## *Illustrated Atlas of the Himalaya* by David Zurick and Julsun Pacheco, with Basanta Shrestha and Birendra Bajracharya. Lexington: University Press of Kentucky. 2006. 211 p., photographs, maps. ISBN 0813123887

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David Zurick and Julsun Pacheco, with Basanta Shrestha and Birendra Bajracharya offer us a beautiful Atlas of the Himalaya that elegantly combines thirty-odd tables and charts, almost 300 maps and photographs, along with analysis and comments. The authors provide a panoramic overview of the Himalaya divided into five parts: 1) The regional setting; 2) The natural environment; 3) Society; 4) Resources and conservation; 5) Exploration and travel.

After fifty years of in-depth fieldwork and research in different places over the chain, following its opening to foreigners, many of us now feel the necessity to work on the scale of the Himalava as a whole and to compare data. The work done by the authors of this book, which is indeed substantial, is one of the first attempts at such a synoptic perspective. It is worth pointing out that we can at last access reliable data which were, up to now, scattered among different books and papers. For this reason, the volume will be extremely useful for those working in the Himalava or teaching about particular aspects of the range. Much of the information is original, and was recorded in the field by the authors, while other material is obtained from compiling and cross-checking a wide range of data from different sources: public administration records, atlases of the Himalavan countries etc. The many high-quality maps of the Himalaya, combined with an interesting text on its physical and human features, offer the reader a good idea of environmental problems in the region. The authors stressed the important fact that Himalayan peasants, thanks to their knowledge of their milieu, are not responsible for these problems but, on the contrary, contribute to solving them. They also emphasize issues related to environmental protection that are not often brought to the fore, notably crop damage due to wildlife and the necessity for proper participatory resource management.

Nevertheless, this book is not exempt from criticism. In a way, it is a complement to and at the same time a summary of D. Zurick and P. P. Karan's earlier *Himalaya*. *Life on the Edge of the World* (1999), in which the

maps were already prepared by Y. Pacheco.<sup>185</sup> Although this book is cited in the bibliography of the Atlas, it is surprisingly absent from the main presentation. However, in some respects, some of the comments and maps were better in the 1999 book.

Given the fact that this Atlas received scientific backing from prestigious institutions such as the American Geographical Society, Eastern Kentucky University and the National Science Foundation, and that it was produced by a geographer and a cartographer, we might have expected greater precision. In fact, some of the maps as well as parts of the text contain confusing mistakes, omissions and oversights, suggesting that it was inadequately checked before publication.

First, the fact that many illustrations are not dated means that they cannot be used by other researchers for comparative purposes. This is the case of several maps (such as the town maps) and all the photographs. Likewise, the captions to the photographs are rather insubstantial, lacking the detail that would have added meaning to their evident aesthetic value.

Another point regarding this Atlas is that it only reflects the fieldwork (albeit very extensive) carried out by the authors, and therefore presents a partial view of the Himalaya. Most of the photographs are from areas of Tibetan culture and thus illustrate a Buddhist world, as if Buddhism was predominant in the Himalaya. The book's 1999 predecessor offers a more accurate picture of the diversity of the Himalaya: for example, there is a photograph of a Hindu temple in Kedarnath, whereas in the Atlas, by contrast, Tibetan flags are to be found on practically every page. Between the high summits, the high dry valleys and the plain, and except for a few towns, we are offered hardly any idea of the landscape of the middle and low mountains or hills.

Moreover, the eastern part of the chain is completely neglected except for Bhutan, and this has repercussions at several levels. The authors have obviously not been to Arunachal or to North-east India; while this is understandable since the area was only recently opened to foreigners, they do not even use studies published on this area, and present it as a totally unknown region. Published information on Arunachal has in fact been available for several decades, most notably perhaps an important book from the G. B. Pant Institute<sup>186</sup> that appeared in 2002. There are photographs neither of the *jhum* (slash and burn shifting cultivation) nor of the *mithun*, the semi-domestic animal present throughout the eastern

<sup>&</sup>lt;sup>185</sup> Zurick D. & Karan P. P. (maps by Y. Pacheco), 1999, *Himalaya. Life on the Edge of the World*, Baltimore and London, The Johns Hopkins University Press.

<sup>&</sup>lt;sup>186</sup> Sundriyal R. C., Trilochan Singh, Sinha G. N., 2002, *Arunachal Pradesh. Environmental Planning and Sustainable Development. Opportunities and Challenges.* G. B. Pant Institute of Himalayan Environment & Development, Almora, India.

part of the chain. The only two photographs from this area (both by P.P. Karan) are related to the Apatanis, who constitute one of the smallest groups in Arunachal. These omissions would not pose a problem if the Atlas were not entitled *Illustrated Atlas of the Himalaya*.

A few more examples of the work's shortcomings may be cited.

- The first part of the book presents "The Regional Setting". On several occasions the authors mention Nanga Parbat and Namche Barwa as the northwestern and northeastern limits of the Himalava. However, up to page 70 (where it is mentioned on a map of the "Major Himalayan Trade Routes"), the location of Namche Barwa remains a mystery, and is given only once in the entire book despite its importance. The mountain does not even appear in the map index. The limits of the Himalaya are a subject of debate. There is general agreement that these are Nanga Parbat and Namche Barwa, which are located where two curves demarcate the range from the north-south oriented ranges of Pakistan/Afghanistan on the one hand, and from the Chinese and Burmese ranges on the other. However, the western and eastern frontiers are not perpendicular to these summits; the angle is wider and, when the authors consider that the "Brahmaputra" is the eastern limit of the chain, they do not take into account part of Arunachal Pradesh: the Mishmi hills, the Dibang and the Lohit valley, which belong to the Himalava. I would say that Lohit corresponds more to the eastern limit of the Himalava. Besides, the authors are not consistent since they include the whole of Arunachal State in their statistical data of the Himalaya. Lastly, a few words should be said about the name of the river that is called Tsangpo in Tibet and Brahmaputra in Assam. Where this river passes through Arunachal Pradesh, the authors refer to it as the Brahmaputra, whereas its proper designation in the Himalayan range should be the Siang. The published map of Arunachal gives this name, and not Brahmaputra. This could at least have been mentioned, since the river Siang gives its name to the two districts of Arunachal through which it flows: West Siang and East Siang. Furthermore, it is the name Siang that is used by the people of this area in their myths, tales and history.

Still in the first part of the book, in the fact files, Himachal Pradesh, Nepal and Bhutan are said to be characterised by a temperate to alpine monsoon climate, but neither Uttaranchal, Sikkim nor Arunachal Pradesh are credited with a monsoon climate. Why?

On page 28 we are told: "The middle mountains zone descends in altitude until it forms a line of outer foothills, known in India as the Churia Hills, in Nepal as the Siwaliks": in fact it is the other way around.

- In part two, "The Natural Environment", the geology of the range is detailed and accurate. But in the climatic part, page 55, the table related to temperature and precipitation for several stations in Nepal is not very helpful since the altitude of the stations is not given. The amount of rainfall given for Dailekh is surprising, and does not correspond to the mean values from previous years. Besides, the figure is in contradiction with the rainfall maps presented in the book. More importantly, this table leads the reader to imagine that far western Nepal would be rainier than eastern Nepal, which is not the case.

As for Ĉherrapunji (quoted on page 52), it is not located in Assam but in Meghalaya.

On page 57, the air pressure is not given in millibars as written in the caption, but in inches of mercury which is not at all the same (29.92 inches of mercury being equivalent to 1,013.25 millibars).

Nevertheless, this part offers a fine summary, and the ICIMOD map of Annual Precipitation in the Himalaya, on page 59, will be very useful for those who want to present the general features of the chain. It is a clear summary and illustrates very skilfully the climatic differences from the western to the eastern part of the range. Unfortunately, the lack of dates related to the mean rainfall values used to draw this map diminish its usefulness for scholars.

- The third part, devoted to "Society", contains numerous mistakes.

On page 70, east and west are inverted: "The Tibetan empire reached its zenith during this period, extending as far east as Turkestan" (sic!).

Some of the mistakes are related to the emphasis laid on the Tibetan world, already revealed by the photographs. Thus, on page 73: "One of the problems faced by modern Himalayan societies is the impact of a burgeoning population. In the past, human numbers were kept in check by high mortality rates and by cultural practices such as polyandry, that acted to limit family size". Now it is obvious that polyandry only concerns a handful of people in the Tibetan cultural area of the Himalaya as well as a few Hindu communities in Himachal Pradesh and Uttar Pradesh. This point was well explained in the 1999 book but it no longer features, here, giving a distorted picture of the situation.<sup>187</sup> On the same page, the map of the population density in the Himalaya shows high density in Ladakh in

<sup>&</sup>lt;sup>187</sup> "In some cases, cultural factors also kept the Himalayan population from growing very fast. The practice of polyandry among the Buddhist highlanders, whereby a woman had several husbands — oftentimes brothers — limited household expansion and kept intact the land a family owned. But those practices were restricted to the Tibetan cultures living north of the Great Himalaya." (Zurick & Karan, 1999, p 136)

1961 (1.5 to 3 persons per hectare)—the same as in the Nepalese Teraï, which is very surprising. One may wonder where these data come from.

Other mistakes related to the eastern part of the chain can be found on the map illustrating the location of different groups (page 75): the Apatanis and the Monpas are wrongly located.

Last but not least, the legend of the map related to ethnic groups in Nepal (page 76) shows a strong Newar presence in north-west Nepal, instead of a strong Bhotia one!

We should add that many legends have not been adapted to the scale of the maps and are not readable. For example, the details of the legend symbolised by different colours cannot be distinguished on the map of land-use on page 102, of soils on page 103 and on the map of cropland distribution, page 104. On this last map, the legend of the "Cereal-based irrigated cropland" has obviously been inverted with the "Dryland Crop". Moreover, there seems to be little point in distinguishing between "monocrop" and "dryland crop" or "cereal based irrigated cropland".

In this part, it is regrettable that the authors have ignored the studies related to tree plantations in fields to replace forest resources, a practice that challenges the univocal point of view related to deforestation.

- Part five evokes different kinds of "Explorations and Travels" in the course of the centuries: from pilgrimages and sacred explorations, traderoutes, journeys made by early foreign explorers — thus telling the story of how the chain was discovered — up to modern explorers, trekkers and mountaineers.. This part is well documented and illustrated. We will only note that the map of the Early Explorers (page 160) suggests that Kishen Singh crossed Assam and Arunachal, when in actual fact it was Kintup who did this. This is attested in the text and on another map on page 167 Kishen Singh route took him further north.

To conclude, it seems that many of the mistakes stem from documents being poorly adapted from others, and that the work is not quite complete since it comes across as not having been thoroughly checked or corrected. This may appear to be a very severe review, but aside from the mistakes listed above, whether due to the publisher or to the authors, this book is a valuable contribution to our understanding of the region's complexity, and particular note should be taken of the effort put into compiling such a useful overview. The authors have done a superb job of assembling a good mixture of data. The reader cannot fail to appreciate the beauty of the maps and pictures, as well as the insights provided by this volume. The book is unquestionably helpful, but needs to be used with caution. A future edition in which the errors were corrected would make for a firstrate reference book.