

ABSTRACT
PARALLEL WORKING SESSION

SUSTAINABILITY

Mark Swilling

Professor of Sustainable Development,
School of Public Management and Planning
Stellenbosch University, South Africa

**Sustainability and Transdisciplinary Research:
Overcoming Disciplinary Apartheid at Stellenbosch University**

Throughout the world, in both developed and developing countries, universities are responding to the global challenge of sustainability by establishing inter- and trans-disciplinary centres of research and teaching excellence aimed at building a better understanding of the social, economic, institutional, political and ecological changes required to respond to the accumulating negative consequences of unsustainable use and distribution of resources. Universities are responding in this way because it is no longer possible to comprehend the 'polycrisis' that we face - and the required solutions - by using the traditional set of disciplines that determine the structure and purpose of university departments and faculties. A transdisciplinary challenge requires a transdisciplinary response.

In order to understand the sustainability challenges, we need new ways of knowing and producing knowledge that make it possible to develop an integrated understanding of all the interacting systems, in particular inter-related natural and social systems. This is why complexity thinking for the study of the dynamics of complex systems is often the epistemological and methodological foundation for transdisciplinary research. The challenge of sustainability is not simply about bringing together different disciplines. It is also about changing and extending our understanding of knowledge, and what we mean when we claim that we have knowledge about a particular system or cluster of inter-connected systems.

Since 2005 a group of Professors at Stellenbosch University have explored in various ways what the transdisciplinary study of sustainability means. This has entailed both an exploration of theoretical approaches to transdisciplinarity, as well as practical strategies for conducting research in collaborative ways. The result has been the establishment of a new Doctoral Programme for the Transdisciplinary Study of Sustainability. This academic strategy has been coupled to a partnership between Stellenbosch University and Stellenbosch Municipality co-led by the Rector and Mayor to tackle the concrete problems of the town which like most urban areas suffer from the consequences of water and energy shortages, overflowing waste water treatment plants and landfills, housing shortages, poverty, polluted soils and rivers, and land conflicts.

The presentation will explain the theoretical and strategic explorations of sustainability and transdisciplinarity that have taken place over the past five years, and reflect on the learning that has taken place in order to transcend disciplinary barriers and engage in concrete ways with the realities of the urban context within which Stellenbosch University is embedded.