

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



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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 Chad.

## 2. Data availability

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

Dataset	Have it?	Source
Geodetic control points	No	
Height datum	No	
Geoid model	No	
Aerial photography	Yes	Centre National d'Appui à la Recherche/ Projet de Conservation et Utilisation des Rationnelle des Ecosystèmes Soudano-Sahéliens
Satellite imagery	Yes	Centre National d'Appui à la Recherche/ Projet de Conservation et Utilisation des Rationnelle des Ecosystèmes Soudano-Sahéliens/ Map Maker Trust/ UNECA
DEM	Yes	UNECA
Spot heights	No	
Bathymetry	No	
Coastline	No	
Water bodies	Yes	Centre National d'Appui à la Recherche/ Map Maker Trust/ UNECA
Government boundaries	Yes	Centre National d'Appui à la Recherche/ Projet de Conservation et Utilisation des Rationnelle des Ecosystèmes Soudano-Sahéliens/ Map Maker Trust/ UNECA
Populated places	Yes	Centre National d'Appui à la Recherche/ Projet de Conservation et Utilisation des Rationnelle des Ecosystèmes Soudano-Sahéliens/ UNECA
EA	Yes	Centre National d'Appui à la Recherche
Place names	Yes	Centre National d'Appui à la Recherche/ Projet de Conservation et Utilisation des Rationnelle des Ecosystèmes Soudano-Sahéliens/ Map Maker Trust/ UNECA
Feature names	Yes	Centre National d'Appui à la Recherche/ Projet de Conservation et Utilisation des Rationnelle des Ecosystèmes Soudano-Sahéliens/ UNECA
Land parcels	Yes	Centre National d'Appui à la Recherche

Dataset	Have it?	Source
Land tenure	No	
Street address	No	
Postal code zones	No	
Land use planning zones	Yes	
Roads	Yes	Centre National d'Appui à la Recherche/ Projet de Conservation et Utilisation des Rationnelle des Ecosystèmes Soudano-Sahéliens/ Map Maker Trust/ UNECA
Road centrelines	Yes	Centre National d'Appui à la Recherche/ Projet de Conservation et Utilisation des Rationnelle des Ecosystèmes Soudano-Sahéliens
Railways	Yes	Centre National d'Appui à la Recherche/ Map Maker Trust/ UNECA
Airports	Yes	Centre National d'Appui à la Recherche/ UNECA
Bridges	Yes	Centre National d'Appui à la Recherche
Power	No	
Telecommunication	No	
Land cover	Yes	Centre National d'Appui à la Recherche/ Projet de Conservation et Utilisation des Rationnelle des Ecosystèmes Soudano-Sahéliens
Soils	Yes	Centre National d'Appui à la Recherche
Geology	No	

Chad has access to 18 of the 30 fundamental geo-spatial datasets and the country therefore has an average access to the fundamental geo-spatial datasets. Since it is a landlocked country no data for coastline or bathymetry exists.

## 2.1 Data characteristics

Data characteristics were incomplete 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 or >1000, 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				

<b>Dataset</b>	<b>Scale at which available (000/ resolution m)</b>	<b>Completeness (%)</b>	<b>Format</b>	<b>Accessibility</b>
Geoid model				
Aerial photography				
Satellite imagery	20-80/ >1000	100	GIS	Unrestricted/ Authorisation/ Free
DEM	50-125	100	GIS	Unrestricted/ Free
Spot heights				
Bathymetry				
Coastline	12-50	100	Report/ Table/ Map/ GIS	Unrestricted/ Free
Water bodies	62.5-100/ 500-1000	26-50/ 100	Report/ Table/ Map/ Db <sup>1</sup> / GIS/ Other	Unrestricted/ Free
Government boundaries	62.5-100/ 500-1000	26-50/ 100	Report/ Table/ Map/ Db/ GIS/ Other	Authorisation/ Free
Populated places	12-50	100	Report/ Table/ Map/ Spread <sup>2</sup> / GIS/ Other	Unrestricted/ Authorisation/ Free
EA			Report/ Table/ Map/ Spread/ GIS/ Other	Unrestricted/ Authorisation/ Free
Place names	12-50/ 125-500	100	Report/ Table/ Map/ Spread/ GIS/ Other	Unrestricted/ Authorisation/ Free
Feature names	>10	100	Report/ Table/ Map/ Spread/ GIS/ Other	Unrestricted/ Authorisation/ Free
Land parcels				
Land tenure				
Street address				
Postal code zones				
Land use planning zones				Authorisation/ Free

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<sup>1</sup> Database

<sup>2</sup> Spreadsheet

<b>Dataset</b>	<b>Scale at which available (000/ resolution m)</b>	<b>Completeness (%)</b>	<b>Format</b>	<b>Accessibility</b>
Roads	125-250	100	Report/ Table/ Map/ Spread/ Db/ GIS/ Other	Unrestricted/ Free
Road centrelines				
Railways	125-250	100	GIS	Unrestricted/ Free
Airports	125-250	100	GIS	Unrestricted/ Free
Bridges				
Power				
Telecommunication				
Land cover			Report/ Table/ Map/ Spread/ Db/ GIS/ Other	Unrestricted/ Authorisation/ Free/ Payment
Soils			Report/ Table/ Map/ Spread/ GIS/ Other	Authorisation/ Free
Geology				

The scale availability of datasets varies since most datasets are available at a medium scale and some at a detail scale. The data completeness is 100% for most datasets with water bodies and government boundaries being between 26-50% complete. Most data is available in a number of formats and with free access. One data set requires payment.

### **3. Conclusion**

Despite the fact that it seems that Chad 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.