

BOOK REVIEWS

Habitat, Habitation and Health in the Himalayas

By Veena Bhasin (Edited by M.K. Bhasin)
xvi + 344 + 16 Plates, Tables, Figures,
Illustrations, Glossary, Bibliography, Index.
Kamla-Raj Enterprises, Delhi (1990), Rs. 400.00
(Cloth)

A description of the socio-medical profile of a community or region is the core of any study in medical anthropology. Such a profile takes into cognizance the culturally constituted realms of health and illness, the intersecting and concurrent healing practices, the domains of religion that are invocable for rendering appropriate cure, the role of domestic group in administering traditional medicine and, equally important, in providing congenial social and psychological environment to the sick, the interaction between different, often contesting, systems of medicine, and the preparedness of people to adopt novel methods of cure. Local pharmacopoeia, the herbs advised for the sick, is also of great interest, as it opens up the vast possibility of 'alternate medicine', with reduced side effects and complications.

An anthropologist is suitably placed to accomplish a detailed study of the native beliefs and practices concerning health, illness, and pharmacopoeia, because central to his work is a long field work. When he follows a case of sickness—or what I would call, when he prepares a 'medical biography'—he comes to know the pattern of choices the people have, the curative practices they approach, the drugs and preparations they use, and a whole set of social relations

that crystallizes around the sick. A medical biography, or a catalogue of medical biography is then to be located in the socio-cultural milieu of the people, on the one hand, and the eco-system, on the other. All anthropologists, pursuing studies of health and sickness, are committed to understanding, as precisely as possible the role of social and cultural parameters managing health and illness, but delineating interaction in the eco-system of a region—what may be called 'medical ecology'—remains generally unachieved.

Bhasin's book takes an ecological perspective to the study of health in the Himalayas: to analyze its title, 'habitat' refers to macro-and micro-environmental forces, the ensuing characteristics of vegetation and animal life, and the symbiotic relations established between different forms: life with the natural endowments; 'habitation' a cultural concept, it designates the patterns of human settlement, the amenities and opportunities available to the people, and the pursuits they are engaged in for a livelihood; compared to concept of 'habitat', which falls in the realm of 'nature', and that of 'habitation', which is 'culture', the concept of 'health' may be envisaged as mediating between 'nature' and 'culture', 'habitat' and 'habitation'. There cannot be a definition of 'health', although the WHO one is often quoted and the phrase 'state of general well-being' becomes rather imperative, *inter alia* of parameters, for conceptualizing the state of health, because it is conditioned by the cultural concepts. The state of shaman, for example, which in inspirational divination, would be judged 'pathological', according to modern medicine

for the 'people', such an exalted state, may be 'normal' and 'expected'. Therefore, Bhasin writes, 'Well-being has physical, mental, ethical, socio-economic, political and ecological dimensions. What constitutes "health", or "well-fare", or "pathological" changes according to cultural setting, environmental conditions and ecological relationships' (pp. V, 2).

Habitat, Habitation and Health in the Himalayas is a comparative study of the people inhabiting Sikkim and Bharmour Tehsil (Chamba District). The vast amount of data is organized in nine chapters, well substantiated with sixty figures and maps, one hundred and fourteen tables, and thirty-two plates, followed by a glossary of local words and their etymology, and a detailed bibliography. The maps are detailed and excellent; the quantitative data have been fully treated; the references are complete in all respect; the pictures are evocative and relevant; and above all, the quality of production is unmatched. Rarely anthropological monographs attend to what some call 'scholarly apparatus'—diagrams, notes, detailed maps, tables, etc.—and Bhasin has done a marvellous job in bringing together bumper data in such a fine shape.

But what inspired Bhasin to undertake a comparative study of Sikkim and Bharmour? She carried out field works in both these areas, thus knew them extremely well. Besides the pragmatic reason, 'these areas constitute different culturo-geographic regions' (p.10). Compared to multi-ethnic nature of Sikkim, where the autochthonous Lepchas had vicissitudes of contacts with Bhutias and Nepalis, Bharmour valley is inhabited by seasonably migrant pastoral Gaddis. A description of both these areas is given in the third chapter (pp. 99-109) of the book, and their natural and human environment is detailed out in the second (pp. 11-98).

'Human Settlements and Amenities', the fourth chapter, approaches the settlement patterns in relation with physical features, climate and seasonal migrations (p. 128). Absence of proper drainage favours proliferation of germs that cause various bacterial diseases. Poor ventilation accelerates respiratory disorders (p. 133).

Though there is no paucity of water, and it is relatively bacteria-free, it still has a high proportion of mica and other impurities, having deleterious effects on the general health of the people (p. 136). Further, stomach ailments multiply as drinking water is not treated with any purifier, it is neither boiled (p. 139). Education plays a primary role in raising the awareness of people about their environment, when they come to relate their illness episodes with the germ theory: take the following example, 'Flies breed in the dirty water which helps in spreading diseases. The people are not able to correlate the transmission of diseases with the flies and insects' (p.133).

