

# THE ROLE OF GEOLOGICAL-GEOTECHNICAL CARTOGRAPHY AND VULNERABLE AREAS FOR THE LUANDA PROVINCE

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## Consequences of the lack of geotechnical cartography for urban planning in Luanda City

Floods



Ravines,  
erosions and  
cracking

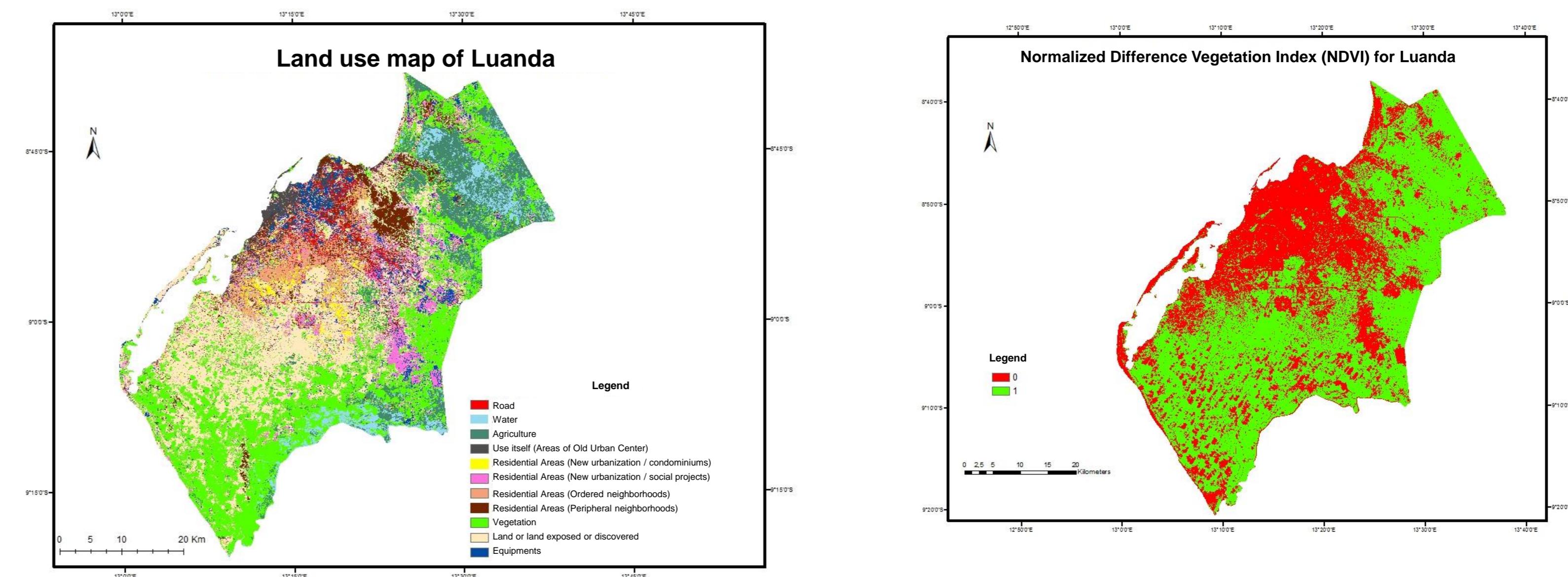
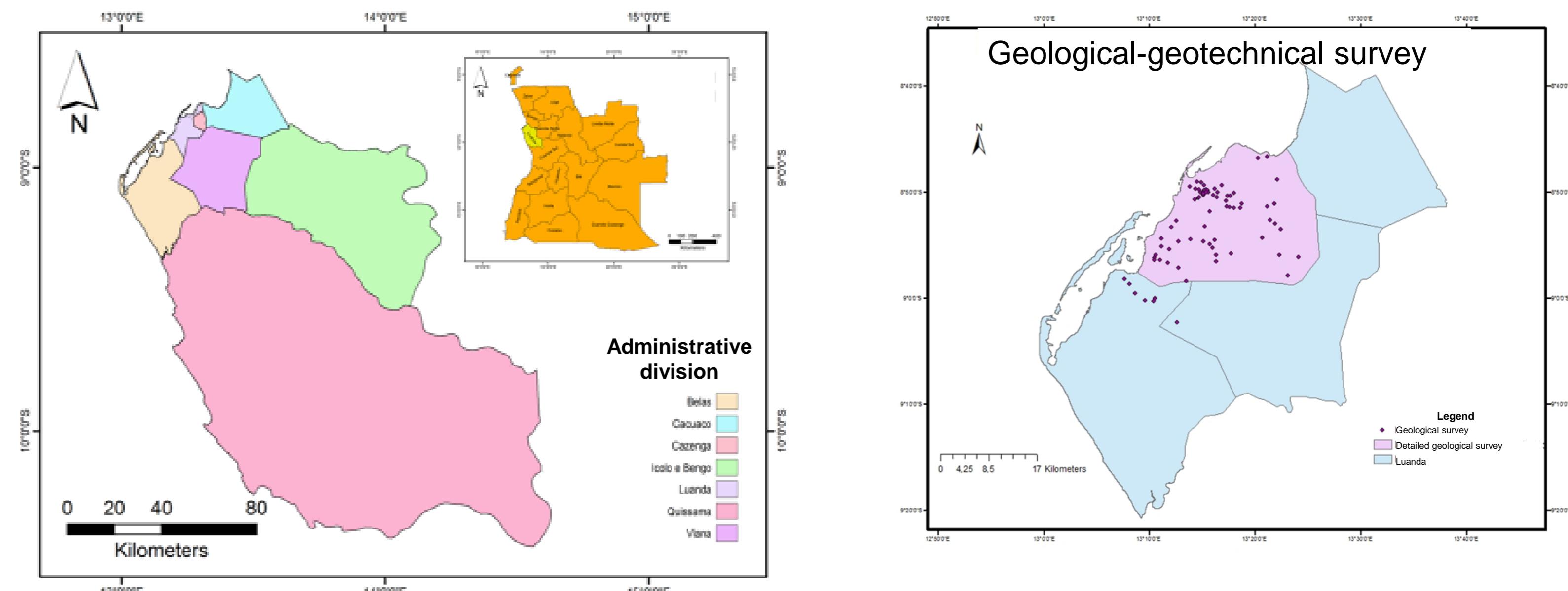


