

Contemporary Social Science

Themed Issue: Sustaining natural resources in a changing environment

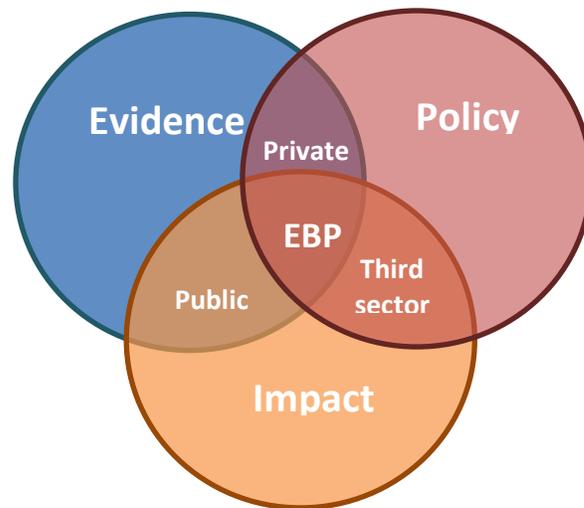


Linda Hantrais, Ruth Kattumuri and Ashley Thomas Lenihan have guest edited a themed issue of the UK Academy of Social Sciences' journal *Contemporary Social Science*, on [Sustaining natural resources in a changing environment](#). The topic was explored at a seminar sponsored by Taylor & Francis in January 2017, hosted by the Academy' International Advisory Group, in conjunction with the LSE Centre for International Studies (CIS) and the LSE India Observatory.

Academic researchers and practitioners who have worked and lived in countries as geographically and culturally diverse as Brazil, China, India, Ghana, Palestine, Uganda and Venezuela have contributed to this themed issue of *Contemporary Social Science*.

As authors and reviewers, they bring to bear their wide-ranging international and inter-sectoral experience, offering valuable comparative insights into the relationship between research and evidence-based policy in international contexts. Their articles provide an exciting mix of disciplinary perspectives ranging across geography, ecology, social policy, the political economy, philosophy, international development studies, technology, architecture and urban planning. They examine not only the institutions involved in generating and mediating evidence about the sustainability of natural resources in a changing environment, but also the different methodologies employed in collecting and assessing evidence, informing policy, and contributing to governance.

Sustaining natural resources in a changing environment: evidence policy and impact



The editorial by **Ruth Kattumuri**, entitled [Sustaining natural resources in a changing environment: evidence, policy and impact](#), explores the global impacts of a changing environment on the sustainability of resources. In a global context characterised by continued rapid population growth and accelerated urbanisation in emerging economies and the least developed regions of the world, pressures on environmental resources are intensifying. Extreme effects on ecosystems in both urban and rural communities are of enduring concern, as evidenced in water and food insecurity, and poor air quality. The author compares varying approaches to the collection and use of evidence, and the ways in which researchers may influence

policy decisions and their implementation. Drawing on large and small-scale studies conducted in different regions of the world from a range of disciplinary perspectives, the article seeks to unravel the triangular relationship between research evidence, policy and impact, while paying attention to the tools used to assess impact on, and of, policy. In conclusion, the author considers how coordinated efforts by academics, public, private and third-sector practitioners across disciplines and national borders might produce stronger evidence and knowledge with which to inform decision-makers, empower citizens and achieve sustainable development, thereby supporting the needs of present and future generations.

International water targets and national realities in Sub-Saharan Africa: the case of Uganda

