Country Profile: Indonesia

Country Profile (PDF)

Country Resources

Topographic

Series	Publisher	Scale	Years	Sheets
Indonesia 1:25,000 Scale Topographic Maps	ID-BKSPN	1:25,000	1989 – 2014	1,689
Indonesia 1:50,000 Scale Topographic Maps	ID-BKSPN	1:50,000	1975 – 2005	1,025
Indonesia 1:250,000 Scale Topographic Maps	ID-BKSPN	1:250,000	1986 – 2004	191
Singapore 1:50,000 Scale Topographic Maps	SMU	1:50,000	1987	1
Indonesia (Sumatra) 1:100,000 Scale Topographic Maps (AMS T618)	AMS	1:100,000	1961 – 1965	338

Nautical

Series	Publisher	Scale	Years	Sheets
Singapore Nautical Charts (All Scales)	MPA	Varies	2010 – 2024	9
Indonesia Nautical Charts (All Scales)	TNI	Varies	1979 – 2025	639

Aeronautical

Series	Publisher	Scale	Years	Sheets
Indonesia 1:500,000 Scale Aeronautical Charts	INDOAVIS	1:500,000	2014 – 2015	60
Indonesia 1:1,000,000 Scale Aeronautical Charts	INDOAVIS	1:1,000,000	2014 – 2016	10

Geoscientific

Series	Publisher	Scale	Years	Sheets
Indonesia 1:25,000 Scale Geological Maps (Engineering Geology)	DGTL	1:25,000	1989	1
Indonesia 1:100,000 Scale Geological (Environmental Geology)	DGTL	1:100,000	1993 – 1996	8
Indonesia 1:100,000 Scale Geological Maps (Engineering Geology)	DGTL	1:100,000	1991 – 1997	8
Indonesia 1:100,000 Scale Geological Maps (Urban Geology)	DGTL	1:100,000	1986	1
Indonesia 1:250,000 Scale Geological Maps (Hydrogeological)	DGTL	1:250,000	1981 – 1996	34
Indonesia Geological Volcanoes Maps (Scale Not Given)	DV	Scale Not Given	1985 – 1989	4
Indonesia 1:25,000 Scale Geological Maps (Volcanic Hazards)	DV	1:25,000	1996 – 2006	4
Indonesia 1:25,000 Scale Geological Maps (Volcanoes)	DV	1:25,000	1982 – 2000	4
Indonesia 1:50,000 Scale Geological Maps (Volcanoes)	DV	1:50,000	1986 – 2004	18
Indonesia 1:70,000 Scale Geological Maps (Volcanoes)	DV	1:70,000	1985	1
Indonesia 1:100,000 Scale Geological Maps (Volcanoes)	DV	1:100,000	1996	1
Indonesia Horizon Geoconsulting Wireline Logs	HG	Varies	2013	3
Indonesia 1:100,000 Scale Geological Maps (Landslide Zones)	MEMR	1:100,000	1991 – 2004	12
Indonesia 1:500,000 Scale Geological Maps (Landslide Zones)	MEMR	1:500,000	2006	1
Indonesia 1:50,000 Scale Geological Maps	PPPG/GRDC	1:50,000	1997 – 2001	3
Indonesia 1:50,000 Scale Geological Maps (Geomorphological)	PPPG/GRDC	1:50,000	1999	1
Indonesia 1:50,000 Scale Geological Maps (Quaternary)	PPPG/GRDC	1:50,000	1985 – 2003	25
Indonesia 1:100,000 Scale Geological Maps	PPPG/GRDC	1:100,000	1972 – 2001	72
Indonesia 1:100,000 Scale Geological Maps (Geomorphological)	PPPG/GRDC	1:100,000	1993 – 2002	18
Indonesia 1:100,000 Scale Geological Maps (Seismotectonic)	PPPG/GRDC	1:100,000	2000	1
Indonesia 1:250,000 Scale Geological Maps	PPPG/GRDC	1:250,000	1973 – 2004	175
Indonesia 1:250,000 Scale Geological Maps (Seismotectonic)	PPPG/GRDC	1:250,000	1991 – 2003	21
Timor-Leste 1:250,000 Scale Geological Maps	PPPG/GRDC	1:250,000	1979 – 1995	3
Indonesia 1:500,000 Scale Geological Maps	PPPG/GRDC	1:500,000	1998 – 1999	3