Landslides  
associated with  
water erosion



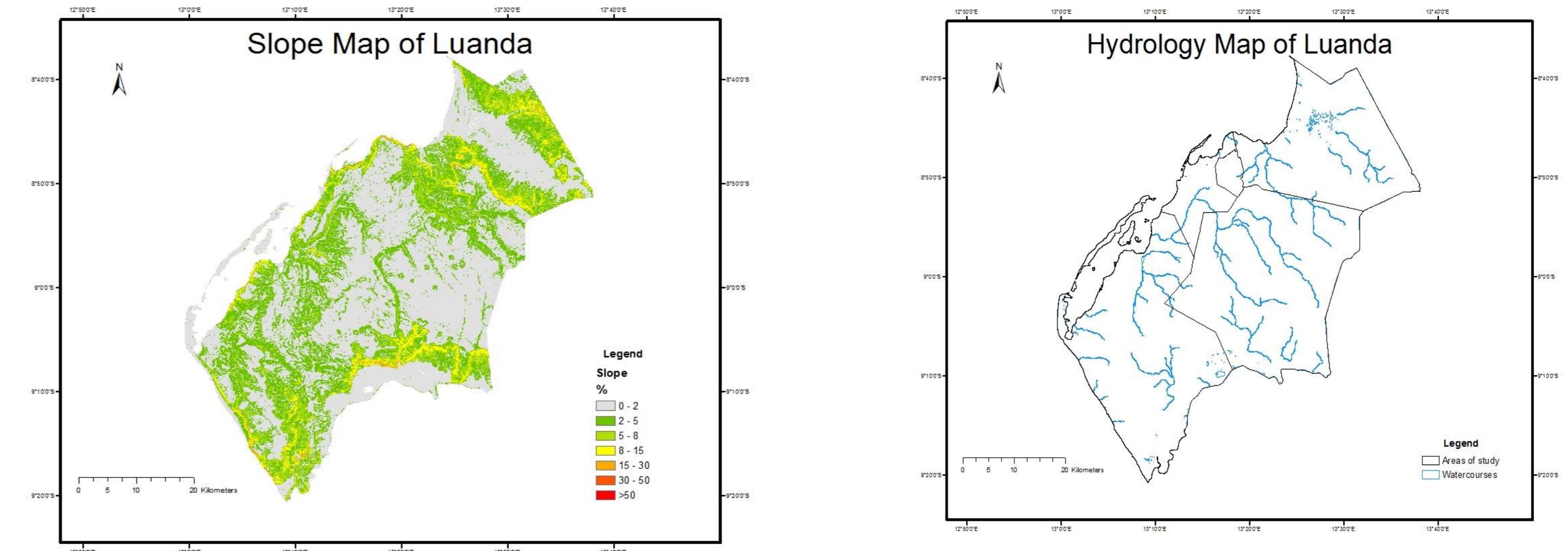
## Need for geotechnical maps and other charts for Luanda

Every activity (geological or geotechnical) requires the study of soil properties (geotechnical cartography), which in turn has several uses.



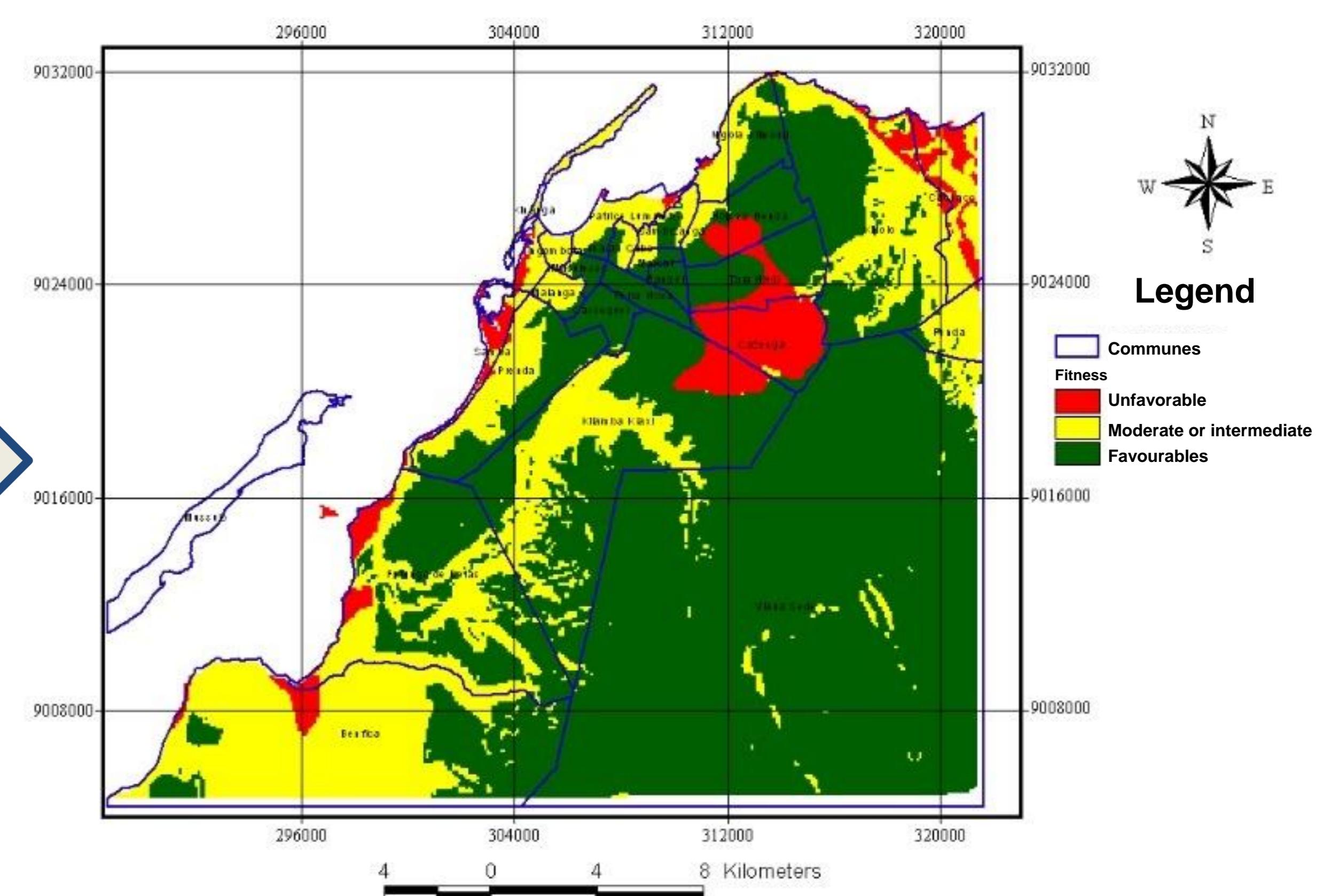
## Methodology

- Methodology for geotechnical cartography of the International Association for Engineering Geology and the Environment (IAEG 1968);
- UNESCO Geotechnical Mapping Guide (1976);
- Data: bibliographical documents, topographic and geological charts, satellite images, aerial photographs and field data.



## The role of geotechnical cartography in the urbanistic planning of Luanda city

- Identification of favourable areas for civil construction (urban and road infrastructures);
- Mapping of vulnerable zones (risks);
- Bases for recommending a territorial re-planning;
- Supportive tool for urban and territorial planning.



## Bibliography

Pires, G. J. P. T.; Núñez, H. M. F.; León, C. S. Modelación de la aptitud ingeniero-geológica de los suelos de la ciudad de Luanda. Minería y Geología: Habana. v. 32 n.2. Abril-junio, 2016. p. 17-34. ISSN 1993 8012.

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