

Chapter 1 : Overpopulation Effects - Everything Connects

Population Growth Causes Multiple Environmental Problems According to Population Connection, population growth since is behind the clearing of 80 percent of rainforests, the loss of tens of thousands of plant and wildlife species, an increase in greenhouse gas emissions of some percent, and the development or commercialization of as.

Changes in atmospheric composition and consequent global warming. Rich countries with high population densities have low rates of infant mortality. It results in human threats including the evolution and spread of antibiotic resistant bacteria diseases, excessive air and water pollution, and new viruses that infect humans. Increased chance of the emergence of new epidemics and pandemics. However, rich countries with high population densities do not have famine. Poverty and inflation are aggravated by bad government and bad economic policies. Many countries with high population densities have eliminated absolute poverty and keep their inflation rates very low. However, this problem can be reduced with the adoption of sewers. For example, after Karachi, Pakistan installed sewers, its infant mortality rate fell substantially. Laws regulate and shape politics, economics, history and society and serve as a mediator of relations and interactions between people. It was even speculated by Aldous Huxley in that democracy is threatened due to overpopulation, and could give rise to totalitarian style governments. David Attenborough described the level of human population on the planet as a multiplier of all other environmental problems. According to Paul R. We want to build highways across the Serengeti to get more rare earth minerals for our cellphones. We grab all the fish from the sea, wreck the coral reefs and put carbon dioxide into the atmosphere. We have triggered a major extinction event A world population of around a billion would have an overall pro-life effect. This could be supported for many millennia and sustain many more human lives in the long term compared with our current uncontrolled growth and prospect of sudden collapse If everyone consumed resources at the US level “ which is what the world aspires to “ you will need another four or five Earths. Williams [] argue that third world poverty and famine are caused in part by bad government and bad economic policies. Resources[edit] Youth unemployment is also soaring, with the economy unable to absorb the spiraling numbers of those seeking to enter the work force. Many young people do not have the skills to match the needs of the Egyptian market, and the economy is small, weak and insufficiently industrialized Instead of being something productive, the population growth is a barrel of explosives. It also depends on how resources are managed and distributed throughout the population. The resources to be considered when evaluating whether an ecological niche is overpopulated include clean water , clean air, food, shelter, warmth, and other resources necessary to sustain life. If the quality of human life is addressed, there may be additional resources considered, such as medical care, education, proper sewage treatment , waste disposal and energy supplies. Overpopulation places competitive stress on the basic life sustaining resources, [] leading to a diminished quality of life. With the global population at about 7. Weather patterns, elevation, and climate all contribute to uneven distribution of fresh drinking water. Without clean water, good health is not a viable option. Besides drinking, water is used to create sanitary living conditions and is the basis of creating a healthy environment fit to hold human life. In addition to drinking water, water is also used for bathing, washing clothes and dishes, flushing toilets, a variety of cleaning methods, recreation, watering lawns, and farm irrigation. Irrigation poses one of the largest problems, because without sufficient water to irrigate crops, the crops die and then there is the problem of food rations and starvation. In addition to water needed for crops and food, there is limited land area dedicated to food production, and not much more that is suitable to be added. Arable land, needed to sustain the growing population, is also a factor because land being under or over cultivated easily upsets the delicate balance of nutrition supply. There are also problems with location of arable land with regard to proximity to countries and relative population Bashford Access to nutrition is an important limiting factor in population sustainability and growth. No increase in arable land added to the still increasing human population will eventually pose a serious conflict. Although plants produce 54 billion metric tons of carbohydrates per year, when the population is expected to grow to 9 billion by , the plants may not be able to keep up Biello. Food supply is a primary example of how a resource reacts when its carrying capacity is exceeded. By trying to

grow more and more crops off of the same amount of land, the soil becomes exhausted. Because the soil is exhausted, it is then unable to produce the same amount of food as before, and is overall less productive. Therefore, by using resources beyond a sustainable level, the resource become nullified and ineffective, which further increases the disparity between the demand for a resource and the availability of a resource. There must be a shift to provide adequate recovery time to each one of the supplies in demand to support contemporary human lifestyles. There is a need to develop renewable energy resources. Scientific Challenges in the Coming Century. In a study, they concluded that "there are not and will never be too many people for the planet to feed" according to The Independent. A large expansion of agriculture to provide growing populations with improved diets is likely to lead to further deforestation.

Chapter 2 : Population controls 'will not solve environment issues' - BBC News

While the interconnected problems of population growth and environmental issues seem overwhelming, it is important to remember that humans can make changes that positively impact the planet. One good starting point is understanding and applying the concept of sustainability, which is the opposite of resource depletion.

See other articles in PMC that cite the published article. Abstract The interactions between human population dynamics and the environment have often been viewed mechanistically. This review elucidates the complexities and contextual specificities of population-environment relationships in a number of domains. It explores the ways in which demographers and other social scientists have sought to understand the relationships among a full range of population dynamics e. The chapter briefly reviews a number of the theories for understanding population and the environment and then proceeds to provide a state-of-the-art review of studies that have examined population dynamics and their relationship to five environmental issue areas. The review concludes by relating population-environment research to emerging work on human-environment systems. In , the U. National Academy of Sciences published *The Growth of World Population 7* , a report that reflected scientific concern about the consequences of global population growth, which was then reaching its peak annual rate of two percent. In , Paul Ehrlich published *The Population Bomb 8* , which focused public attention on the issue of population growth, food production, and the environment. Clearly, efforts to understand the relationship between demographic and environmental change are part of a venerable tradition. Yet, by the same token, it is a tradition that has often sought to reduce environmental change to a mere function of population size or growth. Indeed, an overlay of graphs depicting global trends in population, energy consumption, carbon dioxide CO₂ emissions, nitrogen deposition, or land area deforested has often been used to demonstrate the impact that population has on the environment. Although we start from the premise that population dynamics do indeed have an impact on the environment, we also believe that monocausal explanations of environmental change that give a preeminent place to population size and growth suffer from three major deficiencies: They oversimplify a complex reality, they often raise more questions than they answer, and they may in some instances even provide the wrong answers. As the field of population-environment studies has matured, researchers increasingly have wanted to understand the nuances of the relationship. In the past two decades demographers, geographers, anthropologists, economists, and environmental scientists have sought to answer a more complex set of questions, which include among others: How do specific population changes in density, composition, or numbers relate to specific changes in the environment such as deforestation, climate change, or ambient concentrations of air and water pollutants? How do environmental conditions and changes, in turn, affect population dynamics? How do intervening variables, such as institutions or markets, mediate the relationship? And how do these relationships vary in time and space? They have sought to answer these questions armed with a host of new tools geographic information systems, remote sensing, computer-based models, and statistical packages and with evolving theories on human-environment interactions. This review explores the ways in which demographers and other social scientists have sought to understand the relationships among a full range of population dynamics e. With the exception of the energy subsection, the focus is largely on micro- and mesoscale studies in the developing world. This is not because these dynamics are unimportant in the developed worldâ€”on the contrary, per capita environmental impacts are far greater in this region see the text below on global population and consumption trends â€”but rather because this is where much of the research has focused We have surveyed a wide array of literature with an emphasis on peer-reviewed articles from the past decade, but given the veritable explosion in population-environment research, we hasten to add that this review merely provides a sampling of the most salient findings. The chapter begins with a short review of the theories for understanding population and the environment. It then proceeds to provide a state-of-the-art review of studies that have examined population dynamics and their relationship to the following environmental issue areas: In the concluding section, we relate population-environment research to the emerging understanding of complex human-environment systems. The future size of world population is projected on the basis of assumed trends