Indonesia 1:500,000 Scale Geological Maps (Seismotectonic)	PPPG/GRDC	1:500,000	2004	1
Indonesia 1:1,000,000 Scale Geological Maps	PPPG/GRDC	1:1,000,000	1975 – 1996	15
Indonesia 1:5,000,000 Scale Geological Maps	PPPG/GRDC	1:5,000,000	1996	1
Indonesia 1:10,000,000 Scale Geological Maps	PPPG/GRDC	1:10,000,000	2000	1
Indonesia 1:1,000,000 Scale Soil Maps	CSAR	1:1,000,000	2000	7
Indonesia 1:50,000 Scale Geological Maps (Volcanic Hazards)	VSI	1:50,000	1993 – 2006	20
Indonesia 1:100,000 Scale Geological Maps (Volcanic Hazards)	VSI	1:100,000	2004 – 2006	2
Indonesia 1:250,000 Scale Geological Maps (Landslide Zones)	VSI	1:250,000	2006	2
Indonesia 1:2,000,000 Scale Geological Maps	USGS	1:2,000,000	1965	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 Indonesia 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	4,204
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

Jump to: **Topographic | GIS/Vector | Nautical | Geological/Scientific | Soil | Vegetation/Forestry | Atlas | Cadaster |**

Tourist/Reference | Census/Demography/Statistics

Country Profile (PDF)

Topographic

The **National Coordinating Body for Survey and Mapping** (**Badan Koordinasi Survey dan Pemetaan Nasional (BAKOSURTANAL)**) was founded in 1969 at the start of the first five-year Indonesian development plan. It is currently responsible for official geodetic, aeronautical and photogrammetric surveying, mapping and charting and acts as the national advisory and coordinating body for all surveying and mapping activities in the country. Prior to 1969 there was no systematic national civilian mapping program. Topographic maps had been prepared by the **Army Topographic Service**, (now **Direktorat Topografi (DIOTOP)**), using the polyconic projection, with series published at 1:50,000, 1:100,000 and 1:250,000 scales, but coverage of the different islands was very patchy and for many areas preliminary colonial Dutch maps, or American wartime surveys remained the best available data. In the last 30 years substantial progress has been made towards the creation of an integrated and modern mapping infrastructure for the whole of Indonesia, as a necessary underpinning for economic development. This transformation has been achieved by a sustained state investment in mapping programs, and has benefited from many different bilateral aid arrangements.

The National Base Mapping Program is carried out jointly by **BAKOSURTANAL** and the **Army Topographic Directorate**. An integrated program on the UTM projection, Spheroid Nasional Indonesia employs a hierarchical numbering system and was initiated in 1969. Sheets are printed in a larger format than the older polyconic and TM-based series. Four 1:25,000 scale sheets cover the same area as a single 1:50,000 scale map, four 1:50,000 scale sheets comprise a 1:100,000 scale map, and six 1:100,000 scale sheets are required for each 1:250,000 scale quadrangle. Graticular sheet lines are used and the basic scale differs from island to island. The basic scale for Irian Jaya was fixed at 1:100,000 while 1:25,000 coverage is used for Jawa, Bali and the Nusa Tenggara islands. A project was started in 1992 with Norwegian technical aid, to compile updated 1:25,000 scale digital coverage of these areas, derived directly from photogrammetric data. Due for completion in 2001 this will establish digital coverage in about 1,600 1:25,000 scale sheets. However 1:50,000 is the standard National Base Map scale and is employed for Sumatera, Kalimantan, Sulawesi and Makalu, with a specification including 25 m contours. 1:100,000 scale high altitude aerial coverage is used as source material, with larger scale coverage flown for some areas. Hard copy mapping has been published in two stages: provisional versions without field checking issued as enhanced orthophotomaps or three-color line editions; the second stage involves publication of full-color field checked maps. Very rapid progress towards completion of this program was achieved in the early 1990s, over 500 new sheets being issued in 1993.

BAKOSURTANAL also compiles derived coverage at 1:250,000, 1:500,000 and 1:1,000,000 scales. 1:500,000 scale mapping in the *Peta lingungkan laut nasional* series covers the country in 44-sheets issued between 1991 and 1993. A 34-sheet 1:1,000,000 scale coverage on *International map of the World* sheet lines was revised to 1992. Complete 1:250,000 topographic mapping coverage at this scale is not yet compiled for Irian Jaya and parts of Kalimantan.

In the 1990s there have been significant improvements in the availability of BAKOSURTANAL products on the international market. Topographic and thematic coverage has been listed in map dealers' catalogues and is described in our catalogue section. Larger scale coverage of urban areas and development regions associated with transmigration schemes is not available, and is mainly produced for land registration, in association with the **Directorate of Land Use**.

