### Chapter 22

# The Environment and the Challenge of Technological Development: Perspectives, Problems, and Prescription

#### Amaobi Nelson Osuala

https://orcid.org/0000-0001-6221-2349

University of Ibadan, Nigeria

#### **ABSTRACT**

This chapter examines the ripple effects of technological development on the environment. It exposes some of the environmental nightmares that has ensued from the exploitation of the ecosystem in the guise and pretext of attaining science and technological feat. The author argues that no doubt, humans have recorded unprecedented progress and breakthroughs in science and through the advent of technology; the boomerang environmental hazards have however remained colossal! This researcher argues that to manage the ambivalence and protect the environment from harm, technological advances must be conducted through a reasonable action undergirded with what the author has christened the law of mutual complementary exchange implied in the notion that humans can only survive through exchange and mutual positive interaction with the environment not as a being-in-the-world serving as a means to an end but a being-with-the-world; the latter of which shares a relationship of mutual dependence.

#### INTRODUCTION

To survive on the earth, human beings require the stable, continuing existence of a suitable environment. Yet the evidence is overwhelming that the way in which we now live on the earth is driving its thin, life-supporting skin, and ourselves with it, to destruction. To understand this calamity, we need to begin with a close look at the nature of the environment itself - Barry Commoner

DOI: 10.4018/978-1-6684-4107-7.ch022

Perhaps, the above epigraph is better captured by Ronald Engels and Gibb J. Engels in their book *Ethics of Environment and Development*, published in 1990, in which they summarized the ripple effects of our technological development on the environment as being wrong-headed. In their words:

...That our basic model is wrong is also indicated by what we have done to other species and forms of life...we increasingly destroy other animal species. Vegetation, the chemical sources of life, and the sea beds and rocky lands bounty has been the source of so much imagination, wonder, joy and creativity spring from the unending acquisitiveness of our technological way of life and concomitant decline in our sensitivity to other common organic bond with the whole of creation and thus both our own survival and that of other species (p. 31).

Before we delve into the mainstreams of the arguments captured by the above quotation, as well as those captured in the above epigraph, which is an excerpt from Commoner's classic work, *Closing the Circle*, let us first cast a bird's eye view at the nature of environmental crisis by briefly examining, some opinions and arguments by certain individuals on what according to them are the likely causes of today's global warming amongst others. It is this researcher's believe that x-raying and examining these crisis will help to better serve as a good background to the issues we hope to elucidate in this chapter.

Although, many of the arguments put forwards were made by western environmentally conscious thinkers in their attempt to salvage their environment through a declaration of what they dubbed as A Save the Earth campaign week of April 1970 in America (Comoner 1971, p.2). This researcher have tried to summarize the major points and also group them into sections to better capture the central theme of the discourse. They include: Those who (1) blame growth in population as the major cause of environmental pollution. (2) Blame affluence (3) Blame poverty and lack (4) gave a rebuttal from the poor. (5) Others argued from the point of appraising our industry (6) blamed man's innate aggression (7) blamed man's unchecked curiosity and his quest to know. As if to further stretch the issue (8) a minister blames profit margin and revenue generation. (9) a historian decides to complicate the matter and decides to put the blame on religion, especially the Judeo-Christian religion. (10) A politician blames Technology. This position is what this paper shall focus more on. (11) An environmentalist contends and puts the blame on politicians. (12) Others blame capitalism and capitalist economies. (13) While the capitalist, counter attacks and toes an escapist position. At last, in his attempt to avoid the ridiculous ad hominem arguments and those fallacious arguments against the straw man, a critical thinker, Pogo, who Barry Commoner described as a rather "keen observer" (7) puts the blame on the generality of the human species. Following the foregoing order, biologist Garrett Hardin avers that what we call "the pollution problem is a consequence of population. It did not much matter how a lonely American frontier man disposed of his waste...But as population became dense, the natural chemical and biological recycling processes became overloaded... freedom to breed will bring ruin to all" (commoner 1971, p.3).

Following this line of thought, Paul R. Ehrlich another biologist further informs that the causal chain of the deterioration (of the environment) is easily followed to its source. Too many cars; too many factories; too much detergent; too much pesticide; multiplying contrails; inadequate sewage treatment plan;, too little water; too much carbon dioxide- all can be traced easily to too many people. But this blame on overpopulation seems not to go down well with Walter S. Howard, who, though also a biologist like Hardin and Ehrlich yet held a contrary view thereby putting the blame of environmental crisis on our human affluent society. For him, the affluent society has become an effluent society. The 6 percent of the world's population...produces 70 percent or more of the world's solid wastes (p.3)

## 9 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/the-environment-and-the-challenge-of-technological-development/304278

#### Related Content

## Continuance Usage of Mobile Banking Services Among Small and Medium Enterprises (SMEs) in Tanzania

Herman E. Mandari, Daniel Ntabagi Koloseniand Julius Macha (2020). *International Journal of ICT Research in Africa and the Middle East (pp. 50-66).* 

www.irma-international.org/article/continuance-usage-of-mobile-banking-services-among-small-and-medium-enterprises-smes-in-tanzania/245698

#### ICT Policy Development Process in Africa

Hopestone Kayiska Chavulaand Abebe Chekol (2010). *International Journal of ICT Research and Development in Africa (pp. 20-45).* 

www.irma-international.org/article/ict-policy-development-process-africa/51588

## Awareness of ICT-Based Projects and the Intensity of Use of Mobile Phones Among Smallholder Farmers in Uganda: The Case of Mayuge and Apac Districts

Stephen Lwasa, Narathius Asingwire, Julius Juma Okelloand Joseph Kiwanuka (2011). *International Journal of ICT Research and Development in Africa (pp. 26-38).* 

www.irma-international.org/article/awareness-ict-based-projects-intensity/60389

## IT – Offshoring and a Cross National Intra Organizational Community of Practice: The Case of Norway House, Vietnam

Inge Hermandrud (2016). Organizational Knowledge Facilitation through Communities of Practice in Emerging Markets (pp. 136-145).

www.irma-international.org/chapter/it--offshoring-and-a-cross-national-intra-organizational-community-of-practice/148867

#### Supporting Family-based Care for Aged Patients with Chronic Illness

Lemai Nguyen (2011). *Intelligent Technologies for Bridging the Grey Digital Divide (pp. 253-268).* www.irma-international.org/chapter/supporting-family-based-care-aged/46738