

Country Profile: Botswana

Country Profile (PDF)

Country Resources

Topographic

Series	Publisher	Scale	Years	Sheets
Botswana 1:50,000 Scale Topographic Maps (Metric Series)	DSM	1:50,000	1998 - 1999	7
Botswana 1:50,000 Scale Topographic Maps (Current Series)	DSM	1:50,000	2007 - 2014	1,014
Botswana 1:250,000 Scale Topographic Maps	DSM	1:250,000	1974 - 1990	40
Botswana 1:50,000 Scale Topographic Maps (Historical Series)	DSL	1:50,000	1976 - 1997	217
Botswana 1:500,000 Scale Topographic Maps	DSL	1:500,000	1989 - 1992	11
Botswana 1:50,000 Scale Image Maps	DOS	1:50,000	1970 - 1991	123

Geoscientific

Series	Publisher	Scale	Years	Sheets
Botswana 1:1,000,000 Scale Geological Maps	GSD	1:1,000,000	1984 - 1990	4
Botswana 1:2,000,000 Scale Geological Maps	GSD	1:2,000,000	1963	1
Angola 1:1,000,000 Scale Geological Map (6 Sheets)	INGA	1:1,000,000	1988	1
Angola 1:1,000,000 Scale Mineral Resources Maps (4 sheets)	INGA	1:1,000,000	1998	1

Thematic

Series	Publisher	Scale	Years	Sheets
The World 1:30,000,000 Scale Topographic Map Series 1145 (NGA)	DMA	1:30,000,000		2

Global Census Archive: GIS Census Data

East View Geospatial has an ongoing effort to add GIS census data to our Global Census Archive program. Please contact us for the status and availability of Botswana census resources.

Global Resources

Topographic

Series	Publisher	Scale	Years	Sheets
Soviet Military City Plans	VTU GSh	Varies	1944 - 2003	3,020
Soviet Military 1:100,000 Scale Topographic Maps	VTU GSh	1:100,000	1947 - 1999	24,897
Soviet Military 1:200,000 Scale Topographic Maps	VTU GSh	1:200,000	1949 - 2009	17,799
Soviet Military 1:500,000 Scale Topographic Maps	VTU GSh	1:500,000	1953 - 1998	3,093
Soviet Military 1:1,000,000 Scale Topographic Maps	VTU GSh	1:1,000,000	1948 - 1994	1,089

Nautical

Series	Publisher	Scale	Years	Sheets
NGA Nautical Charts POD Certified (All Scales)	NGA	Varies	1943 - 2013	4,517

Aeronautical

Series	Publisher	Scale	Years	Sheets
Joint Operations Graphic (JOG 1501A) 1:250,000 - Aeronautical	DMA	1:250,000	1958 - 2007	6,380
Tactical Pilotage Chart (TPC) 1:500,000 Scale - Aeronautical	DMA	1:500,000	1967 - 2006	598
Operational Navigation Chart (ONC) 1:1,000,000 Scale - Aeronautical	DMA	1:1,000,000	1969 - 2001	243
Jet Navigation Chart (JNC) 1:2,000,000 Scale - Aeronautical	DMA	1:2,000,000	1971 - 1999	117
Global Navigation and Planning Chart (GNC) 1:5,000,000 Scale - Aeronautical	DMA	1:5,000,000	1981 - 1999	27

Note: East View Geospatial is continuously sourcing new resources that may not yet be listed in Global Explorer. Please contact us if you have geodata needs beyond what is listed above and we will be happy to discuss available off-the-shelf and custom solutions.

[Shop all products in Global Explorer](#)

Historical Country Mapping Information

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Topographic

The national mapping agency of Botswana is the **Department of Surveys and Mapping (DSM)** in Gaborone. It was established with British support as the **Department of Surveys and Lands (DSL)** and has drawn extensively upon British aid in the creation of topographic mapping programs in the country. After the end of World War II the **Directorate of Colonial Surveys** established 1:125,000 scale two-color mapping of Bechuanaland Protectorate, which continued to be produced for the developed areas of the state until independence in 1966. The **Directorate of Overseas Surveys (DOS)** (now **Ordnance Survey International (OSI)**) issued the first sheets in 1967 of what is now the national basic scale map. This 1:50,000 scale series is a photogrammetric map based upon the Transverse Mercator projection, modified Clarke 1880 ellipsoid. Sheets follow standard DOS numbering practice and cover quarter-degree quadrangles. Nearly 900 sheets are needed for complete coverage, and efforts have concentrated upon the mapping of developed parts of Botswana with nearly half of the country now covered in maps conforming to a number of different specifications. The first **DOS** mapping comprised conventional five-color line maps with a 50 ft contour interval, and some cadastral information. These were published for the developed south and east. In addition about 150 sheets were issued as uncontroled photomaps, covering more remote and flatter northern areas of the country. Monochrome planimetric maps have also been issued for some areas in an attempt to speed completion of the series, and DSM now revises about 25 sheets a year, to a metric specification, with 10 m contours. The remaining areas of Botswana are available as uncontrolled 1:70,000 scale photo-mosaics and as print laydowns based upon 1970s and 1980s aerial photographic coverage.