Soviet military topographic mapping of Indonesia is available at the following scales: 1:1,000,000 (35 sheets, complete coverage, published 1952-1987); 1:500,000 (99 sheets, complete coverage, published 1961-1987); 1:200,000 (129 sheets, primarily complete coverage, published 1956-1983) and city (1:10,000 to 1:25,000) topographic mapping of Bandung, Jakarta, Jogyakarta, Malang, Padang and Surabaya published between 1964 and 1982. These products are available in print, digital raster and digital vector GIS formats from **East View Geospatial**.

Back to top

GIS/Vector

Following completion of most of the base mapping, effort has shifted towards digital production and revision. A four-year Franco-Indonesian project is establishing a digital image map production flowline in **BAKOSURTANAL** and concentrating upon the production of ortho space maps of parts of Irian Jaya and the Moluccas. A total of 240 1:50,000 scale maps will be derived from SPOT satellite data, 176

of which are the responsibility of **SPOT Image** in France, with the remaining 64 being generated locally in Cibinong. Digital marine resource mapping is also being compiled for the 10 eastern Indonesian provinces. Forty-five designated sea lane charts of 1:100,000 and 1:200,000 scale are being produced, and coverage of the Indonesian Economic Exclusive Zone at 1:200,000 and 1:1,000,000 scales established over the period 1995-98. These projects are part of a strategy to establish a national Geographical Information System, and complement the ongoing conversion of hard copy mapping into digital formats. **BAKOSURTANAL** has established exchange standards for topographic data and is seeking to integrate topographic coverage with the numerous sectoral resources information databases. It is intended to use these central initiatives to encourage regional planning authorities to develop local GIS applications in the 18 provinces.

The Australian agency **Volcanex International** has captured 1:250,000 digital earth science coverage of Sulawesi from GRDC mapping which have been merged with all available minerals related data for the island, in the ArcView-based Geoscience Information System, *Sularox*.

Back to top

Nautical

Hydrographic charting of Indonesia is the responsibility of **Dinas Hidro-Oseanografi (DISHIDROS)**. Established in 1945 it maintains a range of 417 hydrographic charts of Indonesian waters and rivers, in addition to coverage of the principal sea lanes linking Indonesia to adjacent countries.

Back to top

Geological/Scientific

The **Geological Research and Development Center (GRDC)** in the Ministry of Mines and Energy carries out geological and geophysical mapping of Indonesia, including the publication of geological, geophysical, seismotectonic, geomorphological and quaternary mapping of the Indonesian region. **GRDC** was established in 1979 and developed the programs of the **Geological Survey of Indonesia**. Prior to this date aid from the **United States Geological Survey** had established small scale coverage and started the systematic geological mapping of Indonesia. Jawa and Madura are covered in 58 full-color 1:100,000 scale geological sheets each covering a half-degree quadrangle. For the other islands the basic geological scale is usually 1:250,000, and maps are being published on topographic sheet lines each covering 1° longitude by 1° latitude. Some local and more limited 1:100,000 scale mapping of key areas on the outer islands is also available. Regional geological mapping at 1:1,000,000 scale was nearly complete by 1997, and was on *International map of the World* sheet lines. Monochrome gravity coverage of Jawa and Madura is nearly complete at 1:100,000 scale, 1:250,000 scale derived gravity mapping is also compiled for these islands, and is progressing for the test of the archipelago. The German **Bundesanstalt fur Geowissenschaften und Rohstoffe (BfGR)** has assisted **GRDC** to compile 1:250,000 scale hydrogeological coverage of Jawa, and small scale coverage of the whole of Indonesia. A quaternary 1:250,000 series is also published, but covers a less extensive area. In addition to these systematic programs **GRDC** maintains a number of themes at smaller scales.

Back to top

Soil

The **Center for Soil and Agroclimatic Research** (**Pusat Penelitian Tanah Sen Agroklimat) (PPT)**) is responsible for the soil mapping of Indonesia. Exploration mapping at 1:500,000 and 1:1,000,000 scales covers about 75 percent of the country, but in the 1970s and 1980s most effort was devoted to the production of reconnaissance coverage of Java and Sumatra at scales between 1:50,000 and 1:250,000. The first Land Resources Evaluation Planning Project led to the completion of 1:250,000 scale soil coverage of Sumatra in 46 sheets, which by 1994 had been captured as soil data in an ARC/INFO and ERDAS-based resources information system. During the period of the second project the emphasis has shifted to 1:100,000 and 1:250,000 scale coverage of high priority areas across the rest of the country.