The habitational structure, interacting with the economic pursuits of people, has implications for the demographic characteristics. Of them, age-sex composition is an important component, for it helps policy makers to have information about the labour force, school-age and voting population, and old age and young age dependency ratios (p. 173). In the two chapters (VI and VII), Bhasin presents a demographic profile of Sikkim and Bharmour, comparing it with all-India statistics and of other regions (especially Kerala), and offer some interesting observations. The mortality rates are related with socio-economic factors, and with the availability of dispensaries, primary health centres, hospitals, and other private practitioners (pp. 231-232). The section on family planning (pp. 234-238) discusses the reasons of low fertility among the Gaddis, and Bhasin's observations are supported by studies on other pastoral nomadic people, especially where periodic migration is sex-bound, and the incidence of matrifocal households is very high.

The habitational structure of the people is directly related with the incidence of diseases. The chapter on health describes the people's cosmology, and how they explain the incidents of sickness (p. 242-249). Supernatural cures are also discussed here. The section on nutrition and health has interesting information on the edible plants, and their parts consumed by the people. Similarly, there is valuable information on medicinal plants, and the way in which they are

utilized. Health care practices and their availability is also discussed. Identifying the reasons of health problems, Bhasin says: 'General poverty, low family income, a high rate of illiteracy and various socio-cultural factors contribute to this type of health structure' (p. 296).

What needs to be done for alleviating the sufferings of people? There are certain issues of priority: 'water and sanitation systems should receive higher priority than other investments' (p. 298); 'properly ventilated houses should be provided' (p. 298); 'medical care facilities should be strengthened' (p. 299), 'local pharmacopoeia should be examined, with the possibility of its incorporation in the official health care system'. But, along with all these, health education needs to be provided (p. 301), and developmental models should be made holistic.

Bhasin's endeavour is significant to studies on population ecology and medical anthropology.

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Women, Work and Marriage in Urban India: A Study of Dual and Single Earner Couples

By G.N. Ramu

206 pp., Tables, Figures, Bibliography,
Sage Publications, New Delhi (1989)
Rs. 175.00 (Cloth)

The author focuses on the emergence of women as earning partners in marriage in the context of Indian society. The primary aim is to analyze the conflicting situation of persisting traditions and ideologies as against a changing politico-social milieu, to understand the change in traditional role of women as wife and mother, as it is being challenged by the role of woman as a working partner in marriage.

The study is around the expanding urban sector of India with its newly acquired phenomenon of dual-earner families. Universal source of conflict and stress in such families is seen in

a role conflict in which the working role of the wife clashes with the traditional stereotype of both the roles of the husband and the wife.

The four variables isolated by the author, as seen to be contributing towards this condition are: 1) religious and cultural prescriptions; 2) a disregard of legal reforms; 3) a decline of women in the labour force due to modernization; and 4) women being largely deprived of the benefits of education.

This is an empirical study of dual-earner families in the city of Bangalore to study the stresses and strains of wives in their multiple roles and to compare the lives of housewives with earning wives. A sample of 245 single earner and 245 dual-earner couples have been chosen at random, where the wives are mainly employed in the industrial sector and Indian telephone industries. The author relies largely on statistical techniques, supplemented by depth interviews.

The author makes a classification of four types of wives, depending upon their relative attitudes to extra-domestic work and domestic duties. The first of these is the category of traditional housewives who happily stay at home. The second type are the neo-traditional wives who work as well as carry all the burden of housework. The other two categories with obvious reference are the reluctant home makers and the reluctant working wives. Interestingly there is no category of a truly professional woman.

The linkage between work and family life has been traced through several variables such as relations between working women and their co-workers and sharing of domestic work by husbands. The working wives do not show significant departure in the emulation of traditional roles except for having relatively greater freedom of movement and less drudgery of being tied to the kitchen. There is definite curtailment of interaction with co-workers, especially males and husbands remain peripheral in domestic duties.

In tracing the ideological background, the author rightly points to the socialization of Indian women according to the Sati-Savitri model rather than that of Shakti—both available in our mythology. It is the sati-savitri model that is

being emulated by women which puts a premium on their wife-mother role, irrespective of whether they are working or not. Gender consciousness is an expression of this model; where the man remains ideologically the patriarchal bread winner and the wife subordinate and dependent. There is no significant change in this model when women take up wage-earning work.

The only variable which has affected the attitude of men is education, but surprisingly all women are deeply rooted in their gender role of domesticity. In tasks related to the household apart from domestic chores, most husbands and wife share the responsibility. This is true for both types of households though the husbands tend to do a little more if their wives are working.

The author has given a sensitive account of the alienating and tedious nature of cooking. Women, under a gender stereotype are expected to cook without making any fuss. However for working women, cooking 4-5 meals a day can be extremely taxing. The data show that full time housewives find household chores equally taxing. The reluctance of men to do the domestic chores is attributed primarily to their socialization. Statistical data support the fact that husbands do not perform domestic chores whether or not their wives are working.

Researches in Western societies and India have been cited to show that wives do not gain much in their 'bargaining power', even if they work. The author rightly puts it to the complexity of the relationship involved, which is guided by centuries of moral uprightness and traditional values and cannot be analyzed as a straight forward exchange. The traditional marital roles are defined on the basis of gender; they cannot be achieved in terms of individual merit. Women do not totally lack in spheres of influence and power in domestic relations, and these are true for non-working as well as working women. The latter have somewhat more influence because of their greater independence and such couples have greater interaction in terms of, say for example, going out to movies together. But overall gender roles remain patriarchal and women compromise their earning roles to suit their feminine

roles. It is the ideological model that is most operative, with economic roles being subservient to it.

It is a well researched work with plenty of theoretical insights and data. The case studies are appropriate and make an interesting reading. Being a finely produced work, it should evince interest in many readers.

