



Summary of Keynote Address by Professor Maano Ramutsindela

Sustainable Transformations: Implications for the Indian Ocean Rim

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Introduction

In this address I focus on sustainable transformations through research questions that are useful for thinking about transformative research in the IOR. These questions relate to conceptions of transformation research, systems thinking, and research directions in the context of natural resources. The goal is to open discussions, and to give the newly launched IORA Universities Network food for thought as it develops a long-term research agenda and a set of activities.

Themes and key questions

Theme 1: Sustainable transformations

Sustainability and transformations have become the buzzwords of our time, but it remains unclear why global and national projects on sustainable development have produced mixed results and what needs be done to truly achieve the envisaged developmental outcomes. This calls for a sustained critical inquiry into sustainable transformations. Such an inquiry should include fundamental questions of what sustainable transformations entail and how it frames research. I refer to two perspectives to illustrate the importance of this question. The first is transformative research (TR) understood as “that which ‘transforms’ or causes a major change in thought patterns concerning an area of scientific endeavor” (Trevors et al 2012: 117). It is spurred by intangibles such as human intuition, implausible hypotheses, etc. but needs an incubator for creative ideas and theories to thrive. TR is partly incubated by transgressing ‘scientific norms’ and grappling with their legacies. The second perspective is that of transformation research as “a lens to study and support fundamental change processes of societal systems *towards sustainability*” (Hölscher et al. 2021: 1). It seeks to change society to live within the earth’s limit and is often expressed through the planetary boundary thesis. I would argue that this second perspective is dominant in sustainability sciences.

Theme 2: Systems thinking and the ‘commoning’¹ of IOR

Given the histories of the Indian Ocean and those of the littoral states, how can the Indian Ocean Rim be reconstituted as a regional Common from the perspective of natural resources?

¹ The process of making IOR a common region for all. Commons are generally referred to as public goods and services that are outside of the control of formal markets and formal governance mechanisms.



Studies have shown that connectivities are key to the IOR as a pan-regional lived space (Rumley and Doyle, 2016; Srinivas et al. 2022). Though such a space is conducive for the emergence of the regional Commons, there are still broken lines of connectivity that are visible in researching people and/or natural resources (see Odura et al. 2022; Srinivas et al. 2022). These lines can be repaired by focusing on complex societal systems, human-environment interactions and relations, and the connectedness of 'all things' (systems thinking) to inspire long-lasting solutions to the challenges the region faces. I consider systems thinking a condition for TR in the IOR.

Theme 3: Research

It would be hard to do meaningful and impactful research in the IOR without answering the question what sustainable TR ought to mean in the context of the region. Research in/on the region appears to revolve around a few approaches, including historical, cultural, geopolitical, and futuristic approaches (Bouchard et al. 2010; Obura et al. 2022; Dalpadado et al. 2024). My view is that these approaches should be assembled to answer crucial research questions. I recall an idea of establishing a peace park in the West Indian Ocean to bring together littoral states in collaborative management of natural resources and to jointly pursue peace, human wellbeing, and the green economy.

Conclusion

The IOR is a useful regional space for thinking about transformative research that integrates societal issues with terrestrial and marine resources. Historical and prevailing thought patterns, perceptions, and imaginations of the futures are central to sustainable transformations. The challenge for the IORA Universities Network would be to co-design a long-term research agenda and to create a safe space for 'crazy theories' in the hope that a few of them will become useful for transforming both society and nature at various levels.

References:

Bouchard, Christian, and William Crumplin. "Neglected no longer: the Indian Ocean at the forefront of world geopolitics and global geostrategy." *Journal of the Indian Ocean Region* 6, no. 1 (2010): 26-51.

Cabrera, Derek, Laura L. Cabrera, and Gerald Midgley. "The four waves of systems thinking." *Journal of Systems Thinking* (2023): 1-51.

Dalpadado, Padmini, Mathew Koll Roxy, Kevin R. Arrigo, Gert L. van Dijken, Melissa Chierici, Marek Ostrowski, Rasmus Skern-Mauritzen, Gunnstein Bakke, Anthony J. Richardson, and Erik Sperfeld. "Rapid climate change alters the environment and biological production of the Indian Ocean." *Science of The Total Environment* 906 (2024): 167342.



Hölscher, Katharina, Julia M. Wittmayer, Martin Hirschnitz-Garbers, Alfred Olfert, Jörg Walther, Georg Schiller, and Benjamin Brunnow. "Transforming science and society? Methodological lessons from and for transformation research." *Research Evaluation* 30, no. 1 (2021): 73-89.

Obeng-Odoom, Franklin. *The commons in an age of uncertainty: Decolonizing nature, economy, and society*. University of Toronto Press, 2020.

Obura, D., Gudka, M., Samoily, M., Osuka, K., Mbugua, J., Keith, D.A., Porter, S., Roche, R., van Hoodonk, R., Ahamada, S. and Araman, A., 2022. Vulnerability to collapse of coral reef ecosystems in the Western Indian Ocean. *Nature Sustainability*, 5(2), pp.104-113.

Rumley, Dennis, and Timothy Doyle, eds. *Indian Ocean Regionalism*. London: Routledge, 2015.

Srinivas, Smriti, Bettina Ng'weno, and Neelima Jeychandran, eds. *Reimagining Indian Ocean Worlds*. London; New York: Routledge, 2020.