



ENCONTROS
SCIENTIA



On ZOOM

Global Risks and Biodiversity

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PSE – cE3c

This book addresses the causes and consequences of many of today's global hazards through the lens of energy metabolism, the need to feed an exponentially growing population, and hence the overexploitation of natural resources. It is divided in three parts.

The first part, deals with some concepts on energy metabolism and climate change, deeply linked to the energy dependence of living beings. All metabolic processes need energy and the entire ecosystem is dependent on continuous energy flows. The complexity of life forms, the appearance of Man and the inherent social growth and development, increased the need for more energy, its exploration and consumption diversification. All use of energy sources brings waste.

“Risk inherent in food production” is addressed in the second part. When one talks about the risks due to climate change, it is explained that they come, above all, from the dependence on fossil fuels, for energy production and mobility. But the increase in population presupposes and requires an increase in food. Food that is both a source and a waste of energy. This part seeks to show the current challenges of science closely linked to how production can be increased, minimizing the impacts through the diversification of agricultural systems and changes in eating habits.

The third and last part of this book addresses the “Risks of Biodiversity Loss”. More than climate change, we are witnessing a profound global change on the planet as a result of scarcity of reserves and excess population. Biodiversity loss is primarily the result of land use change, primarily the conversion of native ecosystems into agricultural systems to feed the world, and overexploitation of the oceans. The minimization of risks and subsequent impacts can be accomplished through the development of ecological restoration projects towards recovering of ecosystem services.

Thursday, November 4, 2021

12h00-13h00