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Determinants of Population Growth in India

By G. Ramachandrudu

300 pp., Tables, Bibliography, Index. Inter-India Publications, New Delhi (1989). Rs. 295.00 (Cloth).

The burgeoning population of the world is giving a creepy feeling to the contemporary planners. The disparities between countries in terms of 'development' have mainly resulted from a growing number of human beings. So important it is in the present day context that it has spawned vast array of literature, research theses, debates, conferences, etc. G. Ramachandrudu's book is another addition to that list. It is a research thesis now published in a book form, and would be useful for reference work as database. As it heavily leans towards economic aspects, it is a good reference source of 'economic demography'.

The method of chapterisation in the book is expedient. Chapter one discusses the approach to the problem, objectives, scope and limitations, and methodology of the study—it is a good beginning, showing grasp of methodological problems one generally faces. The second chapter deals with the demographic trends in Andhra Pradesh since 1901. Its determinants are based on the Census data and other secondary sources. The third chapter estimates the components of population growth, such as births, deaths, and migrations. The fourth chapter is an analysis of

inter-district and inter-regional variations in population growth and its components. A review of the literature on the determinants of fertility, mortality, and migration is the subject matter of the fifth chapter, and their regression analysis is given in the next. Chapter seven offers a critique of the governmental population policies, and some recommendations based on a critical analysis of the present study are delineated. The last chapter consists of summary and conclusion.

However, some factors must be noted in an otherwise well-analysed and understandable work. First, it is understandable why the 'references' were not included at the end of the chapters when a bibliography was appended at the end, before the list of references in 'bibliography' which contain the year of their publication, and to remind, they form an indispensable formal part while mentioning references. Also, pages 293 to 296 are not present in the bound edition of the book—an omission which should not have been overlooked before sending this book for review. Secondly, I could not decipher few paragraphs and sentences, for example on pages 49, 50, 51, 52, etc. Perhaps, proper editing, keeping in view of grammatical errors, printing mistakes, construction and arrangement of sentences, before publishing would have lessened such instances.

Nevertheless, the book should be commended for its detailed elaboration of methodology and analytical significance where regional studies on economic demography are concerned.

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Contemporary India: Essays on the Uses of Tradition

Edited by Carla M. Borden,
412 pp., Plates, Figures, Bibliographies, Index.
Oxford University Press, Delhi (1989).

Based on the Smithsonian symposium (June 21-23, 1985), Carla Borden's edited book, *Contemporary India*, is an excellent venture. Having

contributions from both the academic and non-academic worlds, the organizing theme of the book—as also suggested by its sub-title, *Essays on the Uses of Tradition*—is 'rediscovery of the past as adaptation for the future' (p.3). Though the book is divided into five parts, I shall be solely concerned here with its fourth part, 'Transitions and Directions: The Natural World', and a couple of essays from the earlier part, 'Transitions and Directions: The Social World'.

Berreman contributes a succinct introductory paper on Chipko (pp. 239-266). Two of his observations deserve discussion. Concluding a section on the environmental problems of the Himalayas, he writes, '.... Uttarakhand has become a colony within the state and nation that administer it. It is an internal colony, a domestic colony, but a colony nevertheless, exploited by and for outsiders. Put another way, it is a victim of *fourth world colonialism*, the exploitation of an internal minority by the majority population with in a "developing" or "third world" nation' (p.244).

Berreman is right. Environment is not a 'non-political issue': it is entirely political in the sense that its resources are limited, indispensable for basic survival as well as for maintaining luxurious life, and for accomplishing any development plans, and to these resources contesting classes and communities lay claim. The exploitation of Uttarakhand's resources for development elsewhere began during the time of British rule, and continued unabated after the Independence. The exploiters have always been 'outsiders', whether of 'colonial' or 'home' rule. And the charge of decimating forests (and other resources) is levelled against the people who use its resources—very judiciously—mainly for meeting with survival needs, for firewood, building materials, and fodder. As 'law and order' machinery is strengthened to deal with the 'people', who in this thinking are alleged to be the chief destroyers, *en bloc* exploitation of resources is legitimised under the name of 'contractorship' for urban development. Uttarakhand, like any resource-rich zone in the country, has become, what Berreman calls, an 'internal colony', vulnerable to exploitation—regarded

just under the programmes of industrialization and development—by the 'outsiders'.

The other observation of Berreman is about the integration of Chipko. Sex, age and ethnic barriers have been transcended, but like Achilles heel, caste differentiation poses important difficulties for integrating Chipko: 'The disturbing fact remains that the greatest and most important caste barrier in the region—between these powerful high castes and the low, Harijan, or Dom castes (artisan and service castes, including all who elsewhere in India would be called Sudra as well as untouchable)—has not been significantly breached by Chipko' (p. 254). I think the voluntary agencies—the Friends of Trees being an example—working at local levels in the Himalayas, have been able to unite diverse castes and factional groups. And there is a reason for them to come together: although differing in degree, environmental degradation is affecting the high and the low, the poor and the rich, the peasants and the artisans, the landlords and the labourers. In this context, Agarwal's 'Nature and Society in Modernizing India' (pp. 269-283) provides valuable information.