in fertility and mortality. Current world population stands at 6 billion. The revision of the United Nations World Population Prospects presents a medium variant projection by 2050 of 9 billion. All of the projected growth is expected to occur in the developing world increasing from 5 billion. Africa, which has the fastest growing population of the continents, is projected to more than double the number of its inhabitants in the next 43 years from 1 billion to approximately 2 billion. Globally, fertility is assumed to decline to 2.1. The medium variant is bracketed by a low-variant projection of 7 billion. Fertility in the former is assumed to be half a child lower than the medium variant, and in the latter, it is assumed to be half a child higher. Consumption trends are somewhat more difficult to predict because they depend more heavily than population projections on global economic conditions, efforts to pursue sustainable development, and potential feedbacks from the environmental systems upon which the global economy depends for resources and sinks. Nevertheless, several indicators of consumption have grown at rates well above population growth in the past century: Global GDP is 20 times higher than it was in 1950, having grown at a rate of 2.5%. In the case of CO₂ emissions and footprints, the per capita impacts of high-income countries are currently 6 to 10 times higher than those in low-income countries. As far as the future is concerned, barring major policy changes or economic downturns, there is no reason to suspect that consumption trends will change significantly in the near term. Long-term projections suggest that economic growth rates will decline past owing to declining population growth, saturation of consumption, and slower technological change. Here we review the most prominent theories in the field of population and environment. The introduction briefly touched on the work of Malthus, whose theory still generates strong reactions years after it was first published. Adherents of Malthus have generally been termed neo-Malthusians. Neo-Malthusianism underpins the Club of Rome World Model mentioned above and implicitly or explicitly underlies many studies and frameworks. The widely cited IPAT formulation in which environmental impacts I are the product of population P , affluence A , and technology T is implicitly framed in neo-Malthusian terms, although not all research using the identity is Malthusian in approach. IPAT itself has been criticized because it does not account for interactions among the terms. Although often depicted as being in opposition to Malthusianism, Malthus himself acknowledged that agricultural output increases with increasing population density just not fast enough, and Boserup acknowledged that there are situations under which intensification might not take place. Cornucopian theories espoused by some neoclassical economists stand in sharper contrast to neo-Malthusianism because they posit that human ingenuity through the increased supply of more creative people and market substitution as certain resources become scarce will avert future resource crises. In this line of thinking, market failures and inappropriate technologies are more responsible for environmental degradation than population size or growth, and natural resources can be substituted by man-made ones. Political ecology also frequently informs the population-environment literature. Many political ecologists see population and environment as linked only insofar as they have a common root cause, e.g., climate change. Whatever the impact of the migrant on the rainforest, it is merely a symptom of more deeply rooted imbalances. A number of theories often subscribed to by demographers state that population is one of a number of variables that affect the environment and that rapid population growth simply exacerbates other conditions such as bad governance, civil conflict, wars, polluting technologies, or distortionary policies. Some also group IPAT in this category because population is only one of the three variables contributing to environmental impacts. Many theories in the field of population and environment are built on theoretical contributions from a number of fields. A case in point is the vicious circle model (VCM), which attempts to explain sustained high fertility in the face of declining environmental resources. In this model, it is hypothesized that there are a number of positive feedback loops that contribute to a downward spiral of population growth, resource depletion, and rising poverty (see the land degradation section). At the simplest level, the model is neo-Malthusian, but it also owes a debt to a number of other theories. First, it builds on the intergenerational wealth flows theory from demography, which holds that high fertility in traditional societies is beneficial to older generations owing to the net flow of wealth from children to parents over the course of their lifetimes. It also borrows from a demographic theory that describes fertility as an adjustment to risk, which argues that in situations where financial and insurance markets and government safety nets are poorly developed, children serve as old-age security. It is important to note that population-environment theories may

simultaneously operate at different scales, and thus could all conceivably be correct. But many scientists—neo-Malthusian or not—are justifiably concerned with the impact that even the current 6. Although theory may seem dry and academic, theoretical frameworks can be important guides to action. A good theory helps to develop well-targeted policies. In the case of neo-Malthusianism, population growth is the primary problem, and the solution is population programs. In the case of cornucopianism, market failures are the primary problem, and the solution is to fix them. For political ecologists, inequalities at different scales are the main problem, and policies should address those inequalities. Multivariable theories offer few magic bullets but do underscore the need for action on multiple fronts to bring about sustainability. Unfortunately, many theories in the realm of population and the environment have not been subjected to the level of rigorous empirical testing that would allow them to be categorized as robust. This is partly because the linkages are complex and difficult to disentangle. Fortunately for the field as a whole, the picture is beginning to change, and a number of studies at the microlevel have used robust statistical methods and multilevel modeling in order to test theories such as the VCM. We now turn to a review of the five issue areas. We focus largely on peer-reviewed articles published in the past decade with an occasional reference to important earlier work.

Land-Cover Change and Deforestation The conversion of natural lands to croplands, pastures, urban areas, reservoirs, and other anthropogenic landscapes represents the most visible and pervasive form of human impact on the environment. We can conclude from this that large-scale land-cover change is largely a rural phenomenon, but many of its drivers can be traced to the consumption demands of the swelling urban middle classes. As with the demographic and development transitions, the world remains divided in various stages of the land-use transition (Figure 1). Although the developed nations have achieved replacement

Chapter 3 : Population growth - Wikipedia

Many people worry that unchecked population growth will eventually cause an environmental catastrophe. This is an understandable fear, and a quick look at the circumstantial evidence certainly shows that as our population has increased, the health of our environment has decreased.