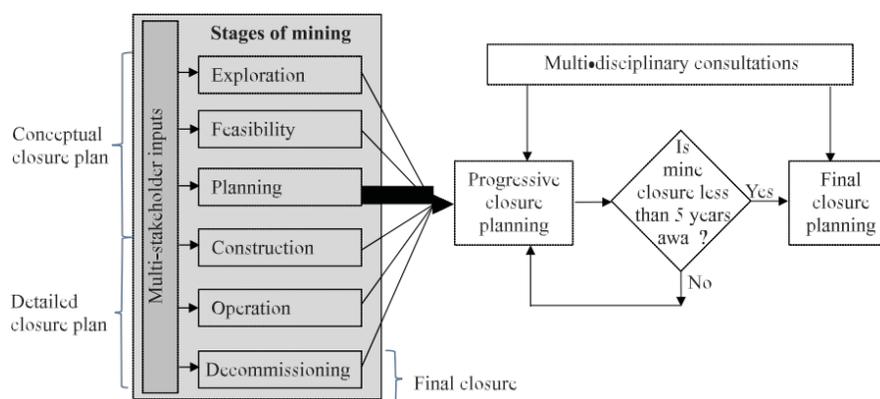


Woman using handpump @Wayne Conradie. Reproduced with permission

In their article on [International water targets and national realities in Sub-Saharan Africa: the case of Uganda](#), Kevin Sansom, David Hirst and Sam Kayaga consider how to reconcile ambitious UN Sustainable Development Goals (SDGs) for universal piped water supplies with developing country realities in Sub-Saharan Africa. A concise process for effective reviews of medium-term national targets is proposed and is applied in an analysis of the current provision of piped water to households and shared community facilities in urban and rural settings in Uganda. Different disciplinary perspectives are adopted to review trends, the performance of key stakeholders and their scope for achieving new targets. Only about

5% of households have piped water supplies on their premises in rural areas in Sub-Saharan Africa. To achieve the SDG target of 100% coverage will therefore take a long time and requires continued support for the sustainability of community water facilities as a priority. The SDGs offer sensible long-term aims, but national medium-term target setting and reviewing remain critical and require realistic and systematic planning approaches, as well as careful global reporting of national performance against SDG targets. The authors argue that balanced incentives are needed to encourage stakeholders to strive for realistic targets in the medium term, without demotivating countries with limited capacities and resources.

Towards sustainable development: planning surface coal mine closures in India



Framework for mine closure planning

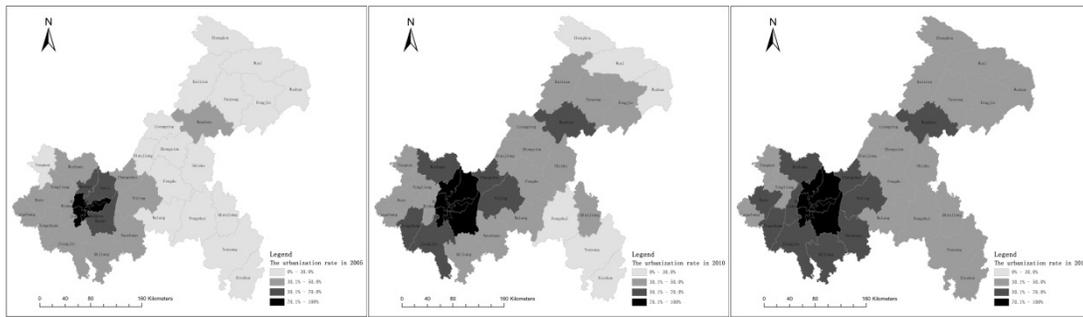
Adapted from ICMM, 2008 <https://www.icmm.com/website/publications/pdfs/310.pdf> and MOC, 2013 http://www.cmpdi.co.in/env/MCP%207_1_2013.pdf

In their article on [Towards sustainable development: planning surface coal mine closures in India](#), Raman Srikanth & Hippu Salk Kristie Nathan explain that coal is the major source of India's electricity today, accounting for 59% of its electricity generation capacity and 75% of the electrical energy generated. Given that 63% of the power generation capacity added in the Twelfth Five-Year Plan (2012–2017) was coal-based, they argue that coal is set to remain the most staple source of electricity for India in the foreseeable future.

Of the coal produced in India, more than 90% is dispatched from surface or opencast mines, with potentially harmful effects for the environment, due

to loss of forests and habitats, disruption of biodiversity and of local communities, and associated damage to agriculture, water resources, and local air quality. Acknowledging these adverse environmental impacts, the Government of India has mandated the restoration of mining areas post mine closure to create a 'self-sustaining ecosystem', while optimising the use of mined-out land for the benefit of local communities. Within this context, the article reviews India's surface coal mine closure policies, regulatory regimes, and operating practices with reference to best practices for reclamation and restoration in selected major coal producing countries. The article identifies the shortcomings in India's policies and suggests strategies and measures to remedy them.