How does one mitigate the crises that ensue from environmental degradation? How does one ensure that we have fresh air to breathe, uncontaminated water to drink, fertile soil to grow our food, and keep a reservoir of resources for our posterity? The environmental problems have to be dealt with at macro-and micro-levels, and a coordination between them is likely to yield encouraging results. In other words, the efforts of a voluntary agency or local movement, like Appiko, are to be supplemented with an execution of environmental plans at the state level. Vohra, in his paper, 'The Greening and Cleaning of India: An Overview of Environmental Challenges and Prospects' (pp. 285-295), states that four objectives must be central to any environmental plan in India: control of industrial pollution, prevention of any further depletion and degradation of 'life-support systems' of soil, water and flora, guaranteeing human settlements, and the protection of wild life (p. 285). He offers

a number of fresh suggestions regarding how the administrative set-up should be revamped for solving ecological problems—the respective responsibilities of central and state governments need to be defined, the 'exact role' of the Department of Environment and its relation with other Departments and Ministries should be charted out. The environment programme, he suggests, should be first of all, implemented in all union territories, as this would be a source of conviction for the states: for each union territory, the environmental plan may be different, depending upon the existing habitat and the history of its exploitation. To quote Vohra, '...the cities of Delhi and Chandigarh could be made models of good sanitation, waste disposal, and pollution control, and the union territories of Pondicherry and the Andaman Islands could be made models of natural resource management and wildlife protection' (p. 293).

Both micro-and macro-level efforts work towards saving the environment from further deterioration, evolving rational policies for environment management and allocation of resources. The micro-level efforts—of which there are at least three thousand formally structured and another three thousand informally organized groups in India—are directed, besides raising people's consciousness of their environment, towards getting them just and honourable right to own, develop, sustain, and use their own habitat. But, these actional plans for sustaining the environment, need to be supported with an ideological revolution that redefines man's relationship with the environment—in this, the subjects of conservation and preservation of nature become extremely important. Ripley, in 'Reflections on Conservation and Preservation in India', writes: '... conservation is a dual subject: conservation both of nature and the environment in which we live, as well as of ethnicity and the environmental associations of those who live on the land' (p. 297-298).

But conservation is a synergistic concept. If the habitat is preserved, only then one hopes for the protection of wild life. The same applies to human diversity, as each socio-cultural system

is a homeostatic arrangement with its environment, its constraints and fluctuations. Modern development is anti-thetical to the enormous socio-cultural diversity on one hand, and that of eco-system, on the other, thus creating a monolithic structure. How can floral and faunal worlds survive when the habitat congenial to them is razed to ground. Here, Lahiri Choudhary's 'The Indian Elephant in a Changing World' (pp. 301-321) becomes relevant. He writes that deforestation has destroyed the compact habitat of the elephants, with the result that their population is dwindling, as well as being left in open habitat, they run berserk, causing heavy damage to human life, crops and property.

For resolving environmental crisis, traditional bases of living need to be fully explored and respected. Both Appadurai ('Transformations in the Culture of Agriculture', pp. 173-186) and Gadgil ('Husbanding India's Natural Resources: The Tradition and the Prospects', pp. 323-332) argue on similar lines, illustrated with examples from their respective field situations. The notion of development has to be defined in moral and ethical terms, curbing the 'gargantuan appetite', to use Agarwal's words (p. 273), that has overtaken us because of a consumeristic pattern of life. Further, Agarwal says that the development process should be modified in a manner 'that will bring it into greater harmony with the needs of the people and with the need to maintain ecological balance, while increasing the productivity of our land, water and forest resources' (p. 270).

A minor protest. In the article on conservation and preservation in India, Ripley has cited Champion (1936) and Champion and Seth (1968), but their reference is not given. Sinha's paper on tribes, about which Singer writes in his Foreword (p. 4), had it been included in the present volume, would have been of especial interest to anthropologists.

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Mangrove Swamps in the Sunderbans— An Ecological Perspective

By K.R. Naskar and D.N. Guha Bakshi
263 pp., *Figures, Tables, Illustrations,*
Bibliography, Index. Naya Prokash, Calcutta (1987)
Rs. 350.00 (Cloth).

The mangrove swamps, more appropriately termed forests, are excellent "reservoirs, refuge, feeding ground and nursery" for a wide array of useful and interesting organisms. These are also the home of human communities which utilise the resources of the saline waters for their bare subsistence under extremely harsh conditions. Unfortunately, these fertile grounds have been traditionally looked upon as 'waste' areas, to be exploited at will and 'reclaimed' on slightest pretext! Conservation of the surviving mangroves calls for concerted research and management so that their riches can be utilised for the good of man without destroying their capacity to renew themselves. The book under review can justifiably be termed as a step in that direction.

The volume, in its eight chapters, offers a fair understanding of the ecology of the Sunderbans, the largest mangrove ecosystem in the Indian subcontinent. Following a rather brief Introduction, in Chapter 2 the rapid evolution of the Ganga delta has been traced to the tectonic, geomorphological, climatic and anthropic factors. Perhaps no more than 6000-7000 years old, these mangroves started attracting various groups of people in the medieval period leading to a gradual encroachment of the dense forests for food and timber.

It is pointed out that since 1901 nearly three-fourth of the mangrove area in the Indian Sunderbans (about 4266.00 sq. km) has been brought under intensive cultivation or human habitation. Several islands are now highly populated and the halophytic mangrove species have practically disappeared from these. In Chapter 3, the authors have tried to indicate the patterns of eco-floral changes that have occurred on many of the islands since the beginning of the twentieth century.