In many ways, it is similar to half-life. But instead of the time it takes for half the isotopes to decay, it is the time it takes for a known quantity to double. Subject to change Students especially those in introductory classes may have a difficult time understanding why predictions of population growth are difficult to make and constantly debated. To help them understand the difficulty of prediction have them think about the complex variables that must be considered when predicting population growth. It may be fairly obvious to students that calculation of the rate of population growth can be expressed in the following equation: However, students may not have considered the factors that can influence both birth and death rates. Do you think these things are constant throughout time? What other "variables" could change them? Hide age structure of the population - the number of women of child bearing age affects the rate of population growth. Access to immunizations, family planning and birth control are also important to the overall picture of population growth. Unfortunately, standards of living are difficult to raise in areas where population growth is high - this creates a negative feedback loop that is difficult for some countries to get out of. For example, the bubonic plague decimated Europe in the 14th century - the population of Europe was cut nearly in half by There are many more variables that can affect change in the population and its growth - have your students brainstorm about other factors that affect the rate and prediction of population growth. Wide open spaces can be hard to find The concept of population density is sometimes difficult for students to grasp. Population density can be calculated by dividing the total population of a city or country by its area. To give them a sense of perspective, I try to give them a sense of what it is like to live in other places. Other places of interest include: Estimates of population density by city vary considerably but the general idea is that most small cities in the U. I also use a story about a friend of mine who moved from China to the U. When he got to Atlanta, he was very uncomfortable because he felt there was so much open space. In Wuhan, when he was in a public place, he was always surrounded by people - people bumping into him, people talking to him, people streaming along the street. He would often go to a mall in Atlanta just to be around people. In contrast, many Americans become uncomfortable when in large crowds. A friend of mine traveled to Japan and tells a story of standing in line at the airport with the Japanese gentleman behind her pushing her with her body while she strained not to touch the person in front of her in line. Culturally, we deal with population density problems by changing our concept of "personal space". In many parts of the U.

Chapter 4 : How small families can help end global warming and climate change

Scholars, political leaders, and experts in international development issues offer their responses to the need for up-to-date information about the linkages between population growth and three significant environmental issues: global warming, land use, and natural resource management.

Print Advertisement In an era of changing climate and sinking economies, Malthusian limits to growth are back—and squeezing us painfully. Whereas more people once meant more ingenuity, more talent and more innovation, today it just seems to mean less for each. Less water for every cattle herder in the Horn of Africa. The United Nations projects there will be more than four billion people living in nations defined as water-scarce or water-stressed by , up from half a billion in . Less land for every farmer already tilling slopes so steep they risk killing themselves by falling off their fields. At a bit less than six tenths of an acre, global per capita cropland today is little more than half of what it was in , and more than million people are hungry. Less capacity in the atmosphere to accept the heat-trapping gases that could fry the planet for centuries to come. Scarcer and higher-priced energy and food. A close look at this problem is sobering: The low-consuming billions of the developing world would love to consume as Americans do, with similar disregard for the environment—and they have as much of a right to do so. These facts suggest that the coming ecological impact will be of a scale that we will simply have to manage and adapt to as best we can. Population growth constantly pushes the consequences of any level of individual consumption to a higher plateau, and reductions in individual consumption can always be overwhelmed by increases in population. The simple reality is that acting on both, consistently and simultaneously, is the key to long-term environmental sustainability. The sustainability benefits of level or falling human numbers are too powerful to ignore for long. Population concerns may lurk within the public anger over illegal immigration or over the unwed California mother of octuplets earlier this year. You are more likely to read about population growth in a letter to the editor than in a news story or editorial. When President-elect Barack Obama pledged in late to bring U. The European Union, after all, had committed itself to 20 percent reductions from levels. Because of much more rapid population growth than in the E. Any pledges to lower emissions by a uniform percentage among industrial countries will be much harder for the U. The bitterness of the immigration debate has helped keep U. In industrial countries outside of North America, however, population is creeping back into public and even political consciousness. And the concern in the U. Blog comments on his remarks, most of them supportive, soared into the thousands. Meanwhile, in Australia, as summer temperatures hovered near degrees Fahrenheit 47 degrees Celsius and murderous flames converted forests into carbon dioxide, a new book entitled *Overloading Australia: Would they be wise to do so?* A Number of Us Two big questions present themselves as population reemerges from the shadows: Can any feasible downshift in population growth actually put the environment on a more sustainable path? And if so, are there measures that the public and policy makers would support that could actually bring about such a change? What matters to the environment are the sums of human pulls and pushes, the extractions of resources and the injections of wastes. When these exceed key tipping points, nature and its systems can change quickly and dramatically. But the magnitudes of environmental impacts stem not just from our numbers but also from behaviors we learn from our parents and cultures. Broadly speaking, if population is the number of us, then consumption is the way each of us behaves. In this unequal world, the behavior of a dozen people in one place sometimes has more environmental impact than does that of a few hundred somewhere else. Consider how these principles relate to global warming. The greenhouse gases already released into the atmosphere are likely to bring us quite close to the 3. Already the earth is experiencing harsher droughts, fiercer storms and higher sea levels. If the scientists are right, these impacts will worsen for decades or centuries. The oceans, for example, have yet to come into equilibrium with the extra heat-trapping capacity of the atmosphere. As the oceans continue to warm, so will the land around them. If world population had stayed stable at roughly million people—a number that demographers believe characterized humanity from the birth of Christ to A. But instead we kept growing our numbers, which are projected to reach 9. Greenhouse gas release has been linked overwhelmingly, at least up until recently, to the

