

Survival Crisis  
PLANET IN PERIL  
People's Response Only Way Forward

BHARAT DOGRA

Remember His Words

Whenever you are in doubt, or when the self becomes too much with you, apply the following test:

Recall the face of the poorest and the weakest man whom you have seen, and ask yourself if the step you contemplate is going to be of any use to him.

Will he gain anything by it?

Will it restore him.... to control over his own life and destiny?

In other words, will it lead to Swaraj for the hungry and spiritually starving millions?

Then you will find your doubts and.... self melt away.

—*Mahatma Gandhi*

That economics is untrue which ignores or disregards moral values.

The extension of the law of non-violence in the domain of economics means nothing less than the introduction of moral values as a factor to be considered in regulating international commerce.

—*Mahatma Gandhi*

What we seek to do is substitute false and non-human economics by true and human. Not killing competition but life giving cooperation is the law of the human being.

—*Mahatma Gandhi*

## Introduction

In recent years it has become very clear that several environmental issues are increasingly taking the form of nothing less than a survival or an existential crisis.

On another front, not just nuclear weapons but also other weapons of mass destruction and the fast-emerging military use of robots/artificial intelligence also pose an existential threat. The environmental catastrophe resulting from actual use of nuclear weapons is one manifestation of how the existential threats on these two fronts can be interrelated. The main focus of this book is on existential or near-existential threats and to emphasise the need for timely solutions before it is too late.

These survival issues need to be resolved within a framework of democracy, peace and justice. As the existing framework has failed to an alarming extent in resolving these issues, clearly big changes in global governance capable of resolving these issues are needed before it is too late.

These changes will not come on their own; a huge and sustained upsurge in people's mobilisation on these issues all over the world is needed for this. On the one hand, this mobilisation will increase common people's consciousness about the urgency of these survival

issues and on the other hand, this mobilisation will lead people to strive for a situation in which governments accord adequate urgency to survival issues.

An essential part of this mobilisation of people should be to bring justice and equality on the one hand and improve social relationships at all levels on the other hand. Justice and equality will help all people to meet their basic needs without imposing a heavy burden on the environment. Improving social relationships will help to reduce significantly widespread distress and depression while leading towards highly creative relationships which can contribute so much to resolving the most critical issues in conditions of increasing happiness and enthusiasm.

In this mobilisation of people, the various movements for justice (including gender justice), protection of environment and all forms of life, peace and genuine spirituality need to come closer to each other. They have been fulfilling very important roles but also need to self-introspect, improve and innovate in close cooperation with each other. If this happens, then they can play a very crucial role in the overall efforts which are needed for resolving survival or existential issues in time.

All these efforts will keep alive hope in difficult times. The situation just now is very difficult but instead of saying it is too late for remedial action, we need to assert that it is never too late. This is the basic context in which this book is written.

## ALARM BELLS RINGING

The World is not headed toward a sustainable future, but rather toward a variety of potential human and environmental disasters.

—The World Resource Report

### The Earth is Finite Survival Crisis like None Other

*The authors of the 1992 declaration feared that humanity was pushing Earth's ecosystems beyond their capacities to support the web of life. They described how we are fast approaching many of the limits of what the planet can tolerate without substantial and irreversible harm.*

*... On the 25th anniversary of their call, we look back at their warning and evaluate the human response by exploring available time series data. Since 1992, with the exception of stabilising the stratospheric ozone layer, humanity has failed to make sufficient*

*progress in generally solving these foreseen environmental challenges, and alarmingly, most of them are getting far worse.*

—World Scientists' Warning to Humanity:  
A Second Notice (2017), a Statement signed  
by 13,524 signatories from 180 countries

*If not checked, many of our current practices put at serious risk the future that we wish for human society and the plant and animal kingdoms, and may so alter the living world that it will be unable to sustain life in the manner that we know. Fundamental changes are urgent if we are to avoid the collision our present course will bring about.*

—World Scientists' Warning to Humanity  
(1992 Statement of 1,575 top scientists)

THE MOST critical issue of our times is that the life nurturing conditions of our planet are being threatened by man-made factors as never before. The most discussed concern is climate change, but there are at least eight other serious environmental problems which can be treated as *survival threats*. In addition, there is the great risk from weapons of mass destruction including nuclear weapons, chemical weapons and biological weapons as well as the fast-emerging high threats from military use of robots.

These great risks increase further if we keep in mind the various interactions among them as well as their accumulated impact. Such warnings have been voiced increasingly in recent decades by some of the most prominent scientists, and yet somehow these warnings have not led to the action that was needed to check these problems in time. Instead, despite the growing recognition of their seriousness, most of these problems have gone from bad to worse. In fact, during the last one or two years, the world appears to be moving away further than ever before from any credible response to these survival threats. And yet, we need to keep alive the hope for an adequate response to these threats before it is too late.