The hallmark of the book is in its extensive treatment of the forest types and floristic composition of the mangrove islands. The distribution and frequency of occurrence of several trees, shrubs, grasses and sedges in different islands are discussed, giving a reasonable idea of what to expect on a particular island and where to look for specific species. Among the trees that have been introduced in the region, *Commersonia equisetifolia*, *Parkinsonia aculeata* and *Prosopis chilensis* have proved highly successful, especially in checking soil erosion. The study has also helped in revealing some distinct patterns of phytosuccession. There are also two useful Tables, one concerning the distribution, frequency and economic utility of the common mangrove species, and the other listing out the relatively less familiar plants of the delta. Among the important but endangered plant species of the Sunderbans are *Heritiera fomes*, *Nipa fruticans*, *Ceriops decandra*, *Rhizophora apiculata*, *R. mucronata* and *Kandelia candel*.

A brief key to the principal angiospermous families, and an equally useful Table enumerating the number of genera/species, habit, indigenous and exotic taxa and category of economic use in each family, forms the beginning of Chapter 4. In this chapter, 126 species belonging to 90 genera and 49 families are described.

In Chapter 5, while the ecological features of the mangrove species are discussed well, the authors have faltered in their description of the botanical characteristics. The treatment is cursory, particularly with respect to the reproductive features. Thus, in describing the interesting phenomenon of viviparous germination, it is stated that the "zygotes develop without any interruption through embryo and able to produce seedlings without intervention of any resting stage" (p. 185). At another place on the same page it is written that "Rhizophoraceae endosperm is less important, while the radicles soon form and come out from the tip of the cotyledons of the fruit apex". Such erroneous statements reflect a lack of understanding of the seed biology. Physiological adaptations have also not

received the attention that these aspects deserved. Another glaring handicap is in the lacklustre approach to microbial and algal flora and to the diversity of animal life.

Chapters 6 and 7 revolve around the utilisation and management of the mangrove forests—their environmental importance and economic worth as sources of food, fodder, fuel, timber and a variety of other products. The authors have not forgotten to mention the contribution of various scientific social and developmental agencies which are working in the region for conservation and improvement in the lot of the local people. Chapter 8, a sort of an appendix, gives some general information about other mangroves in India and the rest of the world.

The book is a result of several years of painstaking research in the difficult terrain of the Sunderbans delta. It not only offers an excellent ecological perspective, but also outlines a conservation-oriented approach to utilisation and management of the mangrove forests. It is recommended as a general reading and reference material to all those who are interested in natural history, floristics, environmental conservation and sustainable utilisation of natural resources.

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Ecology, Ethnology and Nutrition

By S. Patel

138 pp., Figures, Tables, Bibliography, Map,
Index. Mittal Publication, Delhi, 1985

Rs. 90.00 (Cloth).

Nutritional status and health are the areas being given top priority by national as well as international organisations, especially in Third World countries. More meaningful research is needed in the field of nutrition so that adequate attention is paid to nutrition, nutritional status and malnutrition. Patel's effort is to cover the influ-

ence of socio-cultural and ecological factors on nutrition and differences in growth and development due to different levels of nutrition.

The book makes an interesting reading as Patel puts the explanations in clear, simple and vivid way. In the present book two populations have been taken into consideration. They are Tibetan refugees settled in Odisha and Kondhs—a tribal population in Orissa. One fails to understand the relevance of two ethnically, culturally and genetically different populations being discussed alongside.

The book is divided into six chapters. The first chapter deals with a general introduction and effects of malnutrition. It sketches the methodology used for present investigation. Mayo clinic nomograms used by the author is welcome, however, one is at a loss to understand as to why haemophilia—a pure genetic disorder—has been classed with metabolic diseases (p. 13).

Chapter second deals with land and the people. Here the author briefly describes the background of the Tibetan refugees, their life styles, and the reasons that forced them to desert their motherland. The author often confounds the readers by interchangably using the word Lamaism for Buddhism and vice versa. In the second half of this chapter the author gives a preliminary information and primary statistics of the Kondhs of Phulbani district. Since the book is published as late as 1985, I do not see much relevance in figures quoted from Census 1971; perhaps figures from Census 1981 or from a recent survey could have been more appropriate. The author offers the way of life of Kuvi or Kui speaking Kondhs, who are divided into numerous exogamous clans 'Klambhs' and their basic political system, agricultural patterns and food habits, etc.

Diet Survey is the title of third chapter, divided into two sections. Garn has shown that culture is a directing force in recent evolutionary changes of man and it is well known that culture has definite impact on food habits. In this chapter, the author evaluates the nutritional status of both the Kondhs and the Tibetan. Diet survey has been carried out as recommended by Akroyd

and Krishnan (p. 53).

Fourth chapter deals with the work evaluation. The author enlists the factors influencing individual work and group performance. The work output is directly linked to nutritional input, but difficulties in measuring the effect under normal condition comes in the way of accurate assessment. Tables given for energy expenditure, etc., can serve useful purpose for future research. Bio-physical Record forms the fifth chapter of the book. The author starts with the physiology of nutritional intakes. The tables illustrate how the excess and deficiency of dietary constituents affect the health status. Summing up this chapter, he says that of both the groups Tibetans are physically much better than Kondhs. Growth rates, nutritional index and body built index are all higher in Tibetans than Kondhs. Patel advocates that a healthy community is an infrastructure upon which an economically viable society can be formed. At the same time, Garine suggested that man's nutritional behaviour should be studied not only from physiological and psychological points of view, but also from the socio-cultural one (p.109). As such food gathering habits of tribal people are correlated with their health nutritional and total well being, the author rightly observes.