The impact of urbanisation on natural resources: the case of Chongqing



Spatial distribution of urbanisation in Chongqing municipality in 2005, 2010 and 2015

In their article, Huiming Zong and Bingjie Cai examine [The impact of urbanisation on natural resources: the case of Chongqing, 1997 to 2015](#). They highlight significant differences not only between China and countries in the Western world, but also within China between its western regions and coastal areas. The western region of China experienced rapid urbanisation after 1997 when Chongqing, one of the most important central cities in the region, came directly under central government control.

Zong and Cai use the coordinated degree index, land use change intensity index and land use spatial index to analyse the urban construction process, its spatial variability and impact on cultivated land resources from a human geographer’s perspective. In their analysis, they show how rapid urban growth kept pace with the rate of industrialisation

and was characterised by a ‘centre–periphery’ spatial structure.

They find that urban growth lagged behind the rate of urban construction, measured by the rate of population urbanisation. In line with the government’s ‘new urbanisation strategy’, which was supported by research evidence, arable land was not used for construction, in contrast to other coastal cities. In identifying the characteristics of the urbanisation process in Chongqing and the challenges it raised, Zong and Cai comment on the reciprocal relationship between research evidence and policy development. They conclude that the findings from the Chongqing case afford a model that can be used by other cities in the western part of China that are experiencing a high rate of urbanisation and are seeking to promote sustainable urban development.

Negotiating transparency: NGOs and the contentious politics of the Extractive Industries Transparency Initiative in Ghana



Artisanal miners in Ghana. @Keith, Oxfam America. Reproduced with permission.

In his article on [Negotiating transparency: NGOs and the contentious politics of the Extractive Industries Transparency Initiative in Ghana](#), Nelson Oppong argues that, while transparency has been upheld by the dominant *zeitgeist* of the twenty-first century as an all-purpose recipe for addressing the ills associated with resource-led developmental transformation, little attention has been paid to the bargains and contestations accompanying its institutionalisation in resource-rich countries.

To gain a fuller understanding of how transparency interventions interact with the deeper vectors of power and politics embedded in resource governance, Oppong examines the dynamics of NGO participation in the Extractive Industries Transparency Initiative (EITI), an international

auditing and multi-stakeholder oversight initiative, adopted by Ghana. By recasting the analytic problem around the optic of NGO contestation and representation, the article offers a more nuanced engagement with the material politics of negotiability, contestation and representation that drive EITI compliance, non-compliance, and de-compliance. Drawing from an overall comparative political economy approach and a heuristic model highlighting the intricate dynamics of transparency, the overriding argument ranks the understated contestations within the NGO community around the EITI and the disparity between its platforms and the representational processes of democratic accountability, among the most formidable threats to the EITI's noble ambition of securing optimum resource-led transformation.

Gendered participation in community forest governance in India



People of the Malekudiya tribe discussing the development of their forest village.
Image courtesy of Anisha Sheth. Reproduced with permission.

In his article on [Gendered participation in community forest governance in India](#), Satyapriya Rout considers how recent forest governance practices in India have responded to environmental change and subsequent livelihood insecurity by focusing resource governance policies on communities. He argues that a paradigm shift has occurred involving participatory inclusive bottom-up approaches, rather than state-centric, top-down forestry. With the formulation of the 1988 National Forest Policy, several variants of participatory models of forest governance – social forestry, community forestry, joint forest management – have been tried out, with differing

degrees of success. The 2006 Forests Right Act adopts a rights-based approach to address the serious concerns of environmental degradation, livelihood insecurity, tenure reforms and questions of autonomy and identity of forest-dependent communities. Using mainly qualitative methodology, Rout reviews forest governance policies and recent participatory forestry practices. Drawing empirical evidence from two community-based forest governance institutions in the state of Odisha in eastern India, he shows how participatory forestry programmes may be exclusionary with regard to women's engagement if their involvement is under-represented.

Community empowerment in changing environments: creating value through food security



Community at work in the gardens created in Al Bireh, Palestine (credit: Nadia Habash).

In their contribution on [Community empowerment in changing environments: creating value through food security](#), Nicole Kenton and Sumita Singha show how methodologies that are locally relevant, empowering and replicable offer a way forward for improved policymaking and efficient resource governance in a globalised landscape of rapid change and scarce resources. Using the principles of equal participation and distribution, their article shows how the use of participatory methods can lead to greater community ownership and cohesion around shared concerns over access to healthy food and sustainable resource use in challenging

urban environments. Drawing on contextualised examples from small-scale projects carried out by Charushila, an international environmental design charity, in Venezuela and Palestine, Kenton and Singha present a co-design approach that puts people in touch with food growing and the reuse of resources to transform open spaces. An analysis of community-led co-production projects in these two contrasting urban environments shows how such processes can contribute to policymaking for longer-term sustainable development in the field of disaster relief and amid political upheaval in low- and middle-income countries.

