

in terms of therapeutic rDNA-based proteins, the biotechnology industry has truly heralded a new dawn, even though other more ambitious enterprises such as gene therapy have had relatively limited success till now.

This volume describes in interesting detail the historical, scientific and clinical aspects of the discovery and development of key rDNA proteins (which mostly cover the 'first-generation' of such useful therapeutic drugs as interferon, blood-clotting factors, clot-busters such as tPA, as well as some of the early vaccines *à la* Hepatitis B). These stories offer fascinating case studies of the travails, tribulations and triumphs of some of the more visible candidate drugs. Moreover, apart from interesting anecdotal information, they provide a solid background, replete with detailed reference material, on the scientific research that formed the foundation of their acceptance and approval as drugs. Thus, this book is a useful source for a reader directly interested in quickly accessing the scientific literature on some of the most successful and now well-accepted rDNA-based protein drugs. The fact that these descriptions emanate from some of the earliest practitioners of the art in the field lends a special ring of authenticity to the accounts, as well as provides an intimate insight into the human element involved in the pioneering work on this front. The formidable challenges involved in translating the science into commercially viable products – a novel experience in biology at that time – has been captured well in some of the chapters, most notably the one by Charles Weissmann, is a co-founder of one of the earliest biotechnology ventures, besides being a scientist of formidable reputation. There are many lessons in this book for some of the 'struggling souls' of the Indian biotechnology industry, especially that good products – apart from other factors – eventually ensure success in the market in the long run, and one cannot afford to overlook a solid commitment to basic science and quality control, even though it may be commercially more tempting to be the first in the market in the short run.

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Methods for Community Participation: A Complete Guide for Practitioners.

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The process of development in any country treads a path that primarily emerges from the imagination of planners and policy makers, who perhaps have a gross idea on the resource, livelihood pattern and culture of the country. However, when such a development concept spreads, it would be implemented uniformly over vast stretches of landscapes and cultures. While implementing these policies conflicts arise from the local community, though the policies may be well intended. Such conflicts may be because of lack of social benefits to the local community or the policies may not have been developed through consensus to meet the expectations of the local community. Thus it was realized, that while formulating the policies, it is essential to go to the people to understand their concerns and expectations. Further, it was realized that government programmes were not reaching the people, and that many of the development and livelihood programmes did not bring out expected results. One such example was the social forestry project in India. In the last decade, the programmes, particularly those supported by the international agencies, insisted that the implementation be done with the consent of the local populace. Programmes such as watershed development and Joint Forest Management need a lot of support and understanding of the local community behaviour, in order to be successful. Therefore, agencies that supported such programmes ensured participation of local community in planning, implementation and future management plans.

Development professionals, who generally did not have hands-on experience in dealing with the expectations of the community had to undergo radical change in their approach and therefore had to undergo training. Therefore, methods such as participatory rural appraisal (PRA) were developed in order to facilitate participation of people in planning, decision-making and managing the local resources, training them towards self-governance. In view of many programmes related to environment and natural resources prevalent nowadays,

the book under review comes in handy. As an administrator, the author has put himself in many situations and tries to deal with them. The book deals with methods of enhancing community participation by making the process interesting for the community using locally available material, giving importance to the opinions and suggestions expressed by the local community. The book has five chapters, detailing the concepts of participation, methods of PRA to obtain information over landscapes, historical events and societal aspects, and finally, the summary.

Chapter 1 deals with conceptual issues related to PRA. It discusses various ways of eliciting responses from the rural/urban community and also how currently practised methods were evolved. The author explains in detail, the preliminary ways in which questionnaires were used to get responses and compares various methods that were evolved. It indeed captures various views on the current methods and answers some of the myths associated with PRA. As a book on the methodology, sufficient theoretical details are given for a practitioner. One of the problems, as the author quotes several examples, is of insufficient training and understanding of theoretical details for proper implementation in order to cope with the programme's objectives. The author indicates that the larger goal of the participatory appraisal is to empower people towards self-governance; it is difficult to imagine, given the inequity in the social system and implementation process, whether it could be truly achieved. We have several development models working in the country brought about by the efforts of illustrious personalities. These are isolated in nature and have failed to replicate themselves, though they were successful. No doubt, these development models are based on strong theoretical foundations, but when they are unable to replicate themselves through 'demonstration effect' there is a need to diagnose where the problems lie at a different level.

Chapters 2–4 illustrate various methods of understanding the perception of people about the space, time and their relation. The author vividly explains the method, the precautions that need to be taken, the importance of using locally available material, the advantages of allowing concerned people to dominate discussions, etc. Further, illustrations of the

map using live examples involve the reader in the process of undertaking the appraisal. However, taking one example in its entirety, starting from the objective of the project till the outcome should have been more useful. This kind of illustration gives us only a 'snapshot' picture of the response of people to a given aspect, but not so much the context and the utility of such an exercise to the overall objective of the project. It is also important to demonstrate, from the chosen examples, how the suggestions of the people were incorporated into the development model, so that people would have felt 'involved' in the process. Overall, the book is well written with a view to reach administrators and non-governmental agencies implementing the development programmes. The author has made a good beginning to motivate administrators and implementing authorities to approach people and discuss with them the prospects of different development programmes, and ways of implementing them.

