

The role of FOSS GIS for Various Applications in Heritage Preservation of the Atlas Mountain Ranges, Morocco

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The Atlas Mountain Ranges of Morocco has the ideal natural and cultural resources to use them for sustainable development to advantage the local Berber population. Therefore, the Geopark concept, as defined by the UNESCO, is an instrument to protect and conserve this highly sensitive heritage and to sustain the economic future of the region. To foster communication among the stakeholders for such an undertaking, a Geographic Information System-based (GIS) data infrastructure could be set up to compile relevant data and produce maps to support the fact finding and discussion process.

Hereby, Free Open Source Software (FOSS) facilitates the realisation and guarantee international interchangeability and independence from proprietary technologies. It enables the use of sophisticated software tools for research, teaching and commerce. Apart from other benefits this approach enables the application of such tools in fields which for financial reasons could otherwise not afford them.

At least in Europe this is applied also to regional institutions focusing on heritage preservation.

Since heritage has a strong spatial aspect, GIS based on FOSS are well suited tools to record and preserve, store and communicate human and natural heritage topics.

Further, the use of spatial analysis and mapping tools can be used to put the heritage content in a wider context by blending it with remote sensing data. FOSS GIS enables the preservation of heritage information and its use by other fields, such as historic studies and archaeology, but also the creation of analogue products, such as paper maps, geopedagogic toys and displays.

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