the last two million years

The Last Two Million Years: A Journey Through Earth's Transformative Epoch

the last two million years represent an extraordinary chapter in Earth’s history, marked by dramatic environmental shifts, evolutionary milestones, and the rise of human civilization. This vast stretch of time, often referred to as the Quaternary period, has seen glaciers advance and retreat, species adapt or vanish, and our ancestors evolve from primitive hominins into the complex societies we know today. Exploring this epoch provides fascinating insights into how our planet’s climate, landscapes, and life forms have intertwined to shape the world we inhabit.

Understanding the Geological Context of the Last Two Million Years

The last two million years fall within the Quaternary period, which is subdivided into the Pleistocene and Holocene epochs. The Pleistocene, lasting roughly from 2.58 million years ago to about 11,700 years ago, was characterized by repeated glaciations — massive ice sheets expanding across continents. The Holocene, which continues to the present day, marks a relatively warmer and stable climate phase that allowed human civilizations to flourish.

The Ice Age Cycles and Climate Fluctuations

One of the defining features of the last two million years has been the alternating glacial (ice age) and interglacial (warmer) periods. These cycles were driven by subtle changes in Earth’s orbit and tilt, known as Milankovitch cycles, which influenced solar radiation distribution. During glacial periods, ice sheets covered large parts of North America, Europe, and Asia, causing sea levels to drop and ecosystems to shift dramatically.

These climatic oscillations deeply influenced the evolution of species, migration patterns, and even the development of early human cultures. For instance, the fluctuating environment pressured animals and plants to adapt, migrate, or face extinction, fostering biodiversity changes that still echo today.

Significance of Ice Age Megafauna

Throughout the Pleistocene, the Earth was home to a remarkable array of large mammals, often called megafauna. Creatures like woolly mammoths, saber-

toothed cats, giant ground sloths, and mastodons roamed the landscape. These animals adapted to cold climates and played crucial roles in their ecosystems.

However, many megafauna species went extinct towards the end of the last Ice Age, around 11,000 years ago, possibly due to a combination of rapid climate warming and human hunting pressures. Their disappearance marked a significant ecological shift and opened niches for other species, including humans, to expand.

Human Evolution and Cultural Development in the Last Two Million Years

The last two million years also encompass the fascinating story of human evolution. From early hominins to modern Homo sapiens, this period charts a remarkable journey of adaptation, innovation, and survival.

The Emergence of Early Hominins

Around 2 million years ago, early members of the genus Homo began to appear in Africa. Homo habilis, often considered one of the first toolmakers, marks the beginning of technological advancement in human history. These early humans relied on simple stone tools to hunt, gather, and process food, setting the stage for more complex behaviors.

Over time, species like Homo erectus evolved, exhibiting greater brain capacity, improved tool use, and the ability to control fire. Homo erectus was the first hominin to venture out of Africa, spreading into Asia and Europe, showcasing the adaptability of our ancestors.

The Rise of Homo sapiens and Cultural Innovation

Modern humans, Homo sapiens, emerged approximately 300,000 years ago in Africa. Their sophisticated cognitive abilities led to advanced toolmaking, symbolic art, and complex social structures. Around 60,000 years ago, Homo sapiens began migrating out of Africa, eventually populating most parts of the world.

This migration coincided with the extinction of other hominin species like Neanderthals and Denisovans, with evidence suggesting some interbreeding occurred. The last two million years witnessed the gradual development of language, agriculture, and technology – foundational pillars of modern society.

Impact of Climate on Human Evolution

Fluctuating climates during the Pleistocene imposed significant challenges on early humans. Changing environments demanded adaptability in diet, shelter, and social organization. For example, glacial periods likely pushed human groups to innovate survival strategies, including clothing, fire use, and cooperative hunting.

These pressures arguably accelerated brain development and cultural complexity, underscoring how intimately connected climate and human evolution have been throughout this period.

Environmental and Ecological Transformations

Beyond human evolution, the last two million years witnessed profound transformations in Earth’s ecosystems and habitats.

Vegetation Shifts and Biomes

Glacial cycles caused repetitive expansions and contractions of forests, grasslands, and deserts. During colder glacial periods, tundra and steppe environments dominated large areas, while warmer interglacials allowed forests to reclaim land. These shifts affected animal populations and migration routes, influencing biodiversity patterns.