high-consumption habits of the industrial nations. All-Consuming Passions What part can the size of the human race play in finding a happy ending to this morality play? Population scenarios cannot directly address the inequity in emissions patterns—but they are far from unimportant. Countries with the highest emissions per capita tend to have smaller families on average, whereas those with low emissions per capita tend to have larger ones. Americans, for example, consumed 8. These figures somewhat distort the gap because they exclude biomass and other noncommercial forms of energy, for which data are unreliable. So while India gained 17 million people in that year and the U. With such large disparities, the climate would be better served if the Americans emulated Indian consumption than if India emulated U. For a variety of reasons, not quite. Population is not a contrasting force to consumption but something very close to its parent. Alone, each of us has no significant impact on the planet, even when our collective behavior overwhelms its natural processes. Historically, population has grown fastest when per capita consumption is modest. Later, consumption tends to explode on the base of a population that is large, but it is by then growing more slowly. Throughout the 19th century, the U. That century of rapid growth helped to make 21st-century America with million people now a consumption behemoth. The same one-two punch of population growth followed by consumption growth is now occurring in China 1. Per capita commercial energy use has been growing so rapidly in both countries or at least it was through on the eve of the economic meltdown that if the trends continue unabated the typical Chinese will outconsume the typical American before , with Indians surpassing Americans by Moreover, because every human being consumes and disposes of multiple natural resources, a birth that does not occur averts consumption impacts in every direction. A person reducing her carbon footprint, conversely, does not automatically use less water. A wind turbine displaces coal-fired electricity but hardly prevents the depletion of forests now disappearing in the tropics at the rate of one Kentucky-size swath a year or fisheries at current depletion rates facing exhaustion by the middle of the century. But unlike wind turbines, humans reproduce themselves. So every smaller generation means that the multipliers of consumption linked to population also shrink on into the future. With respect to saving the planet, over a few short years it is hard for smaller families to beat sharp reductions in per capita consumption. Since the early s, however, published calculations have demonstrated that slower population growth over decades yields significant reductions of greenhouse gas emissions even in countries where per capita fossil-fuel consumption is modest. Slower population growth that leads to eight billion people in rather than to the currently projected 9. The subsequent savings in emissions would grow year by year ever afterward—while the billion-plus fewer people would need less land, forest products, water, fish and other foodstuffs. Those improvements still would not be enough on their own to avert significant climate change. If two billion automobiles getting 30 miles per gallon traveled only 5, miles a year instead of 10,, that change would save another billion tons of carbon emissions. So would replacing coal-fired power plants that produce 1. But without a population that stops growing, comparable technology improvements or lifestyle downshifts will be needed indefinitely to keep greenhouse gas emissions sustainable. The complications that population growth poses to every environmental problem are not to be dismissed. In fact, they are accepted and understood best by the governments of poorer countries, where the impacts of dense and rapidly growing populations are most obvious. During the past few years, most of the reports that developing countries have filed with the U. Instruments of Policy A commonsense strategy for dealing with rising environmental risk would be to probe every reasonable opportunity for shifting to sustainability as quickly, easily and inexpensively as possible. No single energy strategy—whether nuclear, efficiency, wind, solar or geothermal—shows much promise on its own for eliminating the release of carbon dioxide into the air. Obstacles such as high up-front costs hamper most of those energy strategies even as part of a collective fix for the climate problem. No single change in land use will turn soils and plants into net absorbers of heat-trapping gases. But the more obvious reason is the discomfort most of us feel in grappling with the topics of sex, contraception, abortion, immigration and family sizes that differ by ethnicity and income. What in the population mix is not a hot button? And so critics from left, right and the intellectual center gang up on the handful of environmentalists and other activists who try to get population into national and global discussions. Yet newly released population data from the U. Even if net immigration ended tomorrow, continuation of that fertility rate would guarantee further growth in U. Those who do consider

population to be a key to the problem typically say little about which policies would spare the planet many more billions of people. Should we restructure tax rates to favor small families? Propagandize the benefits of small families for the planet? Reward family-planning workers for clients they have sterilized? Each of those steps alone or in combination might help bend birthrates downward for a time, but none has proved to affect demographic trends over the long term or, critically, to gain and keep public support. And how can we reduce consumption? Ideas such as cap-and-trade plans for limiting greenhouse gas emissions and allowing companies to trade emission rights are based on the same principle: Governments can also eliminate subsidies of polluting behavior, an approach that is more palatable—except to the often powerful interests that benefit from the subsidies. Or governments can subsidize low consumption through tax deductions and credits, but the funds to do so on the needed scale will likely be increasingly scarce. If only something comparable could be imagined to shrink consumption. The strategy that nations signed onto at a U. That approach, which powerfully supports reproductive liberty, might sound counterintuitive for shrinking population growth, like handing a teenager the keys to the family car without so much as a lecture. But the evidence suggests that what women want—and have always wanted—is not so much to have more children as to have more for a smaller number of children they can reliably raise to healthy adulthood. More than million women in developing countries are sexually active without effective modern contraception even though they do not want to be pregnant anytime soon, according to the Guttmacher Institute, a reproductive health research group. By the best estimates, some 80 million pregnancies around the world are unintended.

Chapter 5 : Scientists more worried than public about world's growing population | Pew Research Cen

*Does the simultaneous occurrence of population growth and environmental decline over the past century indicate that more people translate into greater environmental degradation? In *The Environmental Implications of Population Dynamics*, Lori Hunter synthesizes current knowledge about the influence of population dynamics on the environment.*

Effects of Population Growth on our Environment Article shared by: Effects of Population Growth on our Environment! One of the factors responsible for environment degradation is population growth or population density. In particular, population density plays the most important role in shaping the socio-economic environment. Its effects are felt on the natural environment also. Due to his destructive activities, man has dumped more and more waste in environment. As the man-made waste is not transformed, it causes degradation and the capacity of environment to absorb more waste is reduced. Further, waste leads to air and water pollution. Due to his destructive activities, man has extracted more and more minerals from the earth. Animals have been hunted and plants have disappeared. There has been loss of biodiversity. These have led to ecological imbalance. Man has established new housing colonies. National highways and hydropower projects have been built and forests have been wiped out. These destructive activities have increased and led to ecological imbalance. Rapid growth of population has led to urbanization which has adversely affected environment. Due to population pressure, natural resources in the cities are depleted at a fast rate due to population pressure. Moreover, population does not have proper sanitation facilities and pure drinking water. As a result, the health of the people is adversely affected. No doubt, urbanization reduces pressure on the rural environment, but it brings with it environmental damages through industrial growth, emissions and wastes. Underdeveloped countries are following the policy of heavy industrialisation which is causing environmental degradation. The establishment of such industries as fertilizers, iron and steel, chemicals and refineries have led to land, air and water pollution. Intensive farming and excessive use of fertilizers and pesticides have led to over-exploitation of land and water resources. These have led to land degradation in the form of soil erosion, water logging and salination. Environmental degradation is also due to transport development in the different parts of the world. The automobiles release huge quantities of poisonous gases such as carbon monoxide, nitrogen oxides and hydrocarbons. The development of ports and harbours have led to oil spills from ships adversely affecting fisheries, coral reefs, mangroves and landscapes. Climatic changes are irregular due to green house gases. The thin skin of air that surrounds the planet is being affected by human activities as never before. Urban people are still being exposed to unaccepted levels of toxic pollutants. Further, forests are still being degraded by acid deposition generated by faraway industries, and greenhouse gases continue to accumulate in the atmosphere. Environmental degradation not only harms health but also reduces economic productivity. Dirty water, inadequate sanitation, air pollution and land degradation cause serious diseases on an enormous scale in developing countries like India. These, in turn, reduce the productivity levels in the country. To take specific instances, water pollution has led to declining fisheries in rivers, ponds and canals in both urban and rural areas. Water shortages have reduced economic activity in towns, and cities and villages. Soil and hazardous wastes have polluted ground water resources which cannot be used for agricultural and industrial production. Soil degradation leading to soil erosion, drought, etc. Deforestation has led to soil erosion and consequent loss of sustainable logging potential. Loss of bio-diversity has resulted in the loss of genetic resources. Last but not the least, atmospheric changes have given rise to disruption of marine food chain, damages to coastal infrastructure due to sea-rise and regional changes in agriculture productivity due to hurricanes in seas. Thus, environmental degradation undermines economic productivity of a nation. Presently, environmental pollution is caused by old technology which releases gases and pollutants causing chemical and industrial pressure on environment. Impact of Environment on Population: Polluted environment also affects adversely the health of people. Agricultural and industrial development along with urbanisation and spread of infrastructure combined with population growth has led to environmental degradation. Environmental degradation harms human health, reduces economic productivity and leads to the loss of amenities. The damaging effects of economic development on environmental degradation can be reduced by a judicious

