(2) generate interest in the region in developing further budgets; (3) provide a formula for generating regional budgets to be compiled into the world-wide database that is being developed by the LOICZ Biogeochemical Modelling Node.

The publication gives an overview of the workshop and budget results, budgets for 12 individual sectors of Mexican coastal lagoons, conclusions and implications for lagoon comparison, besides appendices on (1) an overview of Mexican coastal lagoons, (2) ecological services and socio-economic sustainability and other aspects.

Each section devoted to the individual sectors of Mexican coastal lagoons, starts with a description of the study area, water and salt balance, and budgets of non-conservative materials like Dissolved Inorganic Phosphorous (DIP) and Dissolved Inorganic Nitrogen (DIN).

Various parameters like the volume of precipitation, evaporation, stream run-off, groundwater flow, exchange time of water in the system, inorganic nutrient concentrations in lagoon waters and adjacent ocean have been determined besides variation in biotic composition like plakton-dominated, major seagrass component and major mangrove communities.

I wish to draw particular attention to the fact that these exercises have made it possible to demarcate systems which release DIP (heterotrophic) and those that take up DIP (autotrophic) and systems with net de-nitrification and with net nitrogen fixation.

The book would be a useful reference to all scientists involved in the LOICZ programme. In addition to collecting valuable data, budget calculations of the type enumerated in the report would go a long way in building box models, quantifying the various processes and inferring human perturbances in the land-ocean interaction zone.

A useful WWW Home Page for the LOICZ community is http:www.nioz.nl/loicz/modelnod that contains the world-wide database developed by the LOICZ Biogeochemical Modelling Node.

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DYNAMIC HIMALAYA by K.S. Valdiya, Universities Press (India) Limited, Hyderabad, 1998, 192p, Price Rs.160.

The Himalaya has a special place in Indian mind and heart. From time immemorial it has been a great source of inspiration to poets and philosophers and to scientists and savants. Its dimension and grandeur evoked in Kalidasa the spontaneous expression:

> "God of the distant north, the snowy range
> O'er the mountain towers imperially,
> Earth's measuring rod, being great and free from change
> Sinks to the eastern and the western sea ..."

The Himalaya has many splendoured aspects. It comprises the earth's largest mountain range and has some of the highest peaks. It is also an orogenic belt in which crustal shortening of hundreds of kilometers has taken place. The great mass of the Himalaya has been a factor in formulating the theory of isostacy. It is the testing ground for plate-tectonic theory involving continent-continent collision. It is also among the youngest mountains of the globe. The Himalaya is a controller of climate that brings copious rainfall and is the source of snow and glacier contributing to the

perennial flow of water to north Indian rivers draining through the fertile tract of the Indus-Ganga alluvial belt. There are chains of hot springs dotting several river valleys as a future source of energy. The mountains display a fascinating biodiversity within their green forests. Above all it is inhabited by colourful people with distinctive ethnic features. K.S. Valdiya discusses all these aspects lucidly in his book "Dynamic Himalaya".

The history of the Himalaya can be traced from around 2000 million years to Holocene. The Purana sea along the northern margin of the Indian Shield provided the base for the development of the Lesser Himalayan domain over 2000 m.y ago. The author describes the crystalline nappes, the nature of the floor of the sea, the early sedimentation, the volcanism *pari passu* with sedimentation, the comparative calm of the sea with carbonate sedimentation and its abundant stromatolites and the early Cambrian development with its invertebrates.

The narration from the retreat of Purana sea to the breaking away of the Tibetan microcontinent covers the various phases of diastrophism particularly in the domain of Tethys Himalaya. Continuing this history, the author focusses on factors of growing tectonic instability that occurred during a period from Permian to Cretaceous. This period witnessed changes in the submarine topography, abundant faunal growth and development of a chain of volcanic islands.

The penultimate phase witnessed far-reaching changes in the geography of Asia. The author describes the chronicle of movement of India from its homeland in Africa-Madagascar to Asia across a distance of 7000 km, and also the eruption of intraplate volcanism of the Deccan, culminating in the welding of India with Asia along the Indus-Tsangpo Suture. There was a contemporaneous development of deformation, metamorphism and intrusion of leucogranites along the Himalayan orogenic axis, evolution of various water divides of the initial drainage system and evolution of foreland basin south of the Himalaya.

The final phase was marked by intracrustal deformation and initiation of major crustal fractures like the Main Central Thrust and Main Boundary Thrust and the evolution of the Siwalik basin. As the Himalaya emerged as the earth's largest mountain range, the present landscape evolved with the onset of a climate of monsoon winds and extensive snow cover and the formation of Indus-Ganga plains.

The author concludes, emphasizing on the squeeze that is still operating and the reactivation along various faults, the uplift of the mountain, the various geomorphic changes and the appearance of man. The author predicts that the unlocking of the active faults accompanied by stored strain energy would shake the region violently, when that happens someday in the future.

The author has presented this complex life history of the Himalayan mountain in about 133 pages of narration supported by figures and colour plates. It is very thoughtful of the author to have provided a detailed and well illustrated glossary. A vast section of students and teachers and others interested in the inner aspect of the Himalaya should find this publication interesting and useful. The effort of the Jawaharlal Nehru Centre for Advanced Scientific Research in bringing out this monograph on the Himalaya, which is sure to create a new interest and awareness among students, is laudable.

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