CLE Newsletter 01/2016

MigSoKo - Junior Research Group on environmental change and human migration

In July 2016 the junior research group MigSoKo has started at CLE. MigSoKo is led by Kathleen Hermans and funded by BMBF and UFZ with a total of 1.5 m Euro (duration 07/2016-06/2021).

The aim of the research group is to explore the causality between environmental change, population pressure, human migration, and environmental consequences of migration for drylands and the humid tropics – two biomes where the linkage between environment and migration has particularly been observed. An interdisciplinary approach shall be applied that combines a variety of methods, including analyses of remote sensing products, interviews, surveys, dynamic simulation approaches, scenario development and transferability analyses. Ethiopia and Indonesia serve as case studies.

Besides the group leader the research group consists of two PhD's, one post-doc and a project assistant. Further information: <u>http://www.ufz.de/index.php?en=40176</u>

Events

Final Conference about sustainable land management

A three days long conference in the beginning of March crowned the provisional peak of the research programme on sustainable land management. More than 350 international researchers and stakeholders came to Berlin for the final conference organized by the GLUES team. Main findings of the twelve regional projects and GLUES were presented.

The first day was focused on policy and societal dimension; on day two, main challenges, outcomes and recommendations from the projects were presented. The last day's major topic was the future of land use research. What are the lessons learned from the programme? How could the research findings continuously be transferred into practice after the end of the projects? Several stakeholders gave important answers to these questions.

Special Issue

Seppelt, R., Verburg, P., Norström, A., Cramer, W., Václavík, T., (2016): Focus on cross-scale feedbacks in sustainable land management. Environmental Research Letters

We are happy to invite contributions to the Focus Issue in Environmental Research Letters on "Cross-scale Feedbacks in Sustainable Land Management". This focus issue will feature the most innovative papers that investigate the link between global change processes and local realities in the context of sustainable land management. http://iopscience.iop.org/journal/1748-9326/page/land-management



Publications "Editor's Choice"

Delzeit, R., Zabel, F., Meyer, C., Václavík, T., (2016): Addressing future trade-offs between biodiversity and cropland expansion to improve food security. *Reg. Envir. Chang.*

DOI: 10.1007/s10113-016-0927-1

This study addresses trade-offs between providing sufficient food in the future and sustaining biodiversity by investigating (1) how global expansion of cropland might affect food production and prices, (2) where environmental conditions favor cropland expansion under changing climate, and (3) whether potential conversion to cropland would affect areas of high biodiversity or conservation importance.

Feilhauer, H., **Doktor, D.**, Schmidtlein, S., Skidmore, A.K., (2016): Mapping pollination types with remote sensing. *J. Veg. Sci.* <u>DOI: 10.1111/jvs.12421</u>.

Mapping pollination types (wind, insect and self pollination) using airborne hyperspectral remote sensing and machine learning techniques.

Rödder, D., Nekum, S., **Cord, A.F.** & Engler, J.O., (2016): **Coupling satellite data with species distribution and connectivity models as a tool for environmental management and planning in matrix-sensitive species.** *Environmental Management.* DOI: 10.1007/s00267-016-0698-y.

In this study, we use fine-scale potential connectivity models (PCMs) derived from multispectral satellite data for the quantification of spatially explicit habitat corridors for populations of the sand lizard (*Lacerta agilis* L.) in the metropolitan area of Cologne, Germany.

Imprint

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Dr. Kathleen Hermans



Miscellaneous

Markus Meyer has successfully defended his PhD thesis on April 14 at the Martin Luther University in Halle. Since May, he works at the Bayrische Landesanstalt für Wald und Forstwirtschaft in the Department Waldbesitz, Beratung, Forstpolitik.

Katharina Gerstner has successfully defended her PhD thesis on May 19 at the Martin Luther University in Halle. Katharina will leave us to the end of August and will work for iDiv at the Synthesis Centre sDiv with Martin Winter und Jonathan Chase then.



We cordially congratulate them both and wish all the best for their new way and good luck.