

THE BIG RATCHET

How Humanity Thrives in the Face of Natural Crisis

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The human species has long lived on the edge of starvation. Now we produce more than enough food for nearly seven billion people on the planet. How did this astonishing transformation come about? How did we evolve from a species of hunters and gatherers into a world-dominating, urban-dwelling species? And, what of the future as the population grows further and adds more demands on resources?

In **THE BIG RATCHET** environmental geographer Ruth DeFries looks back at humanity's journey to show how we got to where we are today, and how we can learn from the past to survive the future. She explains how the radical changes in the past century are part of a larger cycle and the result of two powerful forces: earth's rich natural endowments and humanity's ability to manipulate nature.

DeFries describes how recent agricultural innovations, including the use of nitrogen fertilizers and fossil fuels, which spurred exponential growth, catapulted both our population and food supplies to an all-time high, but come at a cost. Many of today's challenges - climate change, species extinctions, and water shortages – can be traced back to what we eat and how we produce our food. To some these technological advances are a sign of great achievement, and demonstrate how we thrive in the face of disaster. To others they represent our hubris, creating new opportunities for calamity.

In the book DeFries argues that this debate – played out every day between technophiles and environmentalists – is the wrong one to have. She argues that the cycle of crisis and growth is the story of our species, and by understanding how we have turned the ratchet at pivotal moments in our history to overcome problems such as drought, disease and famine, explains not just how we reached this point in our history, but how we might survive it.

Tracing humanity's remarkable journey from cavemen to an exceptional species, **The BIG RATCHET** offers a broad perspective that views human civilization as neither right nor wrong, but as part of the evolution of life on this planet.

About the author: *Ruth DeFries is Professor of Sustainable Development and Chair of the Dept. of Ecology, Evolution and Environmental Biology at Columbia University. For a review copy or interview with DeFries contact Jane Beaton, 07802 433471 jane@kewpublicity.co.uk*