In the last chapter, Patel suggests that knowledge concerning the digestive processes must be taught to backward tribes and advocates that before talking about balanced diet they must clearly understand what it actually means, what is nutrition and what is malnutrition. Need for health centres, effective immunisation, deworming of tribal children is strongly pleaded by the author and he suggests that mobile unit must be put in operation.

Some lacunae in the standard of editing mar the otherwise satisfactory academic status of the work. I think that a tedious part of bringing out a book is proof reading, which seems to have been overlooked. Every page has one or more spelling errors, at some places, the meaning of a sentence becomes confused, or it is difficult to reach it instantaneously, because of careless proof reading for example leaving 'on' room,

'on' in place of 'no.' (p.4); or 'loctation' in place of 'lactation'. Some references given in the text do not figure in bibliography, e.g. Martin and Montagu (p.7); at some places, the year of reference has not been given. For a few sentences, I could not understand what they meant, made a limitation (p. 23) and well catered (p. 19), etc.

Overall Patel's present work is a commendable effort. With a little more labour, it would have been a valuable piece.

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Infant and Childhood Mortality in India

By K. Mahadevan, M.S.R. Murthy, P.R. Reddy,
P.J. Reddy, S. Sivaraju and V. Gowri.
120 pp., Tables, Figures, Illustrations,
Map, Appendix, Bibliography, Index. Mittal
Publications, Delhi (1985) Rs. 90.00 (Cloth).

Death of an infant or child in a family has much greater social, economic and demographic effect than the death of an elder and hence it requires an urgent piece of research. Considerable literature is available on the inextricable behavioural and biological relationship between infant and childhood mortality and fertility, and the present book is a welcome addition to these researches. The data presented here will be important for developing family planning, nutrition, medical and public health programmes (p.1). The book begins with an introductory account on these aspects and how development programmes are modified or nullified when they act as 'causes'. This chapter also includes a brief review of mortality researches in India and the international (especially developing ones) arena.

Here, it should be mentioned that Indian population problems are not uniform in all parts of the country, therefore micro-level research operatives are needed to bring forth a result-oriented and meaningful picture. The second chapter fulfils that purpose. It elaborates the aims and objec-

tives of the survey and the case studies and probes into the cause and effect relationship of infant and childhood mortality with cultural and socio-economic conditions, socialization, demography, community health and nutrition among the Muslims, Harijans and Caste Hindus of Chittoor District, Andhra Pradesh.

The third chapter starts with a routine account of various mortality rates in India, Andhra Pradesh and the populations under study. And it also analyses relationships between the age of mother, the number of live births, birth order and infant and childhood mortality.

Chapter four and five discuss the effect of socio-economic characteristics, housing and environment respectively. Their attempt towards finding solid evidence on which to base an interpretation of mortality differentials that are found between groups defined on the basis of education, economic status, occupation, family structure, type of marriage, type of residence and environmental factors is commendable. The sixth chapter details out the demographic characteristics, like sex ratio, dependency status, etc.

While the seventh chapter deals with the effect of socialization, prelacteal feeds, lactation, initiation of supplementary food, care and affection (bestowed on the child) on the infant and childhood mortality the eighth chapter is a discussion of the morbidity patterns—causes of death, delivery attendants, etc. The ninth chapter explores the possible effect on the same through food choice of the family and nutritional status of the mother.

The regression results given at the end are largely successful in their efforts to locate theoretical pathways by which infant and childhood mortality are affected by various determinants. Mahadevan's generalisation—that infant mortality is caused largely through bio-familial factors and childhood mortality by the familio-environmental factors (p.79, 109)—is based on that theoretical framework. The three case studies of Mrs. Bibi (a Muslim), Mrs. Muni (a Harijan) and Mrs. Lakshmi (a caste Hindu) are quite intriguing, as they bring out the idea that various differences lie basically at the household level.

...not incisive critique as an... though the authors have decided... at the end of the book, ... why the overall qual- ... has been debased by a ... and inevitable characterisa- ... do not find place in ... and the reader would be dis- ... if he wants their detailed account. ... the general account of demographic char- ... (Chapter 6, p. 31), which describes the "people"; should have been placed after the "Methodology" (Chapter ... to make it more appropriate. Besides the ... "demo- graphic and environmental ... on mortality" (p. 23) does not surprise ... discuss the said aspect and one wonders ... is mentioned here at all as there is a ... on "Hous- ing and Environment" ... the same is true for the sub-heading—" ... " (p. 35) which would have been ... if discussed under a ...

In a nutshell, the book is a good survey of methods and case studies and would evoke great interest in discerning researchers, administrators, students in the field of health and population and other social sciences.

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Rural Development in India (Dimensions of Its Planning)

By Ashok Kumar

236pp., Tables, Appendices, Bibliography, Index.
Inter-India Publications, New Delhi (1990).
Rs. 210.00 (Cloth).

