

science & technology

Science and Technology REPUBLIC OF SOUTH AFRICA





## Towards Resilient Futures Community of Practice

Workshop 30 July 2019





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The CoP initiative is aimed at establishing collaborations amongst research chairs:

- Form strategic partnerships within the research community
- Conduct evidence-based research solutions to societal challenges
- Translate research findings into actionable policy

#### SARChl Chair: Developmental Economics Haroon Bhorat



SARChl Chair: Mineral Law in Africa Hanri Mostert





SARChl Chair: Bioprocess Engineering Sue Harrison



SARChl Chair: Minerals Beneficiation Dee Bradshaw





minerals to metals



# Developing a Fibre Microindustry to Generate Economic Growth from Degraded Land

Driving Post-mining Industrial Development through Fibrous Multi-Product Value Chains

### Study Objective

Explore whether fibre-rich plants, such as bamboo and bast fibres, can be used to remediate degraded land in a way that:

- is economically feasible,
- leads to enhanced economic complexity
- promotes the establishment of a fibre micro-industry
- creates higher value-add outputs
- provides employment opportunities

#### Research Approach

- 1. <u>Environmental perspective</u>: What are the environmental factors that influence the ability of rapidly growing, fibre-rich plants to remediate damaged and polluted land?
- 2. <u>Engineering perspective</u>: What are processing alternatives and implications for downstream recovery of multi-value products?
- **3.** <u>Economics perspective</u>: How can economic complexity be built on the basis of an understanding of local socio-economic linkages?
- 4. <u>Legal perspective</u>: What regulatory barriers exist, and how can they be addressed?

www.resilientfutures.uct.ac.za