



Letsmap do Brasil - a web-based planning support tool for sediment management in river basins of Western Central Brazil

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A central element of a sediment management plan for the Federal District, Western Central Brazil is a planning support tool that enables the user to test the effects of land use changes on landscape processes and functions (LPF). In this paper, we will present the web based tool Letsmap do Brasil. The tool has two principal interacting levels. The upper level contains information on effects of land use on LPF, i.e. runoff control, sediment retention, nitrogen availability, and agronomic value. The parameterized relation between land use and LPF is the core of the system. For each LPF a value specific to land use has been assigned. Values for LPF's were taken from published research, e.g. C factor from USLE (sediment retention) and Curve Number (runoff control), or statistics (agronomic yield). All values were standardized on a scale from 0-100. By changing land use/cover users may act as land planners or managers. By creating their own land use/cover patterns users are enabled to test effects of land use/cover change on LPF's. A second level contains information on landscape properties and potentials (LPP), e.g. potential of runoff control or potential of sediment retention. By linking land use and LPP's a site specific assessment of effects of land use changes on LPF is possible.

Letsmap do Brasil is thought to fulfill two purposes. (i) It will support decisions in river basin management concerning sediment management. (ii) It enables non-experts to participate in decision processes. Because of its high adaptability, transparency and simple handling Letsmap do Brasil might be is a universal tool in river basin management and land use planning.