This volume is yet another addition to the vast material on rural development—a phrase which has preponderantly occupied the intelligentsia, planners, administrators, politicians and power-brokers of the Third World, the developing and the underdeveloped countries, especially after the Second World War. The developed and advanced countries are not silent, but continue to help these

countries by evolving strategies and sanctioning grants, technique and personnel to maintain their 'big brother attitude'. The reason of this oft-chanted slogan of rural development is well-known—two-third population of the developing world live in rural areas, where population is constantly increasing, thus producing a host of socio-economic problems such as persisting unemployment and under-employment, abject poverty, meagre agricultural output, poor health and sanitation, etc. A myriad of approaches—area-wise, target group-wise, priority basis (agriculture, non-firm, wage or self-employment) and finally integrated approach—have been planned and implemented, but failed to yield the desired results. Why is this happening? The answer lies at the grass-root level itself. In the light of this, the present volume is a commendable addition.

This book is primarily concerned with an evaluation of planned development measures of the Government, especially the impact of Integrated Rural Development Programme (IRDP) in Saran district of Bihar. The book contains seven chapters of 177 pages, out of which the 49 tables cover 72 pages. Though the author claims to have conducted an empirical study beyond mere statistical description (p.7), the book has, as said earlier, 49 tables. The first chapter is a lengthy introduction of the history and strategies of rural development with particular reference to India. Here, the author has also included the latest brain-child of the politicians, the Jawahar Rozgar Yojana, which in fact has no relevance to the present study. Then the author discusses the IRDP in details in the next chapter. In the third chapter the district profile is dealt with.

Saran is one of the most backward districts of Bihar (p.22) and is situated in the recently created Saran division of North Bihar. Having a population of 20,84,322, it is divided into 15 Community Development Blocks (p.76). The mainstay of economy is agriculture. The planned development programmes in the district are implemented through the District Rural Development Agency (DRDA). The Small Farmers Development Agency created in 1974-75 became DRDA in 1980 with an objective of overall

ity of life. How far they have improved their standard of living is also not dealt with in this study. Regarding the sampling of the study area, it would have been scientific to include at least one village from each of the 15 blocks. A few detailed case studies of the beneficiaries would have given some more authenticity to the empirical situation.

Moreover, there are certain confusions in the book. The author says that Bihar has 11.56% people below poverty line (P.2): as it is known, Bihar has a much higher percentage of people below the poverty line. Table 1.1 presents data ranging from 1971 to 1981 in nine South-East Asian countries. Such a wide time span taken for comparison reduce the comparability of variables. Orthographic errors creeping in almost every page reduce the quality of publication.

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Tribal Development in India

by M. Satyanarayana

172 pp., Appendices, Bibliography, Index.
Inter-India Publications, Delhi (1990).
Rs. 155.00 (Cloth).

The blurb on the inner cover of this book describes the author as an assistant librarian, with an M.Sc. degree in anthropology. The present work is presumably anthropological, though it is not clear as to who will be the consumers of this work. Being exceedingly general, the author in this book commits certain common-place errors—for example, on page, 11 he writes, "tribal groups get divided into clans which are exogamous. Each clan has a totem". Every ethnographer knows that clans are not present in all tribes, and totem is not necessary adjunct of clan organization. Similarly, at places, stereotypic presentations abound; for example, he writes, "anthropologically speaking the Gonds residing in Madhya Pradesh are dark in skin colour, having straight coarse; black hair" (p.21). I wonder if biological anthropologists would agree to such a monolithic prescription of the Gonds.

The first part of the book contains brief ethnographic sketches, which, because of their extreme brevity and a hotch-potch of variables considered, is of no theoretical or practical use. The author has not devoted more than a brief paragraph to the Lepchas, and likewise to the sixteen Naga tribes. In subsequent chapters, half-hearted attempt has been made to give an account of tribal problems, tribal movements and recent changes in tribal way of life. In the last chapter, the author delineates the following variables—culture, demography, community, education, health, economic conditions, land alienation, bonded labour, politics and socio-cultural change. No attempt has been made to define them. Under community, he has included various social-structural variables. Socio-cultural change encompasses variables like, Hinduization, status of women, drinking of liquor. He has actually put together brief references to a large number of known authors without making clear as to what they in each instance have really said.

No attempt has been directed towards any descriptive or theoretical integration of the material; it appears to be an extremely hasty and sketchy presentation. There are many errors of grammar and language; for example, "The late marriage is customary among the tribal people, and there are a large number of men and women in every tribe who cannot afford to marry under normal conditions" (p.12). At times, there is a complete lack of punctuation marks. Having been trained in library science, the author could have compiled an excellent collection of secondary materials. But he falls far short of this. Although the book may not be recommended for any specialized reading, its really useful part are the Appendices of census data which might serve a ready reference. The book has appeared under a series of Tribal Studies of India. No information about the editor or editorial board for this series has been given. One wonders how the series is being published?

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State of the World-1988
(A Worldwatch Institute Report on Progress
Toward a Sustainable Society)

Edited by Linda Starke
239 pp., Tables, Figures, Notes
Bibliography, Index, Prentice-Hall
of India, New Delhi (1988) (Cloth).

State of the World-1988 is the fifth annual assessment of the state in which the world finds itself today. Going through these reports, ably and meticulously edited by Linda Starke, one is face-to-face with some inter-related issues. Firstly, the relation between human beings and the natural environment is fast changing; here, a polarity is discernible between the attitudes people hold for natural resources. Affluent classes, especially in the developing world, are briskly adopting a consumeristic stance unawarely of the damage that such a life style is causing with every fleeting moment; and contrasted to such a consumerism, is the consolidation of resource-saving, nature-saving movements, which conscientiously are raising peoples' awareness of their environment, along with devising alternative life styles more congruent with indigenous resources and techniques.

