June 23-27, 2013

50TH ANNIVERSARY MEETING

ASSOCIATION FOR TROPICAL BIOLOGY AND CONSERVATION
& ORGANIZATION FOR TROPICAL STUDIES

ATBC Online Web Program

O5-1
New technologies to old problems: Online role playing games and policy making in the coffee agroforestry systems of the western Ghats (india)

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Problems of natural resources management are often wicked problems. They involve multiple stakeholders with different worldviews, needs and agendas, in a world with pervasive uncertainties. The answers to such problems are not technical fixes but political process that engage stakeholders in problem solving iterative loops. However, new technologies, particularly IT, can help navigate the complexities of designing efficient natural resources management schemes. We present here an initiative to develop online participatory tools to contribute to an on-going policy debate in the coffee agroforestry systems in the district of Kodagu (India). In this landscape, driven by market incentives and recently available technologies, farmers are intensifying the production system, replacing the complex and diverse canopy cover with the fast growing *Grevillea robusta*.In the background, farmers and foresters are fighting for the rights over the native tree species. The outcome of this struggle has the potential to alter dramatically the farmers' strategies and the distribution of biodiversity at the landscape level. While earlier research quantified past dynamics and highlighted the main drivers of the present trends, tools are lacking for the decision makers to explore the long term, often unforeseen impacts of their proposed interventions. Based on a conceptual model developed through participatory workshops with local stakeholders, we developed an online-enabled agent-based model using a dedicated modelling software, NetLogo and made it available as a web portal. This portal allows stakeholders to interact on a larger scale, to propose alternative futures and policy changes, and to explore the impacts of these proposed changes. We will use it as a springboard for discussion with stakeholders and policy makers, to broadly disseminate the results of our research, and to encourage local farmers and outsiders alike to contribute meaningfully to the policy process, allowing for surprise and innovation to emerge from the interactions the portal will generate.

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Meeting Information

When:
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