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Sahyādri, The Great Escarpment of the Indian Subcontinent. Y. Gunnell and B. P. Radhakrishna (eds). Memoir 47 (1 and 2). Geological Society of India, P. B. No. 1922, Gavipuram P. O., Bangalore 560 019. 2001. 1054 pp. Price: Rs 1500/US \$ 150.

Two edited volumes by Y. Gunnell and B. P. Radhakrishna respectively, having 62 papers are possibly the first of such detailed documentation and effort to compile, collate and elaborate various characters of the Western Ghats, which have been more appropriately called as the Sahyādri on the west coast of India, like the Himadri in the north. The volumes aim to present the morphology and prolonged uplift history of the Western Ghats, where landforms are comparable to many well-known rifted margins of the world.

It has been the experience of past workers that the factors governing the evolution of the Western Ghats (Sahyādri) are mainly controlled by rifting, scarp-retreat, uplift, subsequent erosion and deposition within onshore and by offshore marginal sedimentary basins.

The whole book has been organized in two volumes with an introduction of the term Sahyādri in Indian mythology and its logical adoption in this work, followed by collation of a few early papers on the origin of the Great Escarpment, followed by sections on the relief development, denudation, drainage pattern and offshore sedimentation, and finally by presentation of different models of rifting and plateau uplift with views on neotectonics and landscape rejuvenation. The second volume incorporates sections on Cenozoic uplift and its implications on environment and ecology, including climate (SW monsoon), bioclimate during Quaternary and Holocene, vegetation and relief.

The book starts with an editorial introduction of the term Sahyādri in the ancient Indian literature. The second part of the first volume introduces the changing views on the origin of the Great Escarpment in two sections: insights from field reconnaissance, and global tectonics and denudation chronologies. In the introduction, the editors present the elaborate data set on the pattern of south Indian terrain slope system and topographic profiles through Digital Elevation Modelling (DEM) on the basis of Remote Sensing Data (GTOPO30). The section on early insights from field reconnaissance contains ten papers of historical significance incorporating very early observations on the geological features of the south Maratha country and adjacent districts (Foote, 1876); changes of levels in the Indian peninsula (Oldham, 1983); the Western Ghats (Wadia, 1975) and their dykes of Western India and its relationship with the Deccan volcanism (Auden, 1949); physical geography of the Western Ghats (Pascoe, 1950); structural and physiographic evolution of the Mysore plateau (Radhakrishna, 1952), and other works.

The bulk content of the first volume on global tectonics and denudation chronologies has been divided into four sections: (1) relief development of the Western Ghats passive margin (11 papers); (2) onshore drainage and offshore sedimentation: spatial patterns and time slice analysis (11 papers); (3) models of rifting

and plateau uplift (11 papers), and (4) neotectonics and landscape rejuvenation: a debate around the Nilgiris and the Palghat Gap (4 papers). These sections deal with pre-existing theories of polycyclic denudations and development of continents, precipitous western edge of uplifted plateau and its relationship with cynatogenic uplift followed by rifting resulting into formation of scarps. The sequential events of the formation of the Western Ghats have also been narrated. The process started in Lower Cretaceous time with disruption of the Gondwana continent and formation of the East Coast followed by eruption of Deccan basalt in Cretaceous–Eocene time, and sequential evolution of the Arabian Sea, the Western Ghat scarp, the gorges and canyons and reduction of older plateau to a newer plateau surface. It incorporates papers on recent advances in geomorphic studies on Peninsular India and formation of planar surfaces in South India and its influences on stream profile and interfluvies (Vaidyanadhan, 1977; Dikshit, 1981). Deccan volcanism has also been critically evaluated as an important geological event in shaping the Indian Peninsula (Radhakrishna, 1991) along its mafic dyke swarm (Dessai and Viegas, 1995); large-scale Panvel flexures (Misra, 2001); identification of Tertiary palaeosurfaces on the Deccan Traps (Widdowson, 1997), and tectonics using gravity patterns and the estimation of volume of eroded materials which were deposited in adjoining basins (Balakrishnan, 2001).

Denudation, onshore drainage and offshore sedimentation section (II-B-2) contains papers dealing with drainage-capturing across mature and elevated plateau to a youthful stream resulting into Sharavati (Jog) (Radhakrishna, 1964), and forms and characteristics of drainage basins of Konkan area to evaluate the processes of rejuvenation giving rise to different types of river profiles and river basins (Dikshit, 1976). A paper by Biswas (1988) provides insight into the tectonic framework of the western continental margin of India and its relation with the Deccan Flood basalts. Description of this margin would have remained incomplete without incorporating the details of the petroliferous Bombay Offshore Basin (Mathur and Nair, 1993); Konkan–Kerala Basin (Singh and Lal, 1993), and stratigraphic development of the western continental margin of India incorporating subsidence history since late Mesozoic