

# ***PERSONALLY SPEAKING***

*Number 7*

*January 2005*

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## **WORLD POVERTY, HUNGER, AND DISEASE**

### **PART 3**

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Poverty, hunger, and disease have been harsh and often cruel realities from the very beginning of the human experience. Most of humankind even today live in the shadow of the four horsemen of the apocalypse: war, famine, pestilence, and death. And we've known for more than 150 years – for certain ever since the Great Irish Famine of the 1840s – that hunger and most especially famine, engender disease that in the extreme leads to death in massive numbers, cutting life short for many of its victims. This report is the last of a three-part series. Part 1 dealt with world poverty. Part 2 addressed global hunger and disease. This part examines the causes and remedies for these three worldwide problems.

#### **Fundamental Causes**

There are a host of reasons that account for the poverty, hunger, and disease which beset much of humankind today. Some of those reasons are natural and more or less uncontrollable: drought, hurricanes, earthquakes, monsoons, volcanic eruptions, floods, and most recently the tsunami that devastated several Southeast Asian countries. Others are instances of human greed, exploitation, and discrimination: war, the power vacuum that followed the end of the colonial period, the objectification and enslavement of adults and children (especially females).

Other factors relate to economic globalization. To mention just one, the development and widespread utilization of modern transportation and delivery systems that allow the overnight transmission of a disease from one part of the world to another via human and animal carriers and parcel and freight traffic. As well, the economic vulnerability and failure of small, family-owned enterprises in poor nations due to the vastly greater power of global companies that many justify on grounds of improved market efficiency. Some factors relate to fundamental human failure or frailty in prescribing the correct medication or dosage, continuing a drug regimen as directed, remaining faithful to one's spouse, supporting one's children, turning away from the huge but often illicit financial rewards of the present in order to pursue long-term personal development and the dividends which follow from that development in the future.

Three other related factors contribute powerfully to disease and thereby to hunger and poverty. The first is the unfortunate, though at times inevitable, consequences of using powerful drugs to fight infectious disease. Resistance to life-saving drugs is a natural and

unstoppable biological process wherein the exposure of certain microbes to an antibiotic leads to a mutation and the emergence of microbes which are resistant to that antibiotic. Second, the very same hospital wards that offer hope for successful treatment of injury and disease have become the breeding ground and transmission system for “super infections” which now are regarded as a major health care crisis. In United States hospitals alone, drug-resistant microbes infect and kill 14,000 persons every year. Third, and as a consequence of antimicrobial resistance, pharmaceutical companies are called upon to discover, develop, and manufacture new antimicrobials, but every new compound brought to market costs approximately US\$ 900 million for research and development [Tufts]. In this regard, the World Health Organization in 2000 sounded the following ominous warning:

This report ... documents how once life-saving medicines are increasingly having as little effect as a sugar pill. Microbial resistance to treatment could bring the world back to a pre-antibiotic age ... The potential of drug resistance to catapult us all back into a world of premature death and chronic illness is all too real [WHO, preface and epilogue].

There are and continue to be at work five factors that probe more deeply into the nature and the causes of poverty, hunger, and disease, and thereby contribute to a better understanding as to why those problems persist in certain parts of the world and not in others. More than 40 years ago, Barbara Ward identified four revolutions that have swept over the Western world since the 1850s but which are not widely evidenced in the poor countries of the world. The four are the *biological* revolution that broke through the cycle of peaceful population growth and violent diminution, the *intellectual* revolution of materialism and this-worldliness, the *political* revolution of equality, and the *scientific and technological* revolution that involves the application of savings and the scientific method and insight to everyday business affairs [Ward, pp.40-41]. We would add one more: the *sexual* revolution that encourages individual freedom to initiate a relationship and to leave as the circumstances warrant and thereby to have multiple partners either coincidentally or sequentially.

Before the biological revolution of modern medicine and sanitation began to reduce mortality and extend life expectancy, populations (especially among tribal peoples) tended to grow until the limits of economic resources had been reached, and then decline due to malnutrition and starvation or war with a neighboring tribe over control of resources. Until this revolution, tribal war, and with it disease and hunger, were revisited in every generation. Wars of this type even today are being waged in Rwanda, Burundi, Eritrea, Somalia, and Sudan to name several.

