR Japan is a development NGO taking refurbished tools and artisans from Japan to work with artisans and residents of impoverished communities in developing economies. Several decentralized renewable energy supply, water supply and food processing systems were constructed in rural Sri Lanka through this affiliation. He is also the founder and Chairman of the Board of Trustees of "Global Futures, Kyoto" (est. 2012), an NPO promoting science and technology interventions to foster an open innovation partnership between industry, government,

academia and local communities.

He has been on several Government Advisory Panels in Japan and Sri Lanka. Among the latter, he was Advisor to the Prime Minister for establishing the Information and Communication Technologies Agency and Chairman of the National Bio-Technology Council under the Ministry of Science and Technology between 2002 and 2004.

## **Research and Interests**

Since joining Ritsumeikan in 1994, Cassim has worked on systems design and technology development for solving environmental or human societal issues through an international “open innovation” partnership between government, industry and academia. This first led to the establishment of the Discovery Research Laboratory (DRL) in 2000 with projects on biodiversity restoration in tropical ecosystems (rainforests and coral reefs, primarily), assessing the “environmental health” of small and medium-sized enterprises using Life Cycle Assessment, and inclusive design solutions for aging and disability. The research outcomes at DRL were further developed in the laboratories of the Health, Environment and Life Science (HEALS) Institute, established in 2006 at Ritsumeikan Asia Pacific University (APU).

Cassim was Honorary Professor at King's College London GKT Medical School from 2003–04, when he first developed the TACMIS (Total Access Care and Medical Information System) model for stroke patients. Today, this has evolved into an advanced imaging and rehabilitation robotics initiative with an inclusive design component, expected, to be launched in 2014. At the Research Center for Sustainability Science, Ritsumeikan University, he works on advanced biodiversity mapping systems which mobilizes the “citizen-scientist” and on the introduction of agro-informatics and agro-photonics for adaptation to global climate change. This last currently focuses on the wine, tea and horticultural industries.

He is passionate about creating an Asian community of scientists around S&T interventions and cross-national, trans-disciplinary collaboration leading to creative local initiatives that will solve globally significant problems or issues of under-development. His current research on debilitating lifestyle diseases, biodiversity restoration in damaged ecosystems and climate change adaptation is reflective of this. For eight years Cassim was a part-time farmer, growing rice and vegetables in a mountain village in Central Japan, which gave him many insights into the richness of traditional agricultural and ecological knowledge. He is an avid fan of blues music, loves fast cars, slow food and travel to unknown places.

## **Academic Record**

1966: Graduated from Royal College, Colombo (High School)

1970: Graduated from Department of Architecture, Faculty of Natural Sciences, University of Sri Lanka, Colombo (Undergraduate Education)

1972: Awarded Japanese Government (“Monbusho”) Scholarship for Post-Graduate Studies

1972: Japanese Language Program at the Osaka University of Foreign Studies

1972-73: Post-Graduate Research Auditor at Department of Architecture, Faculty of Engineering, Yokohama National University

1973-74: Post-Graduate Research Auditor at Department of Urban Engineering, Graduate School of Engineering, University of Tokyo

1974-1976: Master's Program, Department of Urban Engineering, Graduate School of Engineering, University of Tokyo

1977: AOTS Special Program on IT Systems and Programming at Fujitsu Systems Laboratories, Kamata

1977-1981: Doctoral Program, Department of Urban Engineering, Graduate School of Engineering, University of Tokyo

## Employment Record

1970-1971: Architect at Valentine Gunasekera Ltd., Colombo, Sri Lanka

1971-1972: Architect at Design and Consultancy Division, State Engineering Corporation, Sri Lanka

1974-1981: Research Fellow and Coordinator, Group Asia 80 Program, Japan Center for Area Development Research

1976-77: Lecturer, School of Housing Building and Planning, University Sains Malaysia, Penang, Malaysia

1980-1984: Architect at Design Management Division, Design Department, Mitsui Construction Ltd. (Head Office), Tokyo

1981-1984: Regional Development Planner, A.U.R. Architecture and Planning Consultants, Tokyo

1985-1994: Senior Research Fellow and Coordinator, Urban Development and Housing Unit, Industrial Development Unit and Strategic Assistance Programmes for Latin America and Indonesia, United Nations Center for Regional Development

1986-1987: Seconded from the U.N.as Regional Planner to the Social Infrastructure Division, Asian Development Bank, Manila, Philippines

1994-1996: Professor (International Development Policy), Faculty of International Relations, Ritsumeikan University

1994-to date: Professor (Health, Environment and Life Science), Faculty of Policy Science, Ritsumeikan University

2000-2004: Executive Director, Center for Global Education and Research, Ritsumeikan University

2003-2004: Honorary Professor, Stroke Unit, GKT Medical School, King's College, London, U.K.

