



Forests –a crucial component in watershed management for Disaster Risk Reduction (online version)

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Forest and Floods

- Floods can be mitigated by forests by the effects of transpiration , interception and reduction of surface runoff
- Deforestation increases surface runoff and therefore has an effect on floods and mass wasting processes
- Limits: this mitigation effect is limited by certain preconditions and scale

Forest and mass wasting processes

- Masswasting processes that can be mitigated through forests range from landslides, debris flows, rock falls to avalanches.
- Forests can for example help to stabilize slopes or protect from the initiation of avalanches.
- Limits: these functions depend on the magnitude of the process and also of the triggering factor.

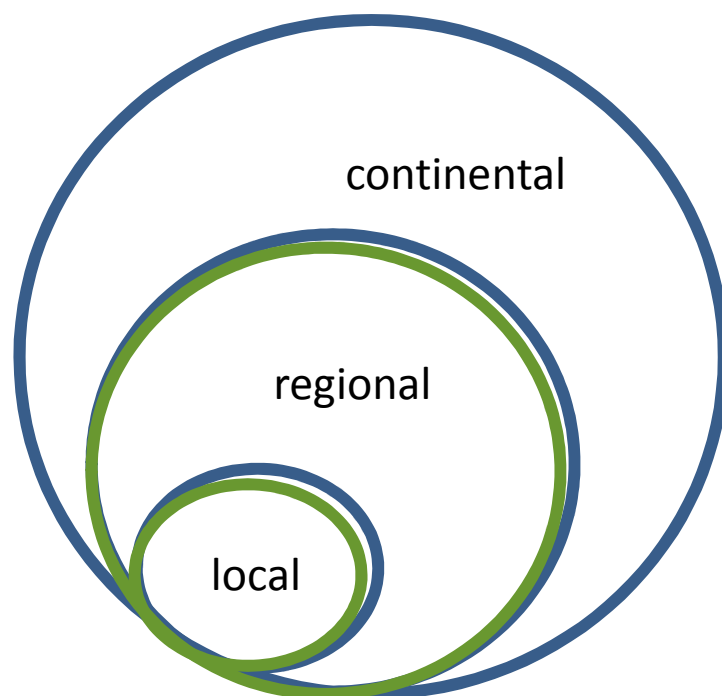




Forest and Droughts

- Forests can also mitigate wind erosion in dry areas through soil stabilization or act as wind breaks.
- Limits: scale of forests planted and of the magnitude of the hazardous process

Scale



time

Watershed management



THANK YOU!



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