Other photo-mapping has also been carried out, notably in a **DOS** series of full-color 1:100,000 scale maps of northwestern areas, supplemented by monochrome 1:100,000 scale coverage using SPOT image bases compiled by **DSM** in the 1990s. These areas extend the coverage of controlled mapping. The country is completely covered by 41 maps published at 1:250,000 scale. Again a number of different specifications have been followed. **DOS** issued a single photomap, and **DSM** issued a further eight maps as conventional line maps with layer-colored relief. In the east of the country maps are available as either ground or air editions of Joint Operation Graphic specifications, with relief depicted according to the reliability of available information as contours, form lines, hachures and color tints. The sparsely settled areas of the Kalahari desert are published as monochrome sheets derived from LANDSAT imagery. This series has been under revision over the last decade. Other national scales are 1:500,000 (11 sheets), also used for administrative mapping, 1:1,000,000 (two sheets) as well as single-sheet 1:1,500,000 and 1:2,000,000 scale coverage.

Soviet military topographic mapping of Botswana exists at the following scales: 1:1,000,000 (6 sheets, complete coverage, published 1977-1983); 1:500,000 (18 sheets, complete coverage, published 1978-1983) and 1:200,000 (107 sheets, complete coverage, published 1979-1985). These products are available in print, digital raster and digital vector GIS formats from **East View Geospatial**.

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Geological/Scientific

Geological mapping of Botswana is the responsibility of the **Department of the Geological Survey (DGS)**. A full color 1:125,000 scale series is published for areas in the south and east of the country – coverage is being extended further into the desert and a revision program is in operation. Sheets are issued with bulletins or district memoirs explaining the geology of the area. It is intended to cover the rest of the country by unpublished provisional 1:250,000 scale *Kalahari* mapping, in a provisional and open file program. In addition to these series **DGS** also issues a number of smaller scale earth science themes, including gravity, groundwater, hydrogeological and aeromagnetic maps at 1:1,000,000 scale as well as a number of scales of geological coverage. Current programs include more detailed aeromagnetic mapping of the whole country, with data becoming available in hard copy and digital forms at 1:50,000 and 1:500,000 scales.

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Soil

Soils mapping of the country was established in an aid project funded through FAO and UNDP and carried out in the early 1980s. 1:250,000 scale two-color soils sheets began to be available in 1984 and 26 maps covering the non-desert areas were issued from the **Soils Mapping and Advisory Service** in the **Ministry of Agriculture**. Smaller scales were also derived from the GIS established in this project, including 1:2,000,000 scale carrying capacity, soils and vegetation maps, and 1:1,000,000 scale soil and land suitability for crop production coverages. The **Ministry of Local Government Lands and Housing** issued a single sheet 1:1,500,000 scale land use map of Botswana in 1996. Other resources mapping of Botswana was carried out in the 1960s by the **British Land Resources Development Centre** (now **Natural Resources Institute (NRI)**).

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Cadaster

DSM publishes a wide variety of urban mapping. Settlements are mapped either as orthophoto plots or as line maps at 1:2,500, 1:5,000, or 1:10,000 scale. A special sheet covering Gaborone at 1:25,000 was issued in 1991.

Since 1990 there have been significant changes in Botswana's mapping infrastructure. **DSM** was created out of the much larger **DSL**, with much more focused mapping responsibilities, and demand for modern mapping encouraged the introduction of digital production flow lines. The first phase in the modernization involved the creation of digital village mapping: initially by **Swedesurvey**, but increasingly in-house by **DSM**. All large and medium settlements in Botswana are now mapped with 1:5,000 scale digital coverage. A digital production flowline was also established by **Swedesurvey** for all scales smaller than 1:50,000 using SOS-MAP and OCAD. This has involved the capture of digital 1:50,000 data, and the redesign of the sheet format for the printed 1:50,000 map.

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Tourist/Reference

Small-scale general maps of Botswana have recently been published by **Lonely Planet**, **New Holland**, **Macmillan**, **Map Studio**, and **ITM**, as well as the **American Central Intelligence Agency (CIA)**. South African street directory publisher **Intratex** issues six indexed street maps of the most important settlements in its Braby range. **B&T Directories** published a useful street and plot index atlas of Gaborone in 1997.

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