choice of economic and environmental policies and environmental investments. We discuss some policy measures as under:

Control of Population Growth: The rate of population growth should be curtailed through effective family planning measures. This is essential because the proportion of total population in the labour force will increase further in the years to come as a result of changes in the age structure of the population. The shifting of labour force from the rural to the secondary sector requires increase in agricultural productivity. Increased agricultural productivity helps in meeting the demand for raw materials of the expanding manufacturing sector. With increased productivity, less workers are required to produce raw materials for industry and food-grains for the population. It also increases agricultural surplus thereby raising saving and investment for economic development. So concerted efforts are needed to increase agricultural productivity through technological advancement. This will ultimately lead to commercialisation of agriculture and production for exports, thereby earning foreign exchange for further development. The aim of population control is not only to bring about a decline in fertility rates but also to improve the quality of life of the people. These are possible through rapid economic development. It is not an illusion to believe that a reduction in population growth will automatically raise living standards. In fact, an effective family planning policy should be integrated with measures to accelerate economic development. As the Ninth Five Year Plan observes: This has been attributed to the increase in productivity due to development and utilisation of innovative technologies by the young educated population who formed the majority of the growing population. These will help the country to achieve economic transition from low economic growth low per capita income to high income growth and to high per capita income. This will, in turn, raise the quality of life of the people and the population will be controlled automatically.

Improving Health and Nutrition: The food and nutrition security for the weaker sections in a developing country should not be considered as issues in the Nutrition Science but should be considered as part of right to work, right to health, right to education, right to information and right of the poor. In such a country, there are agricultural, health, population, nutrition, children and education policies. On the other hand, there are fiscal and budget revisions, exports, imports, taxation, price wage, employment policies and policy related to subsidies. Ultimately, all these policies affect life of the poor, their food and nutrition security and health. As a leading nutritionist C. Guarantee of good nutrition and absence of hunger are not the same thing. Our first effort should be towards removing hunger of the poor, but our long-term goal should be to provide maximum nutrition to our people which is useful in bringing out their hereditary talents. Nutrition security is more important than food security. Nutrition security includes making our food base wider and varietal. Especially the people of the weaker sections of the society who do not take adequate advantage of health, family welfare and nutrition services, should be made aware of these facilities so that their health and nutrition status can be improved. Such development projects should be started which provide greater employment opportunities to the poor. The government should expand health and family planning services and education so as to reach the poor that will help reduce population growth. Further, making investments in providing civic amenities like the supply of drinking water, sanitation facilities, alternate habitats in place of slums, etc. To reduce environmental degradation at no financial cost to the government, subsidies for resource use by the private and public sectors should be removed. Subsidies on the use of electricity, fertilisers, pesticides, diesel, petrol, gas, irrigation water, etc. Subsidies to capital intensive and highly polluting private and public industries lead to environmental degradation. Removing or reducing subsidies will bring both economic and environmental benefits to the country.

Clarifying and Extending Property Rights: Lack of property rights over excessive use of resources leads to degradation of environment. Clarifying and assigning ownership titles and tenurial rights to private owners will solve environmental problems. Places where the use of common lands, forests, irrigation systems, fisheries, etc. Besides regulator measures, there is urgent need for adopting market based approaches for the protection of environment. They aim at pointing to consumers and industries about the cost of using natural resources on environment. These costs are reflected in the prices paid for goods and services so that industries and ultimately the consumers are guided by them to reduce air and water pollution. Regulatory polices also help in reducing environmental degradation. Regulators have to make decisions regarding prices, quantity and technology. In making decisions, they have to choose between the quantity or the price of pollution or resource use of technologies.

The regulating authority has also to decide whether policies should target the environmental problem directly or indirectly. It lays down technical standards and regulations and charges on air, water and land pollutants. Regulators should be impartial in applying environmental standards to both public and private sector polluters or resources users. Like regulatory policies, economic incentives relate to price, quantity and technology. Incentives are usually in the form of variable fees to resource users for the quantity of pollutants in air, water and land use.

Chapter 6 : 15 Current Environmental Problems That Our World is Facing - Conserve Energy Future

The rates of population growth are not the same, of course, in all parts of the world. Among the industrialized countries, Japan and most of the countries of Europe are now growing relatively slowly—doubling their populations in 50 to years.

