

SESSION 1.1 (SDGS, INNOVATION AND GLOBALISATION)

Production and Innovation systems and sustainable regional development: the experience of a Brazilian development bank

Helena M. M. Lastres^a, Cristina Ribeiro Lemos^b, Marcelo Machado da Silva^c and Walsey de Assis Magalhães^d

^a Advisor to the President and Head of the Secretariat for Local Innovation and Production Systems and Regional Development at the BNDES. ^b Advisor to the President, Secretariat for Local Innovation and Production Systems and Regional Development, at the BNDES. ^c PhD candidate in Mineral Economics from Curtin University, Perth, WA; ^d Graduate Certificate (PUC-SP and Fipe/USP).

Abstract: This article discusses the role of the Brazilian Development Bank (BNDES) and the changes that occurred in the first decade of the 21st century, when innovation and social, environmental and regional sustainable development were treated as strategic priorities. It informs about the BNDES' main operations, shows its operating lines, and examines its support for production and innovation systems aiming at inclusive and sustainable development.

The Spectre of Post-capitalism and Rethinking Science, Technology and Innovation for Development

Rasigan Maharajh

Chief Director of the Institute for Economic Research on Innovation, Tshwane University of Technology, South Africa

Sustainable use of terrestrial ecosystems (SDG 15) - Indian Perspective

KP Laladhas, Preetha.N and Oommen V Oommen^a

^a Chairman, Kerala State Biodiversity Board, L14, Jai Nagar, Medical College P O- Thiruvananthapuram-695011 Email : keralabiodiversity@gmail.com

Rethinking Innovation: From Schumpeter's Creative Destruction to Creative Re-construction

Mammo Muchie

Professor, Tshwane University of Technology, South Africa

Abstract: We advance in this exploratory paper how a re-thinking of innovation from economics to include social, environmental and other relevant gains can be developed. The system of innovation has ontologically been mainly driven by economics, commerce and market. These are highly instrumentally driven and they produce economic growth or gains by creating social losses such as bringing social inequality, poverty and unemployment.

We need to bring in on equal terms the gains from economics, sociology and sustainable development to validate both novelty and use that innovation is distinguished from technology, invention and knowledge.

There is a real need to move from economic innovation to social innovation and from mere entrepreneurship to social entrepreneurship by combining knowledge, learning, research, and capability building to construct systems of innovation that is anchored on a new conceptual frame. There is a need to design a new theoretical framework that has a clear and unambiguous ontological and epistemological preference for making the wellbeing and not the wealth of people as the only means to create development. We need innovation not as creative destruction or destructive creation, but creative reconstruction to frame all the interactions to provide a social innovation system and social entrepreneurship to bring about dynamic change and remove all varieties of development and underdevelopment in general and African integrated development in particular. In addition to helping to bring afresh key concepts about systems of innovation, we also seek to re-conceptualise towards an approach that adds value from a social innovation and social entrepreneurship perspective. Thus we propose a new focusing device that we formulate as the "Social System of Innovation and Social Entrepreneurship Development" in order to incorporate knowledge, learning and competence building (KLIC) in the process of an integrated African development. A paradigm shift is needed to change innovation and entrepreneurship mainly validated by market success to social innovation and entrepreneurship mainly validated by social, economic, knowledge and environmental gains and success.