ENVIRONMENTAL ECONOMICS POLICY RESEARCH UNIT



School of Economics University of Cape Town



https://commerce.uct.ac.za/epru https://www.efdinitiative.org/natural-capital-collaborative-natcap

The workshop confirmed that although sub-Saharan Africa's water, biodiversity, agriculture and forestry challenges are well documented, they remain weakly addressed in research, policy design and implementation; participants therefore urged that existing evidence be translated into practical guidance for ministries, utilities and local communities, while closing data and capacity gaps through collaborative projects.

	WATER SYSTEMS	SUSTAINABLE AGRICULTURE
Core Gaps	 Limited groundwater-surface water data integration; scant monitoring of Strategic Water-Source Areas. High non-revenue water losses; chronic under-funding of operations & maintenance. Sanitation deficits drive faecal pollution; health and productivity costs unquantified. 	 Limited uptake of conservation agriculture, agro-forestry and water-efficient practices under climate change. Fragmented spatial & socio-economic datasets impede assessment of technology impacts.
Potential Research Areas	 Map aquifer-river interactions; spatial cost-benefit analyses of green vs. grey recharge. Diagnose leak and theft drivers; test behaviourally informed billing pilots improving affordability for female- and youth-headed households. Trace pollution pathways; evaluate nudges and low-cost nature-based solutions that safeguard health. 	 Conduct GIS analysis of conservation agriculture and agro-forestry across rainfall and soil zones. Design lab-in-field experiments and valuation studies to test incentives reducing deforestation pressure. Test incentives that curb deforestation linked to agricultural expansion.
Cross-cutting Needs	 Consolidate siloed hydrology, utility and health datasets; embed gender & youth perspectives in design. Strengthen economic valuation and communication to secure finance for ecological infrastructure. 	 Build open data infrastructure linking EfD repositories, FAO layers and national surveys. Embed equity and gender considerations in technology adoption evaluations.
	ECOSYSTEMS SERVICES & BIODIVERSITY	FORESTRY
Core Gaps	 ECOSYSTEMS SERVICES & BIODIVERSITY Local valuation data scarce, especially for urban, cultural and spiritual services. Weak evidence on links between natural capital and household welfare; gender & age distributional effects poorly mapped. Lack of socio-ecological system modelling that adequately capture the complexity and feedback loops of its socio-ecological systems (SES). 	 FORESTRY Property-rights ambiguities and weak incentives undermine sustainable forest management. Carbon markets mistrusted due to credibility and verification challenges. Institutional capacity constraints hamper credible verification and enforcement.
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search	 Local valuation data scarce, especially for urban, cultural and spiritual services. Weak evidence on links between natural capital and household welfare; gender & age distributional effects poorly mapped. Lack of socio-ecological system modelling that adequately capture the complexity and feedback loops of its socio-ecological systems (SES). Field-test non-market valuation techniques; build policymaker capacity to interpret results. Investigate benefit-sharing mechanisms ensuring equitable ecosystem service gains. Evaluate payments for ecosystem services and innovative conservation finance in Africa. Integrate climate impacts into valuation frameworks. Develop socio-ecological mapping tools combining protected-area data with livelihood indicators. Provide training and decision-support tools to help ministries interpret valuation results. 	 Property-rights ambiguities and weak incentives undermine sustainable forest management. Carbon markets mistrusted due to credibility and verification challenges. Institutional capacity constraints hamper credible verification and enforcement. Evaluate alternative rights regimes and community incentive schemes for forest protection. Analyse transparency and cost structures of African carbon

NEXT STEPS FOR PARTICIPANTS

• Review these highlights against your mandate; identify where you can contribute data, expertise, ideas, funding, or pilot sites. Full report and shared resources will be circulated within a fortnight.