

Deltas and Humans: A Long Relationship Now Threatened by Global Change

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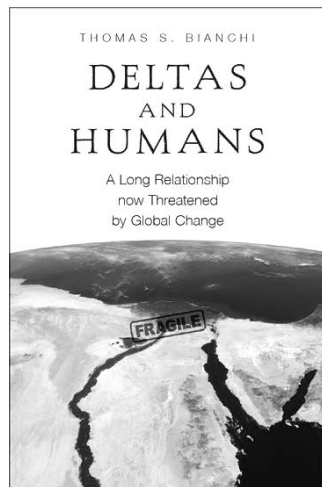
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Deltas and Humans: A Long Relationship Now Threatened by Global Change. Bianchi, T.S., 2016. Oxford: Oxford University Press, 171p. ISBN: 9780199764174, \$USD 59.95.



Although a small book, this volume is packed with much useful information and insight. It deals with human relationships with deltas all over the world through time (beginning with Old World civilizations). The topic is of great relevance to coastal specialists from various points of view. A purview of the contents is indicated by the seven chapters as follows: (1) Early Human Civilizations and River Deltas, (2) The Ever-Changing Delta, (3) The Holocene and Global Climate Change, (4) Changes in the Hinterland and Floodplain, (5) Effects of Sea-Level Rise and Subsidence on Deltas, (6) Saving the Deltas: The Human-Delta Relationship, and (7) Exploring a Sustainable View. That is a pretty broad spectrum of topics, each of which receives some degree of attention, but the in-depth perceptions vary from topic to topic, as might be expected in a cursory review of this sort.

For those working in coastal disciplines, much of the information is already appreciated or intuitive. But for those specialists in related disciplines and for those whose interests are broad ranging, the book offers insight that is not easily obtainable elsewhere in such a concise manner.

One of the main take away concepts is that deltas, like coasts in general, are ever changing, and what happens to them depends in profound ways on human activities along the shore, in the deltaic environment *per se*, and in the hinterland. The

main problem with deltas is that they are attractive to humans for many reasons, mainly because they offer so many advantages for commercial and artisan fisheries, commercial and industrial site development, agriculture, forestry, surface and ground water supply, shipping, petroleum industries, city and urban development, and so on. The list is almost inexhaustible, and so is the abuse that these fragile environments suffer at the hands of humans. Thomas Bianchi clearly lays out the dangers and damages to deltas that come with human use.

The general story of human interactions is not a pretty one, as it features environmental degradation on a grand scale. Even though the book emphasizes adverse impacts of postulated sea-level rise on deltas, the main threat or hazard to deltaic environments stems from too many people. Sequential occupancy and intensive use of these environments seem more of a problem to the reviewer than postulated sea-level rise scenarios. Inland activities associated with stopping sediment delivery to the coast, such as dam construction, also contribute to the obfuscation of natural deltaic cycles that are so necessary for the survival of these fragile environments. These comments are but a few examples of the many topics that are touched upon.

Each chapter is followed by references of further reading or research. The inclusion of references contributes to the veracity of the book and provides a base for more intensive investigation. The subject index is detailed and quite useful. I mention this because it is somewhat more detailed than one would expect in a book of this sort. Kudos to the author for making the effort to provide easy access to all parts of the book. This hardcover book is well prepared and contains an attractive jacket that shows a satellite view of the Nile delta with a hand stamp that says "FRAGILE." The point is well taken and bespeaks of what is to come as seen from the perspective of one who understands how natural deltaic process work and how they are impacted by human activities. Whether one agrees with the author that deltas are threatened by global change or human overuse is up to the reader to discern. Whatever the case, the book is recommended as a worthwhile excursion into the manifold vagaries of what portends for the world's deltas in the future. Bianchi outlines possibilities in an able manner, and those interested in the subject are encouraged to buy the book.

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