By the intellectual revolution, Ward means that archaic civilizations, notably tribal in nature, are backward-looking, tend to hold on to the old ways, to mystery and magic rather than hard work and reason. Holding fast to tradition and not being able to embrace change surely is descriptive of Native American Indian tribes and in part account for their impoverishment.

**There is no concept of equality in traditional societies. Wisdom resides entirely with the elders, and the young must wait their turn before their ideas are given a hearing. Extreme conservatism is the order of the day. The political revolution of equality breaks down the hierarchical nature of traditional societies, and the backward-looking ways that dominate such societies and which subordinate merchants to kings, warriors, and landlords.**

**In tribal societies there is little or no science. Mystery and magic predominate, effectively putting the exercise of the human will before the use of the human intellect in the manipulation of the physical matter of the universe for human ends. And there is no sustained saving in traditional societies, that blocks investment in infrastructure and thereby holds back economic development [Ward, pp.40-61].**

**Confirmation of Ward's insights came recently from Pakistani President Musharraf who at conference of ministers from Muslim countries in 2002 offered the following assessment of living conditions in the Islamic world.**

**Today we are the poorest, the most illiterate, the most backward, the most unhealthy, the most un-enlightened, the most deprived, and the weakest of all the human race [Abbas, p.1].**

**GNP in all Muslim countries, he said, is 20 percent of GNP in Japan. Musharraf cited one central reason for these conditions: a lack of attention throughout the Muslim world to educational and scientific development. There are 430 universities in Muslim countries compared to more than 1,000 in Japan. Britain confers 3,000 doctoral degrees in science every year. The entire Muslim world awards 500 doctorates in science [Abbas, p.2, DAWN, p.3, MSNBC, p.2].**

**The sexual revolution, which took hold after Ward's remarks were published, has influenced disease, poverty, and hunger in several ways. The father who walks away from his wife and their children for another partner leaves them in a state of poverty when her earnings and his failure to provide drop the mother and children below the poverty threshold. One reason gay men were among the first to become infected with HIV is that anal intercourse is more forceful than vaginal intercourse and for that reason tends to break open blood vessels exposing the circulatory system to the virus. As with homosexual intercourse, heterosexual intercourse with multiple partners puts a person at risk of contracting an infectious disease passed to those partners by any one of their prior partners. The only certain protection against contracting a sexually transmitted disease is for both partners to have intercourse with no one but one another. Further, drug resistance makes it difficult or even impossible to cure certain sexually transmitted diseases, such as genital herpes. Eric Noji of the National Center for Infectious Diseases asserted recently that the most important reason why public health officials worldwide underestimated the serious threat of infectious disease was that they had *not* anticipated that economic growth and prosperity would lead to a change in sexual mores and to drug abuse, thereby facilitating the microbe to launch an offensive far more devastating**

than the threat of antibiotics and vaccines had briefly presented to its existence [Noji 2001, p.231].

### Essential Remedies

If economic development truly depends on four revolutions, it follows that development remedies should be designed to contribute to the advancement those revolutions in the developing world. In the following we suggest one remedy for each of the aforementioned revolutions, excluding the sexual revolution, in terms of the need that calls forth the remedy (actuating principle) and the limits beyond which that remedy cannot or should not be applied (limiting principle). Limits often mean hard choices must be made and in some instances lead squarely to a dilemma.

Regarding the biological revolution of modern medicine and sanitation, spraying homes and the breeding sites of mosquitos with DDT reduced the incidence of malaria significantly in the post-WWII period [Bate, p.697]. But even though Bate asserts that there is no scientific study that demonstrates the harmful effects of DDT on human health, a paper published in 2001 suggests the danger inherent in the use of DDT which is “still highly persistent in the environment and [is] uniformly present in the lipid-containing tissues of humans and in breast milk samples” [Reigart and Roberts, p.1193]. The authors’ first recommendation is to “*limit* as much as possible the use of pesticides in the home” [Reigart and Roberts, p.1195; emphasis added]. Most important for economics is that with the enactment of the Food Quality Protection Act of 1996 in the United States regulatory intervention no longer is justified in terms of a favorable cost-benefit calculation but instead requires reasonable certainty of *no harm to human health* [Reigart and Roberts, p.1194; emphasis added].