In spite of the relentless and dedicated efforts of such voluntary groups, the ecological picture of the world is murky. Do we know:

- The earth's forests are disappearing, its deserts expanding, and its soils eroding (p.3).
- Thousands of floral and faunal species become extinct every year, even before they are included in the taxonomy (p.3).
- If forests in developing world are shrinking because of a massive felling of trees and encroachment of human habitation on them, the forests in developed world are being damaged by air pollution and acid rain (p. 14-15).
- Rising atmospheric concentrations of carbon dioxide and emissions of chlorofluorocarbons, nitrous oxide and methane, are steadily warming our planet (p. 25).

- By 1987, the ozone 'hole' was twice the size of the continental United States (p.4).
- As a result of burning the fossil fuels and pollution crossing unwarranted limit, massive toll is mounting on human, animal and aquatic life (p. 12-13).
- Half of all developing countries rely on imported oil for more than 75 per cent of their commercial energy needs, and the impact of major oil price shift is being felt by everyone (p.63).
- Despite lower fertility levels for the world as a whole, there was an increase in population by 83 million people in 1987, surpassing a total of 5 billion (p. 151).

And facts recording ecological degradation are myriad.

Today they are not confined to one-half of the world; in the world system, where developed and developing countries are inextricably linked, where a vicious chain is set up between ecological crises, the politics of loan, and the foreign relations couched in asymmetry, ecological disaster in one will affect the other's survival. Is not it known: felling of trees in Nepal aggravates flooding in Bangladesh, or manufacturing chlorofluorocarbon in Japan can escalate skin cancer rates in Argentina (p.187). And hence, all these ecological problems need concerted efforts at the international level, transcending differences of ideology, culture and relative affluence. Lester Brown and Christopher Flavin write (p. 18):

The mounting, inter-related threats that the world now faces can be overcome only with a new commitment to international cooperation. As the Commission (Report of the World Commission on Environment and Development released in April 1987) put it, we need to move from one earth to one world. Rich and poor alike have a great deal to gain from cooperation and everything to lose if we continue down separate, destructive paths.

A paradigmatic shift from *one earth to one world* is central for saving the planet: we have to devise policies that are not paralyzed either by the enormous socio-cultural diversity the

world has, or by the ideological bloc to which a country belongs to. Environmental issues are common to all: with every chipping of a flake, the natural balance is temporarily disturbed. Obviously, therefore, with excessive human habitation, increasing population challenging the carrying capacity of the planet, unrelaxed burning of fossil fuels to maintain a particular style of life and consumer patterns, the burden on earth will cumulate, multiplying ponderously. Earth's burden is our collective concern; therefore 'pragmatism' should score over 'ideology' (p.19) and 'cooperation on environmental issues' should cut across 'political tensions'.

Here, the 'superpowers' and the 'emerging centres of power' are expected to play a prime role. To salvage the world from a parlous state, the tensions between all of them are to be eased. More important, the defense budgets should be drastically cut. In this context, Mrs. Indira Gandhi, the late Prime Minister of India, once said:

In all countries the voices for Peace are now more numerous and louder. They want to check the arms race and advocate greater cooperation among nations to reduce economic disparity. The environment movement will gain by allying itself with these related causes.

Chandler writes (p. 144) that increases in military expenditures are already burdening the United States economy; if this is happening in the developed world, one may well imagine the state of the developing countries, which, in an environ of ominous war-fears and the capitalising need to strengthen external security and defense, are perforce spending their money and precious resources for arming themselves. When more than half of their resources are spent in requiring arms and maintaining defence forces, they are not virtually left with enough to feed their people or secure their future. The initiative of the 'superpowers', who happen to be major suppliers of arms, is crucial in this regard. Brown

and Flavin (p. 19) appreciate the 'emergence of the Soviet Union as a full participant in studying and resolving global problems'.

The eco-generation programme has to be holistic: energy levels need to be sustained, the earth has to be reforested, species should be saved from mass extinction, pollutants are to be checked from entering life-supporting systems, population control is to be well assisted with improved health care facilities and the programmes of environmental education and 'respect for resources' need to be inculcated. More attention is required to be paid to renewable energy: 'Wind and sunlight are not always available when needed, but if their energy could be stored for later use, their intermittent nature would pose less of a problem' (p.82). Earth's ozone layer is to be protected and the recent Montreal protocol to restrict the use of chlorofluorocarbons is a great step in this direction (p. 171). Effective birth-control technology, incentives and disincentives, and schooling facilities to girls, are essential ingredients of a family planning programme. The Chinese and South Korean examples need to be studied comprehensively: South Korea gives free medical care and educational allowance to all families having no more than two children in which one parent agrees to be sterilized, and in Siachuan province of China, monthly payments are made to couples who limit their family to one child (p. 178).

A dismal picture of the world that emerges from various futuristic studies—by 2010 A.D., there will not be any oil left, or by the close of this century 50 per cent of Delhi population is likely to have cancer and 20 per cent of its newborn babies are likely to be mentally retarded—can only be nullified with holistic plans implemented at national as well as international level; this is the message of 1988 Report.

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