2004-2009: President, Ritsumeikan Asia Pacific University

2004-2012: Vice Chancellor, Ritsumeikan Trust

2006-to date: Board Member, Board of Executive Trustees, Nara Institute of Science and Technology (NAIST)

2011-to date: Board Member, Board of Councillors, Okinawa Institute of Science and Technology (OIST)

2012-todate: Executive Director, Kyoto Museum of World Peace, Ritsumeikan University

2013-todate: Special Aide to the Chancellor, Ritsumeikan Trust;

2013-to date: Advisor, J.C. Services Ltd., Tokyo and Osaka, and E&T Research Institute, Tokyo

2014-to date

## Recent Publications:

- 1) Kurokawa, Kiyoshi and Monte Cassim (2014). **Driving Sustainability Science Forward: Transformative innovations and transnational collaboration**, in: **Hidden Futures, Creative Journeys**, Vol.8, Journal of Policy Science, Ritsumeikan University (publication expected in November 2014).
- 2) Itoh, Shigeru, Monte Cassim and Sachi Perera: **Structural and Non-Structural Elements of Sustainability in Post-Disaster Reconstruction of Japanese Settlements**, in: **Hidden Futures, Creative Journeys**, Vol.8, Journal of Policy Science, Ritsumeikan University (publication expected in November 2014)
- 3) Cassim, Monte, (2013). 「サステナビリティの概念」 (**Concepts of sustainability**), 「サステナビリティ学入門」第2章(Ch.2 in An introduction to sustainability science:, ed. Weisheng Zhou),法律文化社 (Horitsu Bunka Sha), Kyoto.
- 4) Cassim, Monte (2013), **Creating a Knowledge Economy Engine: Driving Sri Lanka and Japan into the 21<sup>st</sup> Century**, Keynote Lecture (invited) in **Abstracts, SLJCR 2013**, Conference on Sri Lanka – Japan Collaborative Research, Peradeniya, Sri Lanka.
- 5) Cassim, Monte and K.J.C. Kumara (2013), **Bioclimatic Zoning of Crop Suitability using GIS Fuzzy Multi-Criteria Analysis: Applying Lessons from Wine Grape Cultivation to a Tea Producing Region in Sri Lanka**, (peer reviewed) in **Abstracts, SLJCR 2013**, Conference on Sri Lanka – Japan Collaborative Research, Peradeniya, Sri Lanka.

- 6) Fitrio Arshadiono and Monte Cassim (2013), **Bio-Climatic Indices for Climate Change Adaptation in Agro-forestry: Sustainability and Value Addition Challenges for the Green Tea Industry in Uji**, (peer reviewed) in **Abstracts, SLJCR 2013**, Conference on Sri Lanka – Japan Collaborative Research, Peradeniya, Sri Lanka.
- 7) Giguruwa, Nishantha, Dang Hoang Anh and Monte Cassim (2013), **Precision Agronomy Informatics Platform (PAIP): A Benchmark Cloud Solution for Food and Agriculture Industries**, (peer reviewed) in **Abstracts, SLJCR 2013**, Conference on Sri Lanka – Japan Collaborative Research, Peradeniya, Sri Lanka.
- 8) Park, Jung-Hwan and Monte Cassim (2013), TerraGreen Network Project: **A System for Making a Global Plant Census through Collaboration between the Public and Scientific Communities**, (peer reviewed) in **Abstracts, SLJCR 2013**, Conference on Sri Lanka – Japan Collaborative Research, Peradeniya, Sri Lanka.
- 9) Cassim, Monte, and K.J.C.Kumara (2012). **Spatial Interpolation of micro-/meso-climatic data using radial basis function neural networks for the use of local farmers**, Summary in Asia Pacific Conference 2012 Proceedings, pp 53-56, Ritsumeikan Center for Asia Pacific Studies, Beppu.
- 10) Giguruwe, Nishantha, K.J.C.Kumara and Monte Cassim (2012). **Towards establishing an integrated framework of food information and opportunities, FOODinfo**, Summary in Asia Pacific Conference 2012 Proceedings, pp 69-72, Ritsumeikan Center for Asia Pacific Studies, Beppu.
- 11) Cassim, Monte, Nishantha Giguruwe, Phillip Sallis, K.J.C.Kumara and K.Nishioka (2012). **Revitalizing communities imperiled by agro-forestry transformations caused by climate change: A cross-national study in Japan and New Zealand of grape growers for the wine industry**, Final Report, A4:66pp, submitted to Toyota Foundation Research Grant Program (FY 2009 award), Ritsumeikan Center for Sustainability Science, Kyoto.
- 12) Giguruwe, Nishantha, Monte Cassim and Koo Jeng Tong (2011). **A social networking platform for augmenting precision agriculture**, 6<sup>th</sup> IEEE International Conference on Industrial and Information Systems (ICIIS), IEEE/University of Peradeniya, Sri Lanka, Peradeniya.
- 13) Giguruwe, G.D.N., M. Cassim and K. Nishioka (2011). **A social networking approach for implementing precision agriculture: The case of the Ajimu project**, 2<sup>nd</sup> Annual Conference of the International Association of Asia Pacific Studies, Beppu
- 14) Cassim, Monte (2010). **TACMIS: A total access care and medical information system**, Ch.23 (pp.315-326) in Biomedical Knowledge Management: Infrastructures and processes for e-health systems (Eds: Pease, Wayne, Malcolm Cooper and Raj Gururajan), Medical Information Science Reference, Hershey, New York.
- 15) Kumara, K.J.C., M. Cassim and P. Heck (2009). **Modeling of viticulture to predict impacts of climate change: A novel methodology using neural networks**, paper presented at Asia Pacific Conference 2009, Ritsumeikan Center for Asia Pacific Studies, Beppu.