For example, the spread of grasslands during certain periods supported large herbivores and their predators, shaping the food web. Understanding these biome changes helps scientists reconstruct past climates and predict future ecological responses.

Sea Level Changes and Geological Impact

Sea levels fluctuated dramatically during the last two million years, sometimes falling by over 100 meters during glacial maxima when vast volumes of water were trapped in ice sheets. This exposed land bridges, such as the Bering Land Bridge between Siberia and Alaska, facilitating species and human migrations.

Conversely, rising sea levels during interglacial periods submerged coastal areas, reshaping habitats and human settlements. These geological dynamics highlight the powerful influence of climate on the planet’s surface and life distribution.

Modern Implications of the Last Two Million Years

Studying the last two million years is not just an academic exercise; it offers valuable lessons for today’s world.

Climate Change Lessons

By examining past climate cycles, scientists gain insights into how natural forces drive environmental change. This knowledge is crucial as we face unprecedented human-induced global warming. Understanding previous glacial and interglacial patterns helps contextualize current climate trends and predict potential future scenarios.

Conservation and Biodiversity

The extinction of megafauna and other species during the Pleistocene underscores the fragility of ecosystems when faced with rapid change. Modern conservation efforts can benefit from understanding these past events to protect endangered species and maintain ecological balance.

Human Adaptability and Resilience

The evolutionary journey of humans through the last two million years reflects incredible adaptability. From surviving ice ages to developing agriculture, our species has continually responded to environmental challenges. This resilience offers hope and guidance as we navigate the complexities of modern life and global environmental shifts.

Exploring the last two million years invites us to appreciate the dynamic history of Earth and humanity. It reveals a story of constant change, survival, and innovation that continues to unfold, reminding us of our deep connection to the planet’s past and the responsibility we hold for its future.

Frequently Asked Questions

What significant evolutionary events occurred in the last two million years?

In the last two million years, significant evolutionary events include the

emergence and evolution of the genus Homo, including species such as Homo habilis, Homo erectus, and eventually Homo sapiens. This period also saw advances in tool use, brain size increase, and the development of complex social structures.

How did climate change impact life on Earth during the last two million years?

The last two million years were marked by repeated glacial and interglacial cycles, causing major climate fluctuations. These changes influenced migration patterns, extinction events, and the evolution of many species, including humans adapting to diverse environments.

What is the significance of the Pleistocene epoch in the last two million years?

The Pleistocene epoch, spanning from about 2.58 million to 11,700 years ago, is significant for its ice ages, the evolution of modern humans, and the extinction of many megafauna. It set the stage for the development of human civilizations in the subsequent Holocene epoch.

How did human ancestors survive and adapt during the last two million years?

Human ancestors survived by developing advanced tools, controlling fire, creating social groups, and adapting their diets and behaviors to changing environments. These adaptations allowed them to spread across continents and survive various climatic challenges.

What major extinctions happened in the last two million years?

Several major extinctions occurred, particularly of large mammals known as megafauna, such as mammoths, saber-toothed cats, and giant ground sloths. These extinctions are often linked to climate change and human activities such as hunting.

How has technology evolved in the last two million years?

Technology evolved from simple stone tools used by early hominins to more sophisticated Acheulean hand axes, eventually leading to advanced tools, weapons, and cultural innovations like art and agriculture developed by Homo sapiens.

What role did migration play in human history over the last two million years?

Migration was crucial for human survival and evolution, enabling early humans to spread from Africa to Asia, Europe, and eventually the Americas and Oceania. Migration facilitated gene flow, cultural exchange, and adaptation to diverse environments.

How did the last two million years shape modern human genetics?

The last two million years saw genetic diversification due to geographic isolation, natural selection, and interbreeding with other hominin species like Neanderthals and Denisovans, resulting in the genetic makeup present in modern humans today.

What archaeological discoveries have enhanced our understanding of the last two million years?

Discoveries such as fossilized hominin remains, ancient tools, cave art, and evidence of early fire use have greatly enhanced our understanding of human evolution, behavior, and environmental adaptation during the last two million years.

Additional Resources

The Last Two Million Years: A Deep Dive into Earth’s Pivotal Epoch

the last two million years represent one of the most dynamic and transformative periods in Earth’s geological and biological history. This timeframe, spanning from the early Pleistocene epoch to the present Holocene, has been marked by dramatic climatic fluctuations, evolutionary milestones, and significant environmental changes that continue to shape the planet today. Understanding this extensive period is crucial for scientists across disciplines, from paleontology and archaeology to climatology and geology, as it provides insights into the factors that have influenced human evolution and the natural world.

