

Yuliya Smirnova (ed.), *Terrain Analysis of Afghanistan*

East View Cartographic, Minneapolis, 2003. ISBN: 0974297305. Hardcover, 390 pp. US\$195.00

This is a thorough review of the terrain of Afghanistan, based on the 128 Soviet-produced 1:200 000 topographic maps that cover the country, and which formed part of a world series of over 18 000 sheets covering 80% of the earth's land surface. The 1:200 000 sheets for Afghanistan were derived from a 1:100 000 scale series which was itself derived from 1:50 000 maps made by the Soviet military between 1984 and 1986. The verso of most sheets in the 1:200 000 series gave a Russian-language description of the sheet's terrain under six headings (populated places, roads, topography and soils, hydrology, vegetation and climate) along with a small black and white soil map. The book translates this textual information for the Afghanistan sheets, although it updates population figures wherever possible.

As an example of the type of coverage that is given in this book, the entry for map sheet I-44-XX (Ulusvali-Ajrestan) is given over three pages (pp.224-226). This entry demonstrates how the terrain is analyzed for practical use such as transportation, and for general military or commercial operations. The terrain analysis covers the first two pages of the entry. This is followed by a colour page featuring an overview topographic map of the area, and a colour rendition of the original black and white soil map from the verso of the sheet. This particular sheet is of a mountainous area near the eastern end of the country, and about half way between the northern and southern borders. Under the populated places heading, this entry notes that the houses are usually one storey high and are made of wattle-and-daub or stone. The populated places in the Ajrestan River Valley are scattered, most towns have fewer than 100 people, but a few have 500 to 1000. There is some telephone service along the valley itself. In the summer, yurts and tents can be found in temporary locations, with livestock pens nearby. Along the valley slopes, fortresses, forts and various types of strongholds are common.

The short entry on transportation and trafficability mentions that the subtropical alpine climate of this section makes transportation for vehicles other than by road impossible, and that the dirt roads are in clayey and loamy soils. These roads are difficult for wheeled vehicles to use in the rain. Near the Oba and Gargara passes, roads have sharp turns, and the area is crisscrossed with pack-animal trails. From November or December to March and sometimes into May, the passes and their approaches are snowbound and all traffic ceases.

As to the hydrology, this entry says that water in this area is supplied from rivers, springs and wells, and that sanitation is unsatisfactory in nearly all populated places. Highest river levels in the spring are usually between 1-3 metres above low water, and a shallow, intermittent lake forms on the bottom of the Dasht-e Navar Basin. In the summer and early autumn many of the rivers dry up and silt up, and the basin becomes a largely impassable or difficult swampy area of up to 48 km². With regard to climate, winds are usually north-easterly, can blow up to storm force on the crests of ranges, and are characterized as mountain-valley winds. These winds blow up the valleys and mountainsides in the day, and then back down at night. In the alpine zone, the air is rarefied and can cause altitude sickness.

At the back of the book are seven fold-out indices for Russian and American map series of the country at various scales. There is also an adequate index of geographic names.

The cost of the book is high at US\$195.00. The Russian maps that this book uses as a base are all over 25 years old, and there is also some question of their accuracy. The added information on each map sheet is also over eight years old, and there have been some major changes in roads and trafficability since the US occupation. However, the data found in this volume are both unique and

valuable, and can be found in no other single volume. Much of this open source material is otherwise available only in Russian language publications, and even those original maps and documents are hard to find and expensive to acquire. For any enterprise interested in transportation, water, geography or climate in Afghanistan, this information is irreplaceable, and is well worth the price.

All in all, this is an excellent reference on the country's terrain, and a highly recommended one for anyone going there or doing business in the country. It is hoped that the East View Cartographic's idea to produce similar volumes for other countries will be followed up.

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Graeme Jupp (ed.), *NZMS 260 and 262: Our Metric Topographical Heritage*

Cartopress, New Zealand Cartographic Society, Auckland, No.1, 2011. ISBN: 9780473183325. Paperback, 100pp., NZ\$25.00 Available from Graeme Jupp gjupp@linz.govt.nz

Acquiring sheets in a map series, Mary Larsgaard writes, is equivalent in the book world to a librarian “forced to obtain a book by purchasing unannounced pages separately, at irregular and possibly infrequent intervals” (p.75). The comparison, while somewhat perverse, highlights the importance and value of the bibliographical list for map series. A complete and definitive map series listing is an essential tool for selection and acquisition of cartographic materials and, consequently, an important promotion of authorship and publication history. The challenge is in the very nature of the maps themselves – ephemeral, documentary and fragile, these impermanent information artifacts make map listings an extremely difficult undertaking. *NZMS 260 and 262: Our Metric Topographical Heritage* is a noteworthy response to this challenge. A carefully prepared, comprehensive review of New Zealand's first two national metric topographical map series (at scales of 1:50,000 and 1:250,000 respectively), this edited collection of map lists and essays provides a valuable contribution to New Zealand's cartographic and mapping heritage.

In 1969, New Zealand adopted the metric system. With much of the country's mapping suddenly out of date, work on designing a new metric series meant beginning each map sheet anew; there was no simple conversion from the old inch to the mile map to the new metric map. The contributors to this volume, all participants in the modern mapping of New Zealand, provide brief but lucid essays rich in perspectives on the decision-making involved in the development of a replacement metric series. Bill Drake's introductory essay (pp.11-18), an abridged version of an article first published in the *New Zealand Cartographic Journal* in 1983, provides useful context for understanding the personal judgments and controversies that shaped the character and design of the NZMS 260 series. The editor, Graeme Jupp, contributes two densely written essays from the cartographer's perspective (pp.19-28 & 35-42) describing in detail the numerous format and style changes undertaken to the NZMS 260 and 262 series, respectively. David Balm and Craig Gear offer two interesting perspectives on the printing of the maps and the detailed methods used by the printers to produce the series (pp.29-33). These personal accounts of the individual judgements and decision-making that contributed to the overall mapping of New Zealand add an important point of view that may sometimes be overlooked in the history of modern cartography.

The greatest strength of this volume lies precisely in the authoritative and comprehensive map lists that Graeme Jupp has assembled (pp.43-95). Exhaustive in scope, meticulous in detail, Jupp's map lists provide an indispensable bibliographic aid for researchers and librarians. Each map list includes both the edition and variant of each map in the NZMS 260 and 262 series, complete with notes on dates, revisions and reprints as well as descriptions of significant achievements realised by particular