

Warnings to be shunned at our peril

This latest tome by the author of *Germes, Guns, and Steel*, *The Rise and Fall of the Third Chimpanzee* and *Why is Sex Fun?* is arguably the most important book thus far of the 21st century. It is also a book that, for many reasons, speaks to me personally.

Firstly, Jared Diamond is a professor of geography and environment at one of my *alma maters*, UCLA, in Los Angeles, and I was born in the US state of Montana.. LA and Montana figure prominently in the book as examples of environmental disasters. Secondly, the book combines examples from archaeology (my PhD specialisation) of societal collapses with present day environmental problems (my current profession).

Although Diamond directs the book at an American audience, and speaks only to a limited extent about wildlife *per se*, the contents are nevertheless of critical relevance to East Africa and the future of its wild animals and plants – and people. He argues that most societies that collapsed in the past did so because of natural resource depletion – ‘ecocide’ – and pretty much everywhere in the world, including East Africa, is heading rapidly in that same direction today.

There is nothing new in this view, and dozens of books have made the same claim. Joseph Tainter’s *The Collapse of Complex Societies* (also in my library) has already analysed why past societies have collapsed. What is original in Diamond’s book is the degree of synthesis he achieves in reaching his analytical conclusions.

For example, Diamond disagrees with Tainter’s view that resource depletion could not have caused the collapse of complex past societies, as those societies were organised in a centralized, authoritarian way, which would have enabled them to act to prevent the last tree from being cut down, all the topsoil from being eroded, and so on, before these events took place. Believing in ‘idleness in the face of disaster’, as Tainter phrased it, requires a leap of faith. Diamond presents several examples where a leap into disaster did take place, and he gives the reasons why.

There can be no perfect parallel between prehistoric societies and those today because of globalisation, technology, and the media, but Diamond argues that

COLLAPSE – How Societies Choose to Fail or Survive

by Jared Diamond

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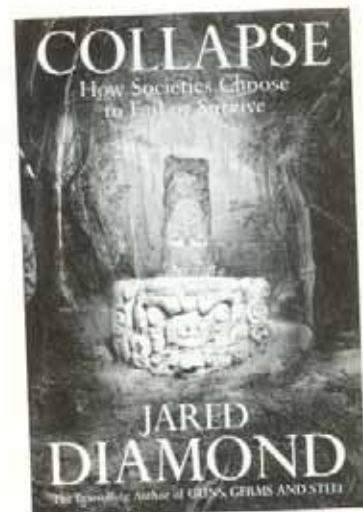
Reviewed by Dan Stiles

the essential problems remain the same, as do causal factors. He defines five sets of factors that influence collapses: environmental damage, climate change, hostile neighbours, the loss of friendly trade partners, and the responses that societies make to environmental problems.

Not all these factors have been involved in each collapse. Diamond deals only with cases in which the environment was the principal cause of a society’s demise, which turns out to have been so with most of them. Of the factor sets, the only one that was always significant was a society’s response to problems. Some societies survived one or more of the first four sets of factors affecting them; others did not. Why? Most of the book is concerned with answering this question.

Part One starts out with present-day Montana, the Big Sky state in America’s north-west. I know the area he describes, but I had never realised the extent of the environmental problems that plague it, and why they do. It makes for sober reading to find out what I had thought of as pristine wilderness and idyllic farms and ranches is succumbing to massive deforestation, soil erosion and salinisation, toxic waste poisoning from mines, bio-diversity losses, alien pest infestations, and the melting of the beautiful ice caps in Glacier National Park (visible from the farm I lived on as a child), which eventually will dry up the rivers where I fished for trout.

All these calamities are the result of peoples’ actions. If Montana were not part of the USA, it would have collapsed by now as a society, with starvation and out-migration. Already, most people born there do leave the state, with wealthy outsiders



moving in to build trophy houses and ranches.

Part Two is made up of four chapters on past societies that did collapse. The first of these is mysterious Easter Island, isolated in the South Pacific. The first European to visit it in the 16th century found a small population of grim, lean people on a totally treeless island that was nevertheless adorned with hundreds of massive stone statues weighing several tonnes apiece. The astonishing amount of labour required to build such monuments led one writer to claim that extraterrestrial aliens must have built them. Archaeological research has shown that the Polynesians living on the island built them, and that in 900 AD when the first settlers arrived the island was covered in forest and hosted many species of (edible) birds.

Why did the people cut down the forest, destroy most of the farmland, and eat all the birds? Was it idleness in the face of disaster? Hardly. While ecological disaster was overcoming them, they were busy cutting massive chunks of rock from quarries, carving them, transporting them all over the island, and hoisting them into place on huge stone platforms – using stone tools and vegetable ropes. Ultimately the trees were gone, so no ocean-going boats could be made on which to escape. There was no wood for house construction, or fuel. For want of any trees, the soils were blown and washed away, and the streams dried up. The 15,000-strong society collapsed amid mass starvation, cannibalism, and many of its statues were pulled down and broken.

The response of the Easter Islanders to their environmental problems was not appropriate. They evidently thought that appeasing the gods with big statues would save them (‘God will provide’). When the gods did not intercede, the people starved, and they attacked the statues. A similar fate

befell other Pacific islanders in prehistoric times.