The intellectual revolution of materialism and this-worldliness is necessary for better provisioning the needs of the human body. Even so, there are other human needs -- the needs of the human spirit for truth, goodness, and beauty -- which cannot be disregarded in the implementation of an economic development remedy. As with Galileo and the Church centuries ago, and creationism and evolution much more recently, faith and reason must be reconciled lest the one dominate or destroy the other. Failing to achieve that reconciliation can impoverish the human body, the human spirit, or both. If truth is one, and if faith and reason are two authentic pathways to the one truth, reconciliation is possible. Settling this conflict has clear implications for economic development in the Muslim world especially.

Following Ward again, the political revolution of equality too is necessary for economic development, in particular in relation to tribal, class, or caste societies that operate on the exclusionary rule, the practice of systematically including some and excluding others . But that rule is necessary in the formation and successful functioning of any group, whether the group in the economic order is a producer or consumer cooperative, trade association, labor union, business establishment or in civil society is garden club, political party, or friends of the symphony orchestra. The pursuit of equality encounters the constraint of individual freedom that is necessary to unleash competitive energies. By freedom we mean both types affirmed by Berlin and Sen: noninterference from others or negative freedom (“liberty” to some), and the

fullness of person -- the absence of imperfections such as physical disability, illiteracy, mental illness -- or positive freedom [Waters, pp.273-274].

Indeed in a system of markets freedom and equality both are necessary for economic development and both are at once actuating and limiting principles. The key to a proper balancing of the two is in how the exclusionary rule is administered. Groups should be free to exclude as long as exclusion is not discrimination by intent or impact. Thus equality can be achieved without sacrificing freedom.

As for the revolution which Ward identified as the most important of all, it is clear that human well-being depends critically on science and technology in ways that are obvious even to the casual observer. For example, entrepreneurial ideas and schemes often originate in the scientific method and are technologically expressed in the form of new products and services, new materials, and new processes of production.

Two limits apply. The first is the destructive impact on human beings from the implementation of new technologies: loss of employment, loss of work that is creative and meaningful, loss of a sense of oneness with others in the workplace. Discount retailing chains that sever the personal connection between shopkeeper and customer and synthesizer-produced music exemplify what can emerge when this limit is ignored. The second limit is the pernicious consequences for natural resources and the environment: depletion of renewable and nonrenewable resources, contamination of the air, soil, and water upon which all living creatures depend. Strip mining and clear-cutting timber are examples of what can happen when this limit is disregarded.

There is one remedy linked to the scientific/technological revolution that seems to offer great promise. Distance learning facilitated by the internet and other innovations in telecommunications make it possible to bring science and technology to developing countries at a fraction of the cost of building traditional brick and mortar institutions of science and technology and hiring the persons competent to handle the teaching responsibilities. It is encouraging to see so many conventional colleges and universities in developed countries moving in this direction, not to mention the “virtual universities” which are reaching students without massive investments in classroom, library, and residential facilities. In this regard, closing the “digital gap” between rich and poor nations is critically important. Besides, distance learning offers reasonably safe personal access to this revolution and the intellectual revolution in those nations where religion dominates reason.

Given the serious problems associated with economic development remedies in the past which have had two effects, one positive, the other negative, the principle of the double effect is instructive. Four conditions must be met in order to remove objections to a specific remedy. First, the positive effect must outweigh the negative effect. Second, the two effects must be inseparably linked proceeding directly from the same remedy, rather than the one effect whether positive or negative being triggered by the other. Put in different ethical terminology, the end does not justify the means. Third, when the two effects are inseparably linked, there is

no way to achieve the positive effect and at the same time escape the negative effect. Even so, the negative effect must not be the intended outcome of the remedy undertaken but an unavoidable and unfortunate consequence of that remedy. Finally, the remedy must not be unethical *per se*. Once more, the end does not justify the means [Grisez and Shaw, pp.138-149].

The four horsemen of the apocalypse are as terrifying and destructive today as at any time in human history. Bringing a complete end to the scourge of war, famine, pestilence, and death simply is impossible. However, reining them is possible, and the experience of developed countries over more than 150 years points the way. The very heart of the problem lies in helping developing countries embrace the scientific/technological revolution. Developed countries should be under no illusion: this task will take many more years and much greater and smarter human effort.

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