Environmental impact assessment: evidence-based policymaking in Brazil and Latin America

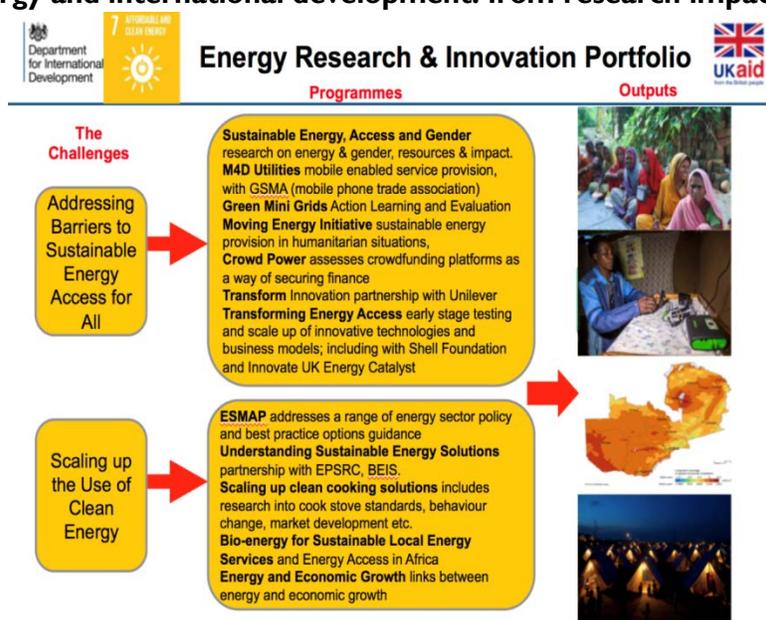


Oil platform in Rio de Janeiro's Guanabara Bay (credit: Kathryn Hochstetler)

In her article on [Environmental impact assessment: evidence-based policymaking in Brazil and Latin America](#), Kathryn Hochstetler shows how, in the 1990s, most Latin American countries adopted Environmental Impact Assessment (EIA) procedures to collect evidence about the environmental impacts of economic projects, and to avoid or compensate for them. In seeking scientific evidence about impacts, the EIA process includes consultation with civil society. Hochstetler undertakes a systematic comparison of the regulatory EIA frameworks of regional states, exploring how they have arranged to collect, disseminate and implement evidence about project

impacts. The comparison finds the Brazilian EIA process to be among the most advanced in the region. She goes on to examine how the process works in practice, focussing on what the Brazilian experiences show about the evidence-policy nexus. She discovers that the EIA process has become highly politicised. On the one hand, many governmental actors are trying to amend the process to gather less information, which they regard as blocking necessary economic projects. On the other hand, civil society actors criticise the process for missing important evidence of negative impacts.

Low carbon energy and international development: from research impact to policymaking



DfID energy research and innovation portfolio 2017 supplied by Alistair Wray.

In their article on [Low carbon energy and international development: from research impact to policymaking](#), Ed Brown, Ben Campbell, Jon Cloke, Jamie Cross, Long Seng To, Britta Turner, Alistair Wray argue that few areas of international development research have seen as much transformation over recent years as those relating to energy access and low carbon transitions. New policy initiatives, technological innovations and business models have radically transformed the configuration and dynamics of the sector, driven by the urgency of ongoing climate change. They ask how, in these rapidly moving contexts, policymakers can engage with research at different scales to gather evidence needed for effective decision-making, particularly within the context of

the frequently opposing aims of increasing energy access and climate change mitigation. They trace the general debates around how research impact is conceived within different constituencies, before exploring the relationship between policymakers, the academic community and other stakeholders within the specific context of energy and international development research. Drawing on cross-cutting lessons from thirteen research projects funded by UK research councils and government, they examine critically ways in which impact and engagement have been conceived by researchers and research funders. They ask how those lessons can feed into the design of future initiatives to make low carbon transitions meaningful as pathways for inclusive development.



Image created by [Serge Belda](#)

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