But other islanders survived. Tikopia is a speck in the Pacific Ocean where the society has persisted for almost 3,000 years. They were facing many of the same problems as the Easter Islanders, but their response was quite different. Instead of clinging to their cultural values and pinning their faith in stone statues, they killed all their pigs. This might sound odd, but the Pacific Ocean peoples regard pigs with the highest esteem and consider them as signs of wealth and prestige, much as the Maasai do cattle. But pigs need about 10 kg of vegetables to produce one kg of meat. Killing them provided more vegetable foods for the people.

The Tikopians also introduced stringent population control measures and forest management systems, which became part of their traditional culture. It was only after Christian missionaries got hold of them in the late 19th century that they again faced starvation and collapse, as the population increased beyond sustainable limits. The British saved them through food aid. Since the 1950s the Tikopians handle excess population by sending people to the Solomon Islands, which has created an environmental and political crisis there requiring Australian peacekeepers.

Even very large, environmentally rich areas with multi-million-strong human populations and trade links with outsiders collapsed, such as the Mayans of Central America. There was much debate when I was a student about why the culturally advanced Mayan civilisation disintegrated and disappeared, leaving their core area almost empty until recent times. Archaeological research has demonstrated that basically the same factors destroyed the Mayans as the Easter Islanders. As natural resources deteriorated, so they built monuments to the gods, until a series of droughts tipped them over the edge of survivability.

Part Three discusses, in four chapters, contemporary examples that illustrate parallels to past collapsed societies. The 1994 collapse of Rwanda and the ongoing collapse of Haiti, as well as the environmental crises facing China and Australia, are analysed. Popular consensus and the media have led us to believe that Rwanda erupted in genocide and chaos through ethnic hatred alone. Diamond convincingly explains that overpopulation and resource depletion was the underlying cause.

I always wondered at the throwaway line in media reports of 'close to a million

Tutsis and moderate Hutus were massacred by Hutu militias'. Who were these 'moderate Hutus', and why would other Hutus massacre them? A Belgian research study showed that the so-called moderate Hutus were in fact killed for their land, or because they were poor and a nuisance. Their massacre had nothing to do with their political leanings towards Tutsis.

The book presents a litany of the same environmental problems afflicting Rwanda as brought down the Mayans and others. Even Rwandans interviewed by Diamond admitted that the genocide was sparked by a realisation that they needed to thin out their population. Rwanda is the only place where I have seen cabbages growing sideways out of near-vertical hillside fields – a good indicator of land shortage.

Part Four, containing the last three chapters, examines why some human societies make disastrous decisions, and discusses the influences of Big Business in today's world, while assessing just what all of this means to us.



It is not possible to summarise everything in a book so crammed with facts and figures and brilliant insights, but there are some seminal points to highlight: we are in big, big trouble because of unsustainable population growth and resource consumption. The United Nations and the globalisation 'movement' have compounded this crisis by creating the expectation that everyone in the world can attain a First World standard of living through 'development'.

The truth is that this goal is not feasible; the Earth does not contain the resources for it. Indeed, at present consumption and pollution rates a First World standard of living cannot be sustained for much longer even in the US and Europe. By the end of this century, if our ways of doing things do not radically change, the world will resemble the apocalyptic movie *Escape From L.A.*, in which gangs fight with each other over the scrappy resources left in a collapsed Los

Angeles of the future. (Anticipating this, I escaped to Kenya.)

Diamond, being more optimistic than I, sees hope in the growing environmental movement in the US and elsewhere. He presents several examples of moves in the right direction, such as the formation of the Forest Stewardship Council and the Marine Stewardship Council and a growing awareness on the part of Big Business that preventing environmental problems is a lot cheaper than fixing the problems once they have occurred.

I have come away with added support for beliefs that I held before reading the book, some not signalled by Diamond. Rwanda, Haiti and other collapses, and collapses that might have happened but have not, have all been mitigated by the responses of the international community, not by the responses of the societies themselves. This aspect of globalisation means that millions of people in Africa are being fed with overseas food on a permanent basis today. The food crises due to drought or disaster, declared to be acute occurrences by the UN and relief NGOs, are increasingly chronic situations.

What I fear are the consequences if food and other aid were to be stopped suddenly for some reason, such as a world war or First World food shortage. Millions of people in Africa would starve, and chaos would break out as the have-nots desperately attack the farms, storehouses, shops, and homes of the haves in an attempt to survive. I think we are already seeing the incipient signs of this.

The public is ultimately responsible for demanding change. Politicians, whether they be dictators or elected officers, cannot stay in power long without the will or at least compliance of the majority. It is this fact that leads to my pessimism. We are in a tragic conundrum. The only way to avert disaster is to control population growth and radically reduce resource consumption. But this would entail giving up dreams of 'development' and of a TV and car for every home – assuming everyone had a house, with electricity and clean running water. Can the world abandon this pipe dream? I don't think so.

Today we can go into the jungles of Central America, or the deserts of the Middle East, to see Mayan and Sumerian ruins and ask ourselves, why did they collapse? Will future tourists gaze on the rusting skyscrapers of Nairobi, overgrown with bush and ask, what happened?

We have to start killing our pigs! ❧