There is no denying that. However, as our environment changes, so does the need to become increasingly aware of the problems that surround it. With a massive influx of natural disasters, warming and cooling periods, different types of weather patterns and much more, people need to be aware of what types of environmental problems our planet is facing. Global warming has become an undisputed fact about our current livelihoods; our planet is warming up and we are definitely part of the problem. All across the world, people are facing a wealth of new and challenging environmental problems every day. Some of them are small and only affect a few ecosystems, but others are drastically changing the landscape of what we already know. Our planet is poised at the brink of a severe environmental crisis. Current environmental problems make us vulnerable to disasters and tragedies, now and in the future. We are in a state of planetary emergency, with environmental problems piling up high around us. Unless we address the various issues prudently and seriously we are surely doomed for disaster. Current environmental problems require urgent attention. Pollution of air, water and soil require millions of years to recoup. Industry and motor vehicle exhaust are the number one pollutants. Heavy metals, nitrates and plastic are toxins responsible for pollution. While water pollution is caused by oil spill, acid rain, urban runoff; air pollution is caused by various gases and toxins released by industries and factories and combustion of fossil fuels; soil pollution is majorly caused by industrial waste that deprives soil from essential nutrients. Climate changes like global warming is the result of human practices like emission of Greenhouse gases. The population of the planet is reaching unsustainable levels as it faces shortage of resources like water, fuel and food. Population explosion in less developed and developing countries is straining the already scarce resources. Intensive agriculture practiced to produce food damages the environment through use of chemical fertilizer, pesticides and insecticides. Overpopulation is one of the crucial current environmental problem. Natural resource depletion is another crucial current environmental problems. Fossil fuel consumption results in emission of Greenhouse gases, which is responsible for global warming and climate change. Globally, people are taking efforts to shift to renewable sources of energy like solar, wind, biogas and geothermal energy. The cost of installing the infrastructure and maintaining these sources has plummeted in the recent years. The over consumption of resources and creation of plastics are creating a global crisis of waste disposal. Developed countries are notorious for producing an excessive amount of waste or garbage and dumping their waste in the oceans and, less developed countries. Nuclear waste disposal has tremendous health hazards associated with it. Plastic, fast food, packaging and cheap electronic wastes threaten the well being of humans. Waste disposal is one of urgent current environmental problem. Climate change is yet another environmental problem that has surfaced in last couple of decades. It occurs due to rise in global warming which occurs due to increase in temperature of atmosphere by burning of fossil fuels and release of harmful gases by industries. Climate change has various harmful effects but not limited to melting of polar ice, change in seasons, occurrence of new diseases, frequent occurrence of floods and change in overall weather scenario. Human activity is leading to the extinction of species and habitats and and loss of bio-diversity. Eco systems, which took millions of years to perfect, are in danger when any species population is decimating. Balance of natural processes like pollination is crucial to the survival of the eco-system and human activity threatens the same. Another example is the destruction of coral reefs in the various oceans, which support the rich marine life. Our forests are natural sinks of carbon dioxide and produce fresh oxygen as well as helps in regulating temperature and rainfall. Deforestation simply means clearing of green cover and make that land available for residential, industrial or commercial purpose. It is a direct impact of excessive production of CO₂. The main impact is on shellfish and plankton in the same way as human osteoporosis. Once these toxic gases reach the upper atmosphere, they cause a hole in the ozone layer, the biggest of which is above the Antarctic. Ozone layer is valuable because it prevents harmful UV radiation from reaching the earth. This is one of the most important current environmental problem. Acid rain

occurs due to the presence of certain pollutants in the atmosphere. Clean drinking water is becoming a rare commodity. Water is becoming an economic and political issue as the human population fights for this resource. One of the options suggested is using the process of desalinization. Industrial development is filling our rivers seas and oceans with toxic pollutants which are a major threat to human health. Urban sprawl refers to migration of population from high density urban areas to low density rural areas which results in spreading of city over more and more rural land. Urban sprawl results in land degradation, increased traffic, environmental issues and health issues. The ever growing demand of land displaces natural environment consisting of flora and fauna instead of being replaced. The current environmental problems pose a lot of risk to health of humans, and animals. Dirty water is the biggest health risk of the world and poses threat to the quality of life and public health. Run-off to rivers carries along toxins, chemicals and disease carrying organisms. Pollutants cause respiratory disease like Asthma and cardiac-vascular problems. High temperatures encourage the spread of infectious diseases like Dengue. Genetic modification of food using biotechnology is called genetic engineering. Genetic modification of food results in increased toxins and diseases as genes from an allergic plant can transfer to target plant. Genetically modified crops can cause serious environmental problems as an engineered gene may prove toxic to wildlife. Another drawback is that increased use of toxins to make insect resistant plant can cause resultant organisms to become resistant to antibiotics. The need for change in our daily lives and the movements of our government is growing. If humans continue moving forward in such a harmful way towards the future, then there will be no future to consider. By raising awareness in your local community and within your families about these issues, you can help contribute to a more environmentally conscious and friendly place for you to live.

Chapter 7 : Population Growth

Restricting population growth will not solve global issues of sustainability in the short term, new research says. A worldwide one-child policy would mean the number of people in remained.

While there has been a steady increase of population growth during the past two or three centuries, it has been especially rapid during the past 20 years. To appreciate the pace of population growth we should recall that world population doubled in about 1, years from the time of Christ until the middle of the 17th century; it doubled again in about years, doubled again in less than , and, if the current rate of population increase were to remain constant, would double every 35 years. Moreover, this rate is still increasing. To be sure, the rate of increase cannot continue to grow much further. Even if the death rate were to fall to zero, at the present level of human reproduction the growth rate would not be much in excess of three and one-half per cent per year, and the time required for world population to double would not fall much below 20 years. Although the current two per cent a year does not sound like an extraordinary rate of increase, a few simple calculations demonstrate that such a rate of increase in human population could not possibly continue for more than a few hundred years. The Growth of World Population: Analysis of the Problems and Recommendations for Research and Training. The National Academies Press. If the present world population should continue to increase at its present rate of two per cent per year, then, within two centuries, there will be more than billion people. Calculations of this sort demonstrate without question not only that the current continued increase in the rate of population growth must cease but also that this rate must decline again. There can be no doubt concerning this long-term prognosis: Either the birth rate of the world must come down or the death rate must go back up. Among the industrialized countries, Japan and most of the countries of Europe are now growing relatively slowly—doubling their populations in 50 to years. Another group of industrialized countries—the United States, the Soviet Union, Australia, New Zealand, Canada, and Argentina—are doubling their populations in 30 to 40 years, approximately the world average. Annual growth rates in all these areas range from one and one-half to three and one-half per cent, doubling in 20 to 40 years. The rates of population growth of the various countries of the world are, with few exceptions, simply the differences between their birth rates and death rates. International migration is a negligible factor in rates of growth today. Thus, one can understand the varying rates of population growth of different parts of the world by understanding what underlies their respective birth and death rates. Page 10 Share Cite Suggested Citation: A simplified picture of the population history of a typical western European country is shown in Figure 1. Schematic presentation of birth and death rates in western Europe after The time span varies roughly from 75 to years. Page 11 Share Cite Suggested Citation: The jagged interval in the early death rate and the recent birth rate is intended to indicate that all the rates are subject to substantial annual variation. The birth rate in was about 35 per 1, population and the average number of children ever born to women reaching age 45 was about five. The death rate in averaged 25 to 30 per 1, population although, as indicated, it was subject to variation because of episodic plagues, epidemics, and crop failures. The average expectation of life at birth was 35 years or less. The current birth rate in western European countries is 14 to 20 per 1, population with an average of two to three children born to a woman by the end of childbearing. The death rate is 7 to 11 per 1, population per year, and the expectation of life at birth is about 70 years. The death rate declined, starting in the late 18th or early 19th century, partly because of better transport and communication, wider markets, and greater productivity, but more directly because of the development of sanitation and, later, modern medicine. These developments, part of the changes in the whole complex of modern civilization, involved scientific and technological advances in many areas, specifically in public health, medicine, agriculture, and industry. The immediate cause of the decline in the birth rate was the increased deliberate control of fertility within marriage. The only important exception to this statement relates to Ireland, where the decline in the birth rate was brought about by an increase of several years in the age at marriage combined with an increase of 10 to 15 per cent in the proportion of people remaining single. The average age at marriage rose to 28 and more than a fourth of Irish women remained unmarried at age In other countries, however, such social changes have had either

