

Assessing Land Value Changes and Developing a Discussion-Support-Tool for Improved Land Use Planning in the Irrigated Lowlands of Central Asia (LaVaCCA)

Initiative: Zwischen Europa und Orient - Mittelasien/Kaukasus im Fokus der Wissenschaft

Ausschreibung: Ausschreibung: "Umwelt, natürliche Ressourcen und erneuerbare Energien"

Bewilligung: 18.06.2014

Laufzeit: 3 Jahre

Projekt-Website: <https://www.geographie.uni-wuerzburg.de/fernerkundung/forschung/abgeschlossene-projekte/lavacca/>

Immense losses of land productivity have been observed on eight million hectares of irrigated agricultural land in Central Asia during the past decades. Especially the irrigated lowlands of the Amu Darya and Syr Darya Rivers are affected by land degradation problems. The research addresses the identification of hotspots of decreasing land production and gaining knowledge about the drivers of change in land production and land degradation by analysing socio-economic and ecological indicators. Economic assessments of land use options under given ecological conditions will be elaborated. A strong methodological focus is set on remote sensing, geographical information systems (GIS), indicator systems, land use modelling, and economic optimization. The generated information will be bundled and presented as a tool of discussion support for politicians and decision makers in their efforts to increase food security and combat environmental degradation in the irrigated areas of Central Asia.

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