## `Sustainable Resource Use: Critical Issues in Developing Areas' IBG/RGS Annual Conference 2003 The Royal Geographical Society, Kensington Gore

Six of the original eight papers accepted were presented at this session. Although the topics covered a wide range of issues, socio-economic systems and environments, a number of inter-related themes ran through the papers. The first centred on resolving problems associated with widening community participation in the management of environments. Smrithi Talwar (Cambridge) demonstrated how international, national and community stakeholders interact in the implementation of development/conservation policies in the forests of Myanmar. Differing perceptions of what participation meant to different stakeholders was illustrated with the varying motivations of stakeholders leading to modification and tension within top-down initiatives. Andrew Dougill (Leeds) analysed the problems of scaling up community generated indicators of rangeland degradation, to enable comparisons between regions within Botswana. The important function of extension workers and Government support in this process was emphasised.

Henny Osbahr (Sheffield) provided a detailed analysis at a micro-scale of the strategies adopted by women in maintaining soil fertility. A Rural Livelihoods framework was adopted to focus on the mechanisms by which women generate financial, social and human capital, and how these activities are used to cross-subsidise investment in natural resource management. Changes over time to entitlements to land, labour, transport, institutions and networks were analysed, highlighting the dynamic nature of smallholder farming in dryland environments.

Continuing the importance of change over time, Jennifer Elliott (Brighton) analysed air photographs and resettlement documents to demonstrate how land cover has altered over a 20 year period in former commercially farmed areas of Zimbabwe following transfer to small-scale indigenous farmers. The analysis illustrated the problems of interpreting such data sources, but also outlined a spatially complex pattern of land use change subsequent to resettlement, that challenges a simple linear degradation outcome in the post commercial farming era.

(Giles Atkinson: LSE). Presented a holistic model that is designed to set out the full social costs and benefits associated with the conversion of forest to agriculture in Peru, with the aim of greening national accounts, thereby enabling an indicator of sustainability for land-use change in Peru. This approach provided an interesting contrast to indicators to that taken by Dougill, whilst Elliott's paper had outlined some of the practical problems of identifying the direction of land-use change which led to an interesting discussion concerning the utility of such models.

The final theme concerned the impact of modernisation on traditional housing in an arid region of Tunisia (Wendy Woodland and Jenny Hill: UWE, Bristol). Abandonment of underground dwellings, caused by government policy and changing aspirations due links with the 'modern' world to has implications for resource usage. Paradoxically modern housing requires higher energy inputs and delivers poorer living conditions than traditional dwellings. Ironically, tourism may provide incentives for existing underground dwellers to remain, but the motivations will be economic rather than environmental.

Papers not presented

Sara Parker (Liverpool John Moores): `Participatory Non-Formal Education in the Annapurna Conservation Area Project: promoting local level sustainable development?

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Eric Neumayer (LSE) Does High Indebtedness Increase natural Resource Exploitation?
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Emails of other presenters/authors

Smrithi Talwar: Decentarlised Governance and the Authoritarian State: community forest management in Myanmar St302@cam.ac.uk

Andrew Dougill: Frameworks for Community-based Rangeland Degradation Assessment for the Kalahari, Botswana Adougill@env.leeds.ac.uk

Henny Osbahr: The Diversity and Dynamics of Gendered Natural Resource Investment in West African Livelihoods: the case of Niger <a href="https://hosbahr@sheffield.ac.uk">h.osbahr@sheffield.ac.uk</a>

Wendy Woodland: Subterranean Settlements in Southern Tunisia: Environmental, and Cultural Controls on Sustainability Wendy3.Woodland@uwe.ac.uk

Jenny Hill: Subterranean Settlements in Southern Tunisia: Environmental, and Cultural Controls on Sustainability Jenny.Hill@uwe.ac.uk

Jennifer Elliott: Land Cover Outcomes over 20 years of Post-Resettlement Experience in Zimbabwe

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Giles Atkinson: Sustainability, Green national Accounting and Deforestation <a href="mailto:g.atkinson@lse.ac.uk">g.atkinson@lse.ac.uk</a>

Discussant: Alan Terry, UWE, Bristol

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