BOOK REVIEWS

GEOLOGY AND TECTONICS OF THE HIMALAYA. Geological Survey of India, Special Publication No. 26, pp. 126, 9 plates (Maps and Legend), 26 Tables, 14 Figures, 1989. Rs. 136, \pm 16, Dollars 49.

The Special Volume 'Geology and Tectonics of the Himalaya' issued by the 'Geological Survey of India, multinational cell for tectonic modelling in Himalaya, is divided into seven sections: I. Stratigraphy and Sedimentation, II. Metamorphism and Magmatism, III. Structure and Tectonics, IV. Neotectonic Activity, 'V. Geomorphology, VI. Metallogeny, and VII. Heat Flow Regime. Each section includes maps, tables and figures and a brief on constraints and strategy for future 'work.

Earth scientists working on various disciplines of the Himalayan Geology are well aware of the enormous geological information that has accrued during the last one hundred and fifty years. It is still insufficient to solve many geological problems related to stratigraphy and tectonics of the Himalaya, such as correlation and duration of many lithological units and unconformities as also biological, volcanic and tectonic events, particularly related to the global episodes. In this respect the attempt by the Geological Survey of India to bring out this publication has its specific importance.

Due to diversified views expressed by workers and paucity of needed data, each and every section is of necessity, incomplete and debatable. Table 1a—Generalised Stratigraphy is of importance as it summarizes the information on the sedimentary succession of the different Himalayan basins, and the different sedimentation breaks and helps to distinguish different sedimentary cycles.

Some of the important sedimentary breaks, however, are not shown in the A break covering almost a period of Kungurian-Abdehian is widespread in Table. Himalaya, traceable in Salt Range, Afghanistan and South Tibet, is missing. This break lies below the Zewan-Kuling Formation and distinguishes two different cycles of sedimentation, the Lower Permian Gondwanic cycle and the Upper Permian Similarly, the hiatus between Kuling Shale (Formation of other workers) Tethvan. and Lilang Group, coinciding with the Permo-Triassic break in Spiti and Kumaon is not included. Kashmir region is, however, believed to have continuous sedimentation from Late Permian to Triassic. Some of the breaks shown in the Table such as between Vihi Group and Wumuh Formation; middle Carboniferous break in Kashmir and Spiti, are open to question. The Vihi Group according to the original definition (Palaeont. Indica, N. S., 46, 1981, pp. 1-2) encompasses succession from Zewan to Wumuh and not up to Triassic, as shown.

In the text of the first section, one misses the details of lithostratigraphy of the most important Tethyan belt of Himachal Pradesh. This belt serves to link the Kashmir Basin with the Kumaon Basin and forms the foundation for the different formations of the Himalaya and provides all the data for distinguishing different episodes. There are a few minor but important nomenclature mistakes, for example, the spellings of Wuyan Formation has been shown in Table 8 as Wuyum; Khreuh Formation (proposed in 1981, *Palaeont. Indica. N. S.*, 46) has been referred as Khrew. The change of spellings of formational units is contrary to the code of stratigraphy. In our opinion, the value of the publication could have been enhanced by inclusion of a section on Palaeoenvironment and Palaeoelimate.

There are genuine difficulties in bringing out a compilation of this kind in synthesising varied data, specially when differing views are held. The present attempt is of value and will be of help in formulating detailed specialised programmes. in future. Authors of each section and the Editorial Board have to be complimented on this piece of good work.

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RECORDS OF THE GEOLOGICAL SURVEY OF INDIA. Vol. 123. Pt. 7 (1990) 153 pages.

This Volume includes extended abstracts of progress reports in respect of the different items of work carried out in the western region of the Geological Survey of India during the year 1988-89. A welcome feature this year is the inclusion of an 'Overview' focussing attention on certain important aspects of research.

The identification and characterization of three parallel arcuate belts in western Indian craton—The Archaean granulite-gneiss belt (Sandmata Complex) in the west, the older supracrustal belt with relict greenstone components (Mangalwar-Complex) and a younger supracrustal belt made up of turbidites, semipelites and bimodal volcanics, is a significant outcome of the geological studies by the Survey during the last twenty years. The Survey should now aim at bringing out a monographic account of the geology of the terrain supported by field maps and crosssections of critical areas.

It is gratifying to note the concept of concept oriented mineral exploration has. brought to light a variety of polymetallic sulphide deposits. What is now required, is a determined bid to exploit these resources. Mineral deposits in the ground, unlike money in the bank, do not fetch interest. The utilization of resources is as important as finding them. A correct understanding of lithologic and tectonic controls hold promise of discovering new deposits of precious as well as base metals. in the belt.

The extended abstracts included in the report are a welcome feature. A large number of detailed geologic maps are now furnished which will prove to be of special value. The western region has an exemplary record in mineral exploration. and we look forward to spectacular new discoveries during the coming years. All those interested in the geology of Western India will find the report interesting and. absorbing, full of suggestions for new approaches. We commend the book to the attention of our readers.

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