Back to top

Vegetation/Forestry

The **Directorate of Land Use** (**Badan Pertananhan Nasional (BPN)**) has been responsible for extensive programs of large scale land use mapping. Since the early 1970s land use data have been collected and published at 1:50,000, 1:100,000 and 1:250,000 scales and now cover most of Indonesia. Hard copy programs included full color 1:250,000 scale mapping of all of Bali and Java, derived from 1:25,000 scale coverage. Three 1:250,000 scale series are issued on topographic sheet lines in conjunction with **BAKOSURTANAL**, to show land use and forest status, land status (indicating development potential) and land systems, showing land capability. The 1:250,000 scale topographic map is used as a base for these series. Coverage is complete for the more developed western provinces, none of these maps yet extends to Irian Jaya or eastern parts of Kalimantan and only the land systems series covers Nusa Tenggara and Timor.

The **Agency for Inventorization and Forest Utilization** (**Badan Inventarisari dan Tata Guna Hutan**) with offices in Bogor and Jakarta, has carried out extensive programs of reconnaissance forest mapping in support of the logging industries. These have been derived from satellite imagery, aerial coverage and topographic mapping programs, and often resulted in 1:50,000 scale forest maps. During the period between 1989 and 1996 a national survey was established which created national 1:250,000 scale ARC/INFO coverage in a database of forests and land use, updated from multiple sources of satellite imagery, and especially radar data. A total of 250 sheets were printed from these data and derived forest coverage at 1:1,000,000 and 1:2,500,000 scales was output for publication for Sumatra and Kalimantan.

Vegetation and bioclimatic mapping of Indonesia has been compiled by the **South East Asian Regional Center for Tropical Biology** (**SEAMEO BIOTROP**) in conjunction with the **Institut de la Carte Internationale du Tapis Végétale (ICITV)**. **BIOTROP** was originally established in 1968 and now acts as the regional center for research on assessing the impacts of global change and their implications for terrestrial ecosystems, with considerable GIS and remote sensing investment. Sumatra in covered in three full-color 1:1,000,000 scale maps published with an explanatory text, which depict 80 natural vegetation types and are derived from 1:200,000 scale cartographic compilations. These maps are now available as hard copy, but also as raster scanned data on CD-ROM. Earlier bioclimatic mapping of the whole of Indonesia is still available.

Back to top

Atlas

BAKOSURTANAL produces a rich variety of smaller-scale resources mapping, usually published in atlases. An *Atlas of Indonesian resources* presents national data at 1:7,500,000 scale for eight themes, with larger scale coverage of the different islands published in *Regional resource atlases*, the scales of which vary according to the size and extent of development of the area, from Bali at 1:250,000 to Sumatera at 1:2,250,000. In 1993 **BAKOSURTANAL** published the *Atlas sumbar daya nasional*, a smaller format paperback overview of resources with many small thematic maps of the country. A bilingual marine resources atlas was released in 1998, with 1:5,000,000 scale mapping, and 1:1,000,000 scale coverage has also recently been published in atlas format to show land use and minerals, with two Indonesian language series bound together in a paperback volume. A two volume digital oceanographic atlas, depicting the Indian Ocean and Eastern Indonesian waters, was published in 1997.

The most useful summary of many of these regional and national data, and published in English, is the resource inventory compiled for 14 themes and published in association with the British **Natural Resources Institute (NRI)**.

Back to top

Cadaster

BPN acts as the cadastral mapping authority for the whole of the country apart from Jakarta. Urban coverage is compiled in association with **BAKOSURTANAL** and has been based upon 1:1,000 or 1:500 scale mapping, with developed rural holdings mapped at 1:2,500

scale. Between 1982 and 1987 100 cities and towns were covered in 1:1,000 scale photomaps, and subsequently line mapping has also been produced at this scale for significant urban areas. From 1994 **BPN** has been digitizing its cadastral data, and capturing digital coverage of non-forested development areas. It is intended to complete digital land registration by 2020. The Indonesian capital Jakarta is mapped at 1:5,000 and 1:1,000 scales by the **Jakarta Mapping Center**.

Back to top

Tourist/Reference

Many small commercial mapping companies issue maps of Indonesian cities, but **PT Pembina** is the most significant commercial publisher. They produce small scale maps of the different islands and provinces for the tourist and motoring market, as well as town mapping of Jakarta, administrative coverage of the country and a range of fifteen thematic maps of the country. **Pembina** also produces atlases and globes for the education market.

Overseas commercial agencies publishing coverage of Indonesia include **Estate/International Travel Maps (ITM)**, **Falk**, **New Holland**, **Periplus**, **RV**, **Nelles Verlag**, and the **National Geographic Society (NGS)**. The most useful western mapping of the country is from **Nelles Verlag** who publish a seven-sheet tourist map.

Back to top

Census/Demography/Statistics

Census data and mapping is the responsibility of the **Badan Pusat Statistik (BPS)**.

Back to top