## Warning to Humanity

In 1992, the Union of Concerned Scientists and 1,575 of the world's most prominent scientists (including 99 of the 196 living Nobel Laureates) signed a document called the *World Scientists' Warning to Humanity*. This document was sent to government leaders all over the world.

This document warned, 'Our massive tempering with the world's independent web of life—coupled with the environmental damage inflicted by deforestation, species loss and climate change—could trigger widespread adverse effects, including unpredictable collapses of critical biological systems whose interactions and dynamics we only imperfectly understand. Uncertainty over the extent of these effects cannot excuse complacency or delay in facing the threats'.

'The earth is finite', this document reiterates. 'Its ability to absorb wastes and destructive effluent is finite. Its ability to provide food and energy is finite. Its ability to provide for growing numbers of people is finite. And we are fast approaching many of the earth's limits. Current economic practices which damage the environment, in both developed and underdeveloped nations, cannot be continued without the risk that vital global systems will be damaged beyond repair'.

After listing the various serious threats, these 1,575 prominent scientists concluded, 'We the undersigned, senior members of the world's scientific community, hereby warn all humanity of what lies



ahead. A great change in our stewardship of the earth and the life on it is required, if vast human misery is to be avoided and our global home on this planet is not to be irretrievably mutilated’.

Twenty-five years after this warning by leading scientists was voiced, another group of senior scientists supported by 13,524 signatories from 180 countries issued a follow-up statement titled: *World Scientists’ Warning to Humanity: A Second Notice*. This follow-up statement reviewed the time series data on major problems and found that most of them are getting far worse. This statement said, ‘Especially troubling is the current trajectory of potentially catastrophic climate change due to rising GHGs (Greenhouse Gases) from burning fossil fuels, deforestation and agricultural production—particularly from farming ruminants for meat consumption. Moreover, we have unleashed a mass extinction event, the sixth in roughly 540 million years, wherein many current life forms could be annihilated or at least committed to extinction by the end of this century’.

The statement concluded, ‘To prevent widespread misery and catastrophic biodiversity loss, humanity must practice a more environmentally sustainable alternative to business as usual. This prescription was well articulated by the world’s leading scientists 25 years ago, but in most respects, we have not heeded their warning. Soon it will be too late to shift course away from our failing trajectory, and time is running out. We must recognise, in our day-to-day lives

and in our governing institutions, that Earth with all its life is our only home’.

### **Weapons of Mass Destruction**

Nearly one hundred thousand people were killed within a few minutes in Hiroshima and Nagasaki after being hit by nuclear weapons in 1945. If we count the longer-term deaths caused by internal bleeding, leukemia and other forms of cancer, then the death toll is likely to be much higher. In addition, nearly seventy-five years later, the next generations continue to pay for this in the form of children born with mental retardation, physical deformities and other serious health problems.

Given this destruction caused by the first two nuclear weapons, it is truly scaring to know that today the world has around 15,000 nuclear weapons. And most of these nuclear weapons are much more destructive compared to the first two nuclear bombs. The US Department of State has provided the following data on the number of nuclear weapons with various countries: Russia-7,000, USA-6,800, France-300, China-270, Britain-215, Pakistan-140, India-130, Israel-80 and North Korea-10.

In addition, several countries are being mentioned as potential future processors of nuclear weapons; these include not just Iran but also possibly Saudi Arabia, Egypt, Japan and South Korea.

In a recent review of the nuclear weapon race, *The Economist* (27 January 2018) has noted, 'Both the USA and Russia are committed to costly long-term modernisation programs for their strategic nuclear forces that should ensure their viability for the rest of the century. Other states with nuclear weapons, such as China, Pakistan, India and, particularly North Korea are hard at work to improve both the quality and size of their nuclear forces'. Further, this review has noted that several disruptive new technologies and worsening relations among some of the nuclear weapon countries may also be increasing the risk of actual use of nuclear weapons.

In addition, despite the efforts to ban chemical and biological weapons, the threat of their highly destructive use still remains, not just by some countries but also by terrorists.

Some experts have warned that ultimately, military use of robots may prove to be the most destructive. Stephen Hawking, Elon Musk, Bill Gates and several others believe that, if adequate care is not exercised, general AI (Artificial Intelligence) can be an existential threat to the human race.

While all of these survival threats are important in themselves, their mutual interactions and accumulated impact can be much more destructive than the sum total of individual threats.

### **Challenge Ahead**

The biggest challenge for human society in the next three decades or so is to significantly reduce all these survival threats, while at the same time meeting the basic needs of all people in a broad framework of justice, peace and environment protection.