

# Catalogue of fundamental geo-spatial datasets for Africa: Country report for Burundi



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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 Burundi.

## 2. Data availability

**Table 1: Availability of fundamental geo-spatial datasets**

<b>Dataset</b>	<b>Have it?</b>	<b>Source</b>
Geodetic control points	Yes	Insitut Geographyque du Burundi
Height datum	No	
Geoid model	Yes	Musee Royal d'Afrique Centrale, Belgique
Aerial photography	Yes	Insitut Geographyque du Burundi/ Institut des sciences Agronomiques du Burundi/ Musee Royal d'Afrique Centrale, Belgique
Satellite imagery	Yes	Map Maker Trust/ UNECA
DEM	Yes	Musee Royal d'Afrique Centrale, Belgique/ UNECA
Spot heights	No	
Bathymetry	No	
Coastline	Yes	
Water bodies	Yes	OCHA-Burundi/ Insitut Geographyque du Burundi/ Map Maker Trust/ UNECA
Government boundaries	Yes	OCHA-Burundi/ Insitut Geographyque du Burundi /Map Maker Trust/ UNECA
Populated places	Yes	Insitut Geographyque du Burundi/ UNECA
EA	No	
Place names	Yes	OCHA-Burundi/ Insitut Geographyque du Burundi /Map Maker Trust/ UNECA
Feature names	Yes	UNECA
Land parcels	No	
Land tenure	No	
Street address	No	

Dataset	Have it?	Source
Postal code zones	No	
Land use planning zones	No	
Roads	Yes	OCHA-Burundi/ Insitut Geographique du Burundi/ Map Maker Trust/ UNECA
Road centrelines	No	
Railways	Yes	Map Maker Trust/ UNECA
Airports	Yes	Insitut Geographique du Burundi / UNECA
Bridges	No	
Power	Yes	REGIDESO
Telecommunication	No	
Land cover	Yes	Insitut Geographique du Burundi
Soils	Yes	Institut des sciences Agronomiques du Burundi
Geology	Yes	Musee Royal d'Afrique Centrale, Belgique/ Departement de geologie/ Ministere de l'Energie et Mines

Burundi has access to 12 of the 30 fundamental geo-spatial datasets and the country therefore has a under-representation of fundamental geo-spatial datasets. Since it is a landlocked country no data for coastline or bathymetry exists.

## 2.1 Data characteristics

Data characteristics were complete for the available datasets. It remains, however, 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 fully complete 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				
Satellite imagery	20-80/ >1000	100	GIS	Unrestricted/ Authorisation/

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

The scale availability of datasets varies since some datasets are available at a detail scale and at a general scale. The data completeness is 100% for all datasets, while most data is available in a GIS format and with unrestricted access. One data set requires payment.

### **3. Conclusion**

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