Climatic Oscillations and Glacial Cycles

One of the defining characteristics of the last two million years is the recurrent glacial and interglacial cycles. These cycles, driven largely by variations in Earth’s orbit known as Milankovitch cycles, have resulted in alternating periods of extensive ice sheet expansion and retreat. During glacial maxima, vast portions of North America, Europe, and Asia were covered

by thick ice sheets, profoundly altering global sea levels, ecosystems, and atmospheric conditions.

Impact on Global Sea Levels and Geography

These glacial cycles caused significant fluctuations in sea levels, sometimes lowering them by as much as 120 meters. This exposed land bridges such as the Bering Land Bridge, facilitating migrations of species, including early humans, between continents. The shifting geography had a direct impact on biodiversity and evolutionary pathways, isolating populations and promoting speciation.

Climatic Variability and Ecosystem Changes

The alternating cold and warm periods created a patchwork of habitats. Tundra and steppe environments expanded during colder intervals, while forests and grasslands thrived during warmer interglacials. This variability acted as a selective pressure, driving adaptations in flora and fauna. Many species that existed at the onset of this period have since become extinct or evolved into modern forms.

Evolutionary Milestones in the Last Two Million Years

This epoch is particularly significant in the context of human evolution. The genus Homo emerged and diversified during this time, with key species such as Homo habilis, Homo erectus, and eventually Homo sapiens appearing and spreading across the globe.

Hominin Development and Migration

Fossil records indicate that early hominins developed increasingly sophisticated tools and social behaviors as they adapted to changing environments. The last two million years also saw the initial migrations of human ancestors out of Africa, driven in part by climatic pressures and the search for new resources. These migrations laid the foundation for the global distribution of modern humans.

Technological and Cultural Advances

Alongside biological evolution, there was significant progress in

technological innovation. Stone tool industries evolved from simple Oldowan implements to more complex Acheulean handaxes and eventually to diverse toolkits associated with Neanderthals and early Homo sapiens. These advancements reflect cognitive developments and the ability to manipulate the environment more effectively.

Geological and Environmental Transformations

Beyond climate and biology, the last two million years have been marked by notable geological processes. Tectonic activity continued to reshape continents, while volcanic eruptions and sedimentation patterns influenced local and global environments.

Landscape Evolution and Sediment Records

Glacial advances carved out familiar landscapes such as the Great Lakes in North America and fjords in Scandinavia. Sedimentary deposits from this period provide valuable archives of past climates and ecosystems, allowing scientists to reconstruct environmental conditions with increasing precision.

Megafaunal Extinctions and Biodiversity Shifts

The last stages of this timeframe witnessed the extinction of many large mammals, including mammoths, saber-toothed cats, and giant ground sloths. While the causes remain debated, factors likely include climate change, habitat alteration, and human hunting pressures. These extinctions significantly altered ecosystems and paved the way for the dominance of smaller mammals and birds.

Human Influence and the Transition to the Anthropocene

Although the last two million years encompass primarily natural processes, the latter portion introduces the increasing impact of human activities. The development of agriculture around 12,000 years ago marked a profound shift in the relationship between humans and the environment.

The Rise of Agriculture and Settlements

The transition from nomadic hunting and gathering to settled farming

communities led to land clearance, domestication of plants and animals, and population growth. These changes initiated feedback loops affecting soil composition, atmospheric gases, and biodiversity.

Early Human Impact on Climate and Ecology

Evidence suggests that even early humans influenced megafaunal populations through hunting and altered fire regimes via controlled burns. Over millennia, these activities contributed to ecological transformations that differ markedly from previous natural fluctuations.

Scientific Importance and Ongoing Research

The last two million years remain a focal point for multidisciplinary research. Advances in dating techniques, genomics, and climate modeling enable more refined interpretations of this complex period.

Technological Innovations in Paleoenvironmental Studies

High-resolution ice core data, sediment analyses, and fossil DNA sequencing have revolutionized our understanding of past climates and evolutionary processes. These tools help clarify the timing and drivers of key events within this epoch.