insignificant or favorable effects on the birth rate. In these countries—England, Wales, Scotland, Scandinavia, the Low Countries, Germany, Switzerland, Austria, and France—the birth rate went down because of the practice of contraception among married couples. It is certain that there was no decline in the reproductive capacity; in fact, with improved health, the contrary is likely. Only a minor fraction of the decline in western European fertility can be ascribed to the invention of modern techniques of contraception. In the first place, very substantial declines in some European countries antedated the invention and mass manufacture of contraceptive devices. There is similar direct evidence for other European countries. In this instance, the decline in fertility was not the result of technical innovations in contraception, but of the decision of married couples to resort to folk methods known for centuries. Thus we must explain the decline in the western European birth rates in terms of why people were willing to modify their sexual behavior in order to have fewer children. Such changes in attitude were doubtless a part of a whole set of profound social and economic changes that accompanied the industrialization and modernization of western Europe. Among the factors underlying this particular change in attitude was a change in the economic consequences of childbearing. In a pre-industrial, agrarian society children start helping with chores at an early age; they do not remain in a dependent status during a long period of education. They provide the principal form of support for the parents in their old age, and, with high mortality, many children must be born to ensure that some will survive to take care of their parents. On the other hand, in an urban, industrialized society, children are less of an economic asset and more of an economic burden. Among the social factors that might account for the change in attitude is the decline in the importance of the family as an economic unit that has accompanied the industrialization and modernization of Europe. In an industrialized economy, the family is no longer the unit of production and individuals come to be judged by what they do rather than who they are. Children leave home to seek jobs and parents no longer count on support by their children in their old age. As this kind of modernization continues, public education, which is essential to the production of a literate labor force, is extended to women, and thus the traditional subordinate role of women is modified. Since the burden of child care falls primarily on women, their rise in status is probably an important element in the development of an attitude favoring the deliberate limitation of family size. Finally, the social and economic changes characteristic of industrialization and modernization of a country are accompanied by and reinforce a rise of secularism, pragmatism, and rationalism in place of custom and tradition. Since modernization of a nation involves extension of deliberate human control over an increasing range of the environment, Page 13 Share Cite Suggested Citation: As the simplified representation in Figure 1 indicates, the birth rate in western Europe usually began its descent after the death rate had already fallen substantially. France is a partial exception. The decline in French births began late in the 18th century and the downward courses of the birth and death rates during the 19th century were more or less parallel. In general, the death rate appears to be affected more immediately and automatically by industrialization. One may surmise that the birth rate responds more slowly because its reduction requires changes in more deeply seated customs. There is in most societies a consensus in favor of improving health and reducing the incidence of premature death. There is no such consensus for changes in attitudes and behavior needed to reduce the birth rate. In short, every country that has changed from a predominantly rural agrarian society to a predominantly industrial urban society and has extended public education to near-universality, at least at the primary school level, has had a major reduction in birth and death rates of the sort depicted in Figure 1. The jagged line describing the variable current birth rate represents in some instances—“notably the United States”—a major recovery in the birth rate from its low point. It must be remembered, however, that this recovery has not been caused by a reversion to uncontrolled family size. In the United States, for example, one can scarcely imagine that married couples have forgotten how to employ the contraceptive Page 14 Share Cite Suggested Citation: We know, in fact, that more couples are skilled in the use of contraception today than ever before. Nevertheless, effective methods of controlling family size are still unknown and unused by many couples even in the United States. The recent increase in the birth rate has been the result largely of earlier and more nearly universal marriage, the virtual disappearance of childless and one-child families, and a voluntary choice of two, three, or four children by a vast majority of American couples. There has been no general return to the very large family of pre-industrial

times, although some segments of our society still produce many unwanted children. Figure 2 presents the trends of birth and death rates in the less-developed areas in a rough schematic way similar to that employed in Figure 1. Note first that the birth rate in the less-developed areas is higher than it was in pre-industrial western Europe. This difference results from the fact that in many less-developed countries almost all women at age 35 have married, and at an average age substantially less than in 18th-century Europe. Second, many of the less-developed areas of the world today are much more densely populated than was western Europe at the beginning of the industrial revolution. Moreover, there are few remaining areas comparable to North and South America into which a growing population could move and which could provide rapidly expanding markets. Finally, and most significantly, the death rate in the less-developed areas is dropping very rapidly—a decline that looks almost vertical compared to the gradual decline in western Europe—and without regard to economic change. The precipitous decline in the death rate that is occurring in the low-income countries of the world is a consequence of the development and application of low-cost public health techniques. Schematic presentation of birth and death rates in less-developed countries, mid-20th century. The steep drop in the death rate from approximately 35 per thousand began at times varying roughly between and from country to country. Instead, the less-developed areas have been able to import low-cost measures of controlling disease, measures developed for the most part in the highly industrialized countries. The use of residual insecticides to provide effective protection against malaria at a cost of no more than 25 cents per capita per annum is an outstanding example. Other innovations include antibiotics and chemotherapy, and low-cost ways of providing safe water supplies and adequate environmental sanitation in villages that in most other ways remain relatively untouched by modernization. The death rate in Ceylon was cut in half in less than a decade, and declines approaching this in rapidity are almost commonplace. The result of a precipitous decline in mortality while the birth rate remains essentially unchanged is, of course, a very rapid acceleration in population growth, reaching rates of three to three and one-half per cent. This extreme rate is undoubtedly due to temporary factors and would stabilize at not more than three per cent. But even at three per cent per year, two centuries would see the population of Mexico grow to about 100 million. Two centuries is a long time, however. Might we not expect that long before years had passed the population of Mexico would have responded to modernization, as did the populations of western Europe, by reducing the birth rate? A positive answer might suggest that organized educational efforts to reduce the birth rate are not necessary. But there is a more immediate problem demanding solution in much less than two centuries: Is the current demographic situation in the less-developed countries impeding the process of modernization itself? One important characteristic is rapid growth, which is the immediate consequence of the large and often growing difference between birth and death rates; the other is the heavy burden of child dependency which results from a high birth rate whether death rates are high or low. A reduced death rate has only a slight effect on the proportion of children in the population, and this effect is in a rather surprising direction. The kinds of mortality reduction that have actually occurred in the world have the effect, if fertility remains unchanged, of reducing rather than increasing the average age of the population. Mortality reduction produces this effect because the largest increases occur in the survival of infants, and, although the reduction in mortality increases the number of old persons, it increases the number of children even more. The result is that the high fertility found in low-income countries produces a proportion of children under fifteen of 40 to 45 per cent of the total population, compared to 25 per cent or less in most of the industrialized countries. What do these characteristics of rapid growth and very large proportions of children imply about the capacity to achieve rapid industrialization? It must be noted that it is probably technically possible in every less-developed area to increase national output at rates even more rapid than the very rapid rates of population increase we have discussed, at least for a few years. The reason at least slight increases in per capita income appear feasible is that the low-income countries can import industrial and agricultural technology as well as medical technology.

