Record Nr. UNINA9910145292503321 Large rivers [[electronic resource]]: geomorphology and management / **Titolo** / edited by Avijit Gupta Pubbl/distr/stampa Chichester, England; ; Hoboken, NJ, : John Wiley, c2007 **ISBN** 1-281-30979-6 9786611309794 0-470-72372-6 0-470-72371-8 Descrizione fisica 1 online resource (730 p.) Altri autori (Persone) GuptaAvijit Disciplina 551.48/3 551.483 Soggetti **Environmental management** Geomorphology Rivers Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Large Rivers: Geomorphology and Management; Contents; Preface; List of Contributors; 1: Introduction; 1.1 A BOOK ON LARGE RIVERS; 1.2 WHAT IS A LARGE RIVER?; 1.3 THE BOOK AND ITS CONTENT; REFERENCES: PART I: BACKGROUND: 2: Geology of Large River Systems: 2.1 INTRODUCTION; 2.2 TECTONIC SETTINGS OF LARGE RIVER SYSTEMS; 2.2.1 Rivers in Continental Collision Belts; 2.2.2 Rivers in Rift Settings; 2.2.3 Rivers in Cratonic Settings; 2.3 COMPLEXITY OF DRAINAGE TYPES; 2.4 LARGE RIVERS - CLIMATIC SETTINGS AND CLIMATIC VARIABILITY; 2.5 MODERN LARGE RIVERS - HYDROLOGY AND SEDIMENT DISPERSAL 2.6 VARIABILITY IN THE ALLUVIAL ARCHITECTURE OF LARGE RIVER SYSTEMS2.6.1 Longitudinal Trunk Systems; 2.6.2 Radial Fans; 2.6.3 Fan-Interfan Setting; 2.6.4 Interfluves; 2.7 GROWTH AND DEVELOPMENT OF LARGE RIVER SYSTEMS: 2.8 DURATION OF LARGE RIVER SYSTEMS AND THE ROCK RECORD; 2.9 SEA LEVEL, TECTONIC AND CLIMATIC CONTROLS ON THE LARGE RIVER SYSTEMS; 2.10

CONCLUDING REMARKS; ACKNOWLEDGEMENTS; REFERENCES; 3:

Hydrology and Discharge: 3.1 HYDROLOGY OF LARGE RIVER BASINS: 3.2 LARGE RIVERS OF THE EQUATORIAL REGIONS: 3.2.1 Amazon River: 3.2.2 Congo River; 3.2.3 Zambezi River 3.3 LARGE RIVERS OF THE DRYLANDS3.3.1 Nile River; 3.3.2 Indus River; 3.3.3 Colorado River; 3.3.4 Murray-Darling River; 3.4 RIVERS OF THE MID-LATITUDES; 3.4.1 Mississippi River; 3.4.2 Danube River; 3.5 RIVERS DRAINING SOUTH FROM THE HIMALAYA; 3.5.1 Ganga River: 3.5.2 Brahmaputra River; 3.6 RIVERS OF EAST AND SOUTHEAST ASIA; 3.6.1 Huanghe: 3.6.2 Changjiang: 3.6.3 Mekong River: 3.7 HIGH-LATITUDE RIVERS; 3.7.1 Ob, Yenisey and Lena Rivers; 3.7.2 Mackenzie and Yukon Rivers; 3.8 SUMMARY; ACKNOWLEDGEMENTS; REFERENCES 4: Transcontinental Moving and Storage: the Orinoco and Amazon Rivers Transfer the Andes to the Atlantic*4.1 INTRODUCTION: 4.2 ANDEAN SOURCES AND ALLUVIAL STORAGE; 4.3 ORINOCO; 4.4 AMAZON: 4.4.1 Setting: 4.4.2 Storage and Remobilization of Floodplain Sediment; 4.4.3 Sediment Storage in the Lowermost Amazon Valley; 4.5 THE AMAZON GOES TO SEA; 4.6 CODA; ACKNOWLEDGEMENTS; REFERENCES: 5: Greatest Floods and Largest Rivers: 5.1 INTRODUCTION: 5.2 HISTORICAL BACKGROUND: 5.3 TERRESTRIAL GLACIAL MEGAFLOODS; 5.3.1 Cordilleran Ice Sheet; 5.3.2 Laurentide Ice Sheet: 5.3.3 Eurasia Ice Sheets 5.3.4 Central Asian Mountains 5.4 EXTRATERRESTRIAL MEGAFLOODS AND MEGARIVERS; 5.5 CONCLUSION; REFERENCES; 6: Classification, Architecture, and Evolution of Large-river Deltas; 6.1 INTRODUCTION; 6.2 DEFINITION OF A DELTA AND DELTA COMPONENTS: 6.3 CLASSIFICATION OF DELTAS; 6.4 MORPHOLOGY AND SEDIMENT; 6.4.1 Morphology; 6.4.2 Sediments and Sediment Facies; 6.4.3 Sediment Accumulation Rates; 6.5 DELTA EVOLUTION; 6.5.1 Response to Holocene Sea-Level Change; 6.5.2 Changes in the Course of a River Channel and of its Distributaries; 6.5.3 Coastal Environment Change Related to Delta Progradation 6.6 PROBLEMS OF SEDIMENT SUPPLY

Sommario/riassunto

Large Rivers: Geomorphology and Management explores an important topic in geomorphology and sedimentology: the form and function of major rivers. Our knowledge of the big rivers of the world is limited. It is currently difficult to recognise large rivers of the past from relict sedimentary deposits or to structure management policies for long international rivers. This exciting book brings together a set of papers on large rivers of the world, as a unique introduction to a demanding subject. The book includes thirty chapters and is organised into three sections. The first part is on