Implications for Contemporary Climate Change

Studying natural variability over the last two million years provides a baseline against which to assess current anthropogenic climate change. Understanding past climate resilience and tipping points informs projections and mitigation strategies.

The last two million years encapsulate a saga of change—shifting climates, evolving life forms, and emerging human civilizations—that continues to influence the contemporary world. As research progresses, this expansive timeframe offers invaluable lessons about resilience, adaptation, and the intricate interplay between Earth’s systems and its inhabitants.

The Last Two Million Years

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the last two million years: Senèze: Life in Central France Around Two Million Years Ago Eric Delson, Martine Faure, Claude Guérin, 2025-04-09 The paleontological site of Senèze (Haute Loire, central France) was discovered in 1892 inside a volcanic crater. For over 40 years, local peasant Pierre Philis collected fossils and sold them to French and Swiss museums. The site became world-famous for its well-preserved skeletons of ungulates and carnivores, as well as rare but well-preserved remains of primates and other mammals. It is considered the reference fauna for the late Villafranchian and MNQ 18 biochronological units of European mammalian evolution, but the lack of provenance data made modern research difficult. From 2000-2006, the multidisciplinary Franco-American Senèze Research Project undertook five seasons of major fieldwork, with the goals of clarifying the age, stratigraphy and taphonomy of Senèze, as well as finding additional remains, especially of the less well-known taxa. In this volume, following a history of study and summary of the new fieldwork, four geological chapters consider field methods, stratigraphy, volcanology and dating. Combining argon-argon ages and paleomagnetic calibration, the newly recovered fossils are shown to date between 2.20 and 2.08 Ma, with concentrations ca. 2.20-2.18 and 2.10-2.08 Ma, significantly older than previously thought. Chapters on palynology, ichthyology and ornithology are followed by eight chapters on the fossil mammals. The chapter on biochronology places Senèze among other sites at the start of MNQ 18, which is estimated to end ca. 1.7 Ma. Of some 2200 specimens known from the site, over half are cervids, with bovids, rhinocerotids and equids far behind. According to data from palynology and the habitat preferences of the more common mammals, the paleoenvironment around the Senèze maar would have included forest, woodland and grassland, perhaps in a warmer and moister climate than today. Taphonomic studies revealed that bones often rested a long time under water, lacked any indication of carnivore attack and often displayed pathologies in their joints. It is likely that most of the associated skeletons were preserved undisturbed after large mammals fell into the paleolake and drowned without being able to climb out. This book responds to the long-held desire of later Cenozoic paleontologists to see a modern study of a site recognized worldwide as a biochronologic reference for the Plio-Pleistocene. Our study required renewed fieldwork using up to date techniques of topography, sedimentology, stratigraphy, geochronology and taphonomy. The systematic paleontology chapters are based on re-study of the entire body of Senèze fossils collected during more than a century of research. The volume will be of interest to paleontologists, especially those concerned with the evolution of the European fauna and with the taxa studied, as well as with paleoenvironmental reconstruction and biogeography. It will also be of value to mammalogists interested in analyses of near-modern taxa and to paleoanthropologists, archaeologists and taphonomists interested in the methods utilized and the role of Senèze as a comparative standard for a site of this age without human intervention. It will surely be an essential reference for all those who want to know more about Life in Central France Around Two Million Years Ago.

the last two million years: The Last two million years Reader's Digest, 1977 Countdown to civilization, the great civilizations, man and his world, and the nations of the world.

the last two million years: The Two Million-Year-Old Self Anthony Stevens, 1993 Also available in an open-access, full-text edition at http: //oaktrust.library.tamu.edu/handle/1969.1/85768 With the evolution of human consciousness, nature has finally become conscious of itself. It has taken eons of time, this lumbering progress through the minds of reptiles, mammals, and primates,

and it is still working its purpose out in the archetypes of the collective unconscious encoded in the most ancient parts of the human brain. The recent evolutionary history of our species, which Jung personified as the two million-year-old human being in us all, is still active in our dreams, myths, psychiatric symptoms, traditional healing practices, and typical patterns of behavior. And it is still struggling to help us survive in the often alienating conditions of the modern world. Through a wide-ranging review of developments in anthropology, ethology, sociobiology, neuroscience, psycholinguistics, and Jungian psychology, Anthony Stevens explores the nature of the two million-year-old Self and examines ways in which the contemporary world both fulfills and frustrates its basic needs and intentions. Drawing on his experience as an analyst, Stevens evokes dreams and psychiatry to reveal a compelling and challenging view of the two million-year-old Self as embodying no less than the will of nature, providing ancient wisdom that we neglect at our collective peril. By granting close attention to nature's mind, Stevens argues, we not only further personal wholeness but help redress the gross imbalances of our culture, which are threatening the destruction of the earth. For the ecologically concerned, this book offers a dramatic new perspective on our future relations with our planet.

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the last two million years: *The Origin and Early Evolution of Life* Tom Fenchel, 2002 Origin and Early Evolution of Life draws on evidence from molecular genetics, the structure and function of extant organisms, and geology. It covers the period from about 4 billion years ago, when life is thought to have originated, to about 600 million years ago when multicellular organisms first arose. There are significant gaps in our understanding of the earliest evolution of life forms, but an insight into the topic leads to a more profound understanding of life itself. Particular emphasis is placed on the fact that although life arose very soon after the origin of the Earth, it was represented only by simple microbial life forms for approximately 85% of this time. Increase in complexity beyond the microbial level took place only very late in the history of life.

the last two million years: India: The Ancient Past Burjor Avari, 2016-07-01 India: The Ancient Past provides a clear and systematic introduction to the cultural, political, economic, social and geographical history of ancient India from the time of the pre-Harappan culture nine thousand years ago up until the beginning of the second millennium of the Common Era. The book engages with methodological and controversial issues by examining key themes such as the Indus-Sarasvati civilization, the Aryan controversy, the development of Vedic and heterodox religions, and the political economy and social life of ancient Indian kingdoms. This fully revised and updated second edition includes: Three new chapters examining the differences and commonalities between the north and south of India; Extended discussion on contested issues, such as the origins of the Aryans and the role of feudalism in ancient India; New source excerpts to introduce students to the most significant works in the historiography of India, and questions for discussion; Study guides, including a list of key issues, suggested readings and a selection of internet sources for each chapter; Specially designed maps to illustrate different time periods and geographical regions This richly illustrated guide provides a fascinating account of the early development of Indian culture and civilization that will appeal to all students of Indian history.

the last two million years: Cognitive Architecture Deborah Hauptmann, Warren Neidich, 2010 Noo-politics is most broadly understood as a power exerted over the life of the mind, reconfiguring perception, memory and attention. This volume unites specialists in political and aesthetic philosophy, neuroscience, sociology and architecture, and presents their ideas for re-thinking the city in terms of neurobiology and Noo-politics. The book examines the relationship between information and communication, calling for a new logic of representation, and shows how architecture can merge with urban systems and processes to create new forms of network that empower the imagination and change our cultural landscape.

the last two million years: Evolutionary Biology 8/e Singh,

the last two million years: Dirt David R. Montgomery, 2007-05-14 Dirt, soil, call it what you want—it's everywhere we go. It is the root of our existence, supporting our feet, our farms, our cities. This fascinating yet disquieting book finds, however, that we are running out of dirt, and it's no laughing matter. An engaging natural and cultural history of soil that sweeps from ancient civilizations to modern times, Dirt: The Erosion of Civilizations explores the compelling idea that we are—and have long been—using up Earth's soil. Once bare of protective vegetation and exposed to wind and rain, cultivated soils erode bit by bit, slowly enough to be ignored in a single lifetime but fast enough over centuries to limit the lifespan of civilizations. A rich mix of history, archaeology and geology, Dirt traces the role of soil use and abuse in the history of Mesopotamia, Ancient Greece, the Roman Empire, China, European colonialism, Central America, and the American push westward. We see how soil has shaped us and we have shaped soil—as society after society has risen, prospered, and plowed through a natural endowment of fertile dirt. David R. Montgomery sees in the recent rise of organic and no-till farming the hope for a new agricultural revolution that might help us avoid the fate of previous civilizations.

the last two million years: Island of Biodiversity Aleta Karstad, Frederick W. Schueler, Candice Vetter, 2012

the last two million years: Inherited Cosmic Intelligence: Vincent L. Di Paolo, 2022-09-19 Inherited Cosmic Intelligence is a continuation to Cosmic Visions within the Microcosm of My Right Hemisphere:... It will give the reader a foundation on the beginning of a star's life and how a galaxy develops its galactic black hole. The reader will learn how healthy fertile stars, like our Sun, fuse hydrogen into helium and all the necessary elements to develop life in their fertile planets, eventually developing intelligent beings. The main subject is how we inherited intelligence within our DNA; and, how our intelligence keeps evolving as dormant parts of our DNA awakens. This book will also educate parents and teachers on brain growths, how nutrition affects myelination which will allow children to learn quicker at school and at home. Finally, Inherited Cosmic Intelligence will educate every reader on how to continue to nurture your brain and body for the rest of your life.

the last two million years: *Vulture Capitalism* Grace Blakeley, 2025-01-14 This timely manifesto from an acclaimed journalist illustrates how corporate and political elites have used planned capitalism to advance their own interests at the expense of the rest of us--and how we can take back our economy for all. It's easy to look at the state of the world around us and feel hopeless. We live in an era marked by war, climate crisis, political polarization, and acute inequality--and yet many of us feel powerless to do anything about these profound issues. Tracing over a century of neoliberal planning and backdoor bailouts, Blakeley takes us on a deeply reported tour of the corporate crimes, political manoeuvring, and economic manipulation that elites have used to enshrine a global system of 'vulture capitalism'--planned capitalist economies that benefit corporations and the uber-wealthy at the expense of the rest of us--at every level, from states to empires. Blakeley exposes the cracks already emerging within capitalism, lighting a path forward for how we can democratize our economy, not just our politics, to ensure true freedom for all. --

the last two million years: *Landscape Appreciation* David Jacques, 2019-12-02 This book examines the many theories of preferred landscape over the last half century and informs those readers teaching or in landscape practice of the main lines of argument so that they can make up their own minds.

the last two million years: The Rough Guide to New Zealand Laura Harper, Tony Mudd, Paul Whitfield, 2002 Combining the most extraordinary aspects of both wild and cosmopolitan New Zealand, this Rough Guide offers unparalleled coverage of activities and accommodations. of color photos. 80 maps.

the last two million years: NOAA , 1974

the last two million years: Coyote Valley Thomas G. Andrews, 2015-10-05 Emergence -- Endurance -- Dispossession -- Settlers -- Miners -- Farmers -- Conservationists -- Feds -- Common ground -- Restoring the valley primeval -- The tragedy of the willows -- Conclusion : Seeing the forest and the trees

the last two million years: The Three-Minute Outdoorsman Returns Robert M. Zink, 2018 Spending time in nature can raise some serious questions. After contemplating your own mortality, you may start to wonder: Why don't deer noses freeze in the winter? What does mammoth taste like? Do fish feel pain? These are important questions, and Robert M. Zink has the answers. Bringing together the common and the enigmatic, The Three-Minute Outdoorsman Returns includes over seventy three-minute essays in which Zink responds to the queries that have yet to cross your mind. Drawing on his zoological background, Zink condenses the latest scientific discoveries and delivers useful, entertaining information on the great outdoors. Can a sheep's horns be too big? Was the Labrador duck a hybrid? Why did I miss that clay target? A large section on deer covers topics ranging from deer birth control backfiring, new information on Chronic Wasting Disease, supplemental feeding, and deer genetics. Other essays explore land, aquatic animals, and humanity's relationship with nature, thus making this book of wild science an essential for any outdoors person.

the last two million years: The Impact of Climate Change on Drylands A.J. Dietz, R. Ruben, A. Verhagen, 2006-04-11 Sahelian West Africa has recovered from the disastrous droughts of the 1970s and 1980s. People have learned to adapt to risk and uncertainty in fragile dryland environments. They, as well as global change scientists, are worried about the impact of climate change on these West African drylands. What do the experiences of the last thirty years say about the preparedness for higher temperatures, lower rainfall, and even more variability? Detailed studies on Dryland West Africa as a whole, and on Burkina Faso, Mali and Northern Ghana in particular show an advanced coping behaviour and increased adaptation, but also major differences in vulnerability and coping potential. Climate change preparedness programmes have only just started and require more robust support, and more specific social targeting, for a population which is rapidly growing, even more rapidly urbanising, and further integrating in a globalised economy. This book is the first of its kind with a comprehensive analysis of climate change experiences in West African drylands, with attention for pathways of change and the diversity of adaptation options available. This book is of interest to scientists studying global and climate change, especially dealing with issues of adaptation. Social scientists, economists, geographers and policy makers concerned with West Africa should also read this book.

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