Chapter 8 : Population Growth and Environmental Issues - Google Books

Continued world population growth tends to exacerbate both localized and global environmental problems that will demand serious policy responses in the coming century. Despite growing recognition that population is one among several key factors in environmental problems, its role remains controversial.

While the causes are complex, one significant contributor to the problem is population growth. Understanding the relationship between population growth and environmental issues may be the first step toward identifying real solutions. Since populations can grow exponentially, resource depletion can occur rapidly, leading to specific environmental concerns such as global warming, deforestation and decreasing biodiversity. Populations in developed countries trend toward using substantially more resources, while populations in developing countries feel the impacts of environmental problems more quickly. How Population Growth Works The concept of population growth is tricky because populations can grow exponentially – similar to the way a bank or credit card company compounds interest. If you plot this equation, you see a curve arching upward over time as the population increases exponentially, assuming no change in the rate. This concept might be easier to visualize with actual figures. From the beginning of time on Earth to the start of the 20th century, the population of the planet grew from zero to 1. Then, thanks to many factors, the population increased to 6. The result of this depletion is deforestation and loss of biodiversity as humans strip the Earth of resources to accommodate rising population numbers. Population growth also results in increased greenhouse gases, mostly from CO₂ emissions. For visualization, during that same 20th century that saw fourfold population growth, CO₂ emissions increased twelvefold. As greenhouse gases increase, so do climate patterns, ultimately resulting in the long-term pattern called climate change. The Biggest Impacts The use of resources and the impact of environmental issues are not equal around the globe. People in developed countries require substantially more resources to maintain their lifestyles compared with people in developing countries. People in developing countries tend to feel the impacts of environmental problems more acutely, especially if they live in coastal areas directly affected by sea level rise and the extreme weather events that accompany climate change. The most vulnerable populations also experience decreased access to clean water, increased exposure to air pollution and diseases – which may result from decreased biodiversity – and may feel the impact more immediately as local resources including plants and animals deplete. While the interconnected problems of population growth and environmental issues seem overwhelming, it is important to remember that humans can make changes that positively impact the planet. One good starting point is understanding and applying the concept of sustainability, which is the opposite of resource depletion. Sustainability describes a model of resource usage in which the current generation uses only the resources the Earth provides indefinitely like solar or wind power instead of burning fossil fuels to ensure that future generations inherit resources.

Chapter 9 : Human overpopulation - Wikipedia

How does population growth affect people and our environment? This weekly blog presents thoughtful articles about how population affects social and environmental problems like hunger, species extinction, water shortages, and even wars.

Human overpopulation is among the most pressing environmental issues, silently aggravating the forces behind global warming , environmental pollution , habitat loss , the sixth mass extinction , intensive farming practices and the consumption of finite natural resources, such as fresh water, arable land and fossil fuels , at speeds faster than their rate of regeneration. However, ecological issues are just the beginning According to the World Resources Institute , "Freshwater ecosystems " the diverse communities found in lakes, rivers, and wetlands " may be the most endangered of all. Freshwater ecosystems have lost a greater proportion of their species and habitat than ecosystems on land or in the oceans; in addition, they are probably in greater danger of further losses from dams, pollution, overfishing, and other threats. Aldous Huxley predicted in that democracy is threatened due to overpopulation and could give rise to totalitarian style governments and it turns out he was right. Rules and restrictions can be good ideas, but only because they are necessary in order to accommodate the growing populations that are encouraging such policies. Without these policies, the global ecological crisis, and the societal and economic issues that ensue, would be worse than they are today. Examples of such restrictions would be putting limits on water consumption, on driving and on what people can do on their land. Some are good ideas while others may be too invasive, but all are exacerbated by overpopulation. Click to enlarge Increased Global Warming and Climate Change According to the Center for Biological Diversity , "The largest single threat to the ecology and biodiversity of the planet in the decades to come will be global climate disruption due to the buildup of human-generated greenhouse gases in the atmosphere. People around the world are beginning to address the problem by reducing their carbon footprint through less consumption and better technology. But unsustainable human population growth can overwhelm those efforts, leading us to conclude that we not only need smaller footprints, but fewer feet. Every professional scientific society in every field related to the field of climate endorses it. The consensus is unequivocal: The effects of climate change are profound and far-reaching. Center for Biological Diversity. Center for Biological Diversity Click for source Depletion of Natural Resources As the human population continues to explode, finite natural resources, such as fossil fuels , fresh water, arable land, coral reefs and frontier forests , continue to plummet, which is placing competitive stress on the basic life sustaining resources and leading to a diminished quality of life. Each person on Earth now requires a third more land to supply his or her needs than the planet can supply. Furthermore, intensive farming kills beneficial insects and plants , degrades and depletes the very soil it depends on , creates polluted runoff and clogged water systems , increases susceptibility to flooding , causes the genetic erosion of crops and livestock species around the world , decreases biodiversity , and destroys natural habitats. Elevated Crime Rate As human overpopulation drives resources and basic necessities, such as food and water, to become scarcer , there will be increased competitiveness for these resources which leads to elevated crime rates due to drug cartels and theft by people in order to survive. As Aisha Tariq of the Pakistan Times states , "It has been observed that the countries which have balanced population, crime rate is very low in such regions. When people are not provided with the basic necessities, it elevates crime rate. These situations are especially dire for populations in Uganda, Nigeria, and Bangladesh, which will double and, in some cases, even triple over the next 40 years. A child suffering extreme malnutrition in India, According to the World Health Organization , "Every three seconds a young child dies - in most cases from an infectious disease. In some countries, one in five children die before their fifth birthday. Every day 3 people die from malaria - three out of four of them children. Great Apes - the Road Ahead. The effects listed on this page are just some of the main problems associated with or exacerbated by human overpopulation. A comprehensive list of the effects of human overpopulation are beyond compiling and perhaps, comprehension. They extend far and wide and across social, political, