

Catalogue of fundamental geo-spatial datasets for Africa: Country report for Burkina Faso



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1. Background

A continental-wide study was conducted in 2006 to catalogue the existence of fundamental geo-spatial datasets in Africa. This study was contracted to a consortium consisting of the HSRC and EIS-AFRICA as lead organisations and numerous sub-regional partners. It was conducted under the auspices of the UNECA.

The study used a questionnaire to obtain information about the 30 fundamental geo-spatial datasets. This report reflects the findings collected from that questionnaire for Burkina Faso.

2. Data availability

Table 1: Availability of fundamental geo-spatial datasets

Dataset	Have it?	Source
Geodetic control points	No	
Height datum	Yes	Centre de Formation et de Perfectionnement
Geoid model	No	
Aerial photography	No	
Satellite imagery	Yes	Ministère des Ressources Animales/ Map Maker Trust/ UNECA
DEM	Yes	ISCGM/ UNECA
Spot heights	Yes	Centre de Formation et de Perfectionnement/ Office National de L'assainissement et de L'eau
Bathymetry	No	
Coastline	No	
Water bodies	Yes	Ministère des Ressources Animales/ ISCGM/ Map Maker Trust/ UNECA
Government boundaries	Yes	Ministère des Ressources Animales/ ISCGM/ Map Maker Trust/ UNECA
Populated places	Yes	Ministère des Ressources Animales/ ISCGM/ UNECA
EA	Yes	Ministère des Ressources Animales
Place names	Yes	ISCGM/ Map Maker Trust/ UNECA
Feature names	Yes	Ministère des Ressources Animales/ ISCGM/ UNECA
Land parcels	Yes	Direction Générale des Impôts/ Centre de Formation et de Perfectionnement/ Office National de L'assainissement et de L'eau
Land tenure	No	
Street address	Yes	Direction Générale des Impôts / Office National de L'assainissement et de L'eau

Dataset	Have it?	Source
Postal code zones	Yes	Centre de Formation et de Perfectionnement
Land use planning zones	Yes	Direction Générale des Impôts
Roads	Yes	Ministère des Ressources Animales/ Office National de L'assainissement et de L'eau/ ISCGM/ Map Maker Trust/ UNECA
Road centrelines	Yes	Ministère des Ressources Animales
Railways	Yes	Ministère des Ressources Animales/ ISCGM/ Map Maker Trust/ UNECA
Airports	Yes	Ministère des Ressources Animales/ ISCGM/ UNECA
Bridges	Yes	ISCGM
Power	No	
Telecommunication	No	
Land cover	Yes	Ministère Des Ressources Animales/ Office National de L'assainissement et de L'eau/ ISCGM/
Soils	Yes	Bureau National des Sols
Geology	No	

Burkina Faso has access to 22 of the 30 fundamental geo-spatial datasets and the country therefore has a fairly good access to the datasets. Since it is a landlocked country no data for coastline or bathymetry exists.

2.1 Data characteristics

Data characteristics were very incomplete and it is therefore difficult to determine whether the geo-spatial datasets available are indeed of good quality. The table indicates for example: satellite imagery is available at the scale of 20 – 80m, it is either between 75-99% or fully complete (depending on the agency who keeps the data) and available in a GIS format. Empty cells in the table indicate that no response was received.

Table 2: Dataset metadata

Dataset	Scale at which available (000/ resolution m)	Completeness (%)	Format	Accessibility
Geodetic control points				
Height datum				
Geoid model				
Aerial photography				

Dataset	Scale at which available (000/ resolution m)	Completeness (%)	Format	Accessibility
Satellite imagery	5-20/ 20-80/ >1000	76-99 /100	GIS	Unrestricted/ Free
DEM	50-125/ >1000	100	GIS	Unrestricted/ Free
Spot heights	>10	51-75	Report/ GIS	Restricted
Bathymetry				
Coastline				
Water bodies	62.5-100/ 500-1000	100	GIS	Unrestricted/ Free
Government boundaries	62.5-100	100	GIS	Unrestricted/ Free
Populated places	12-50	100	GIS	Unrestricted/ Free
EA				Unrestricted/ Free
Place names	12-50/ 500-1000	100	GIS	Unrestricted/ Free
Feature names	>10/ 500-1000	100	GIS	Unrestricted/ Free
Land parcels	>10	76-99	Report/ Map/ Other	Authorisation/ Restricted/ Payment
Land tenure				
Street address	>100	76-99	GIS	
Postal code zones				
Land use planning zones				
Roads	10-50/ 125-250/ 500-1000	51-75/ 100	GIS	Unrestricted/ Restricted/ Free
Road centrelines				
Railways	125-250/ 500-1000	100	GIS	Unrestricted/Free
Airports	500-1000	100	GIS	Unrestricted/Free
Bridges	500-1000	100		
Power				
Telecommunication				
Land cover	10-50/ 62.5-100	51-75/ 100	Map/ GIS	Restricted
Soils	62.5-100	51-75	Report/ Map/ Db/ GIS	Unrestricted
Geology				

The scale availability of datasets varies markedly. The data completeness varies between 51-100%, while most data is available in a GIS format and with unrestricted or restricted access (depending on the holding agency). One data set requires payment.

3. Conclusion

Despite the fact that it seems that Burkina Faso has access to most of the fundamental geo-spatial datasets, the lack of data characteristics complicates the final decision on the quality of the data. Based on this it cannot be concluded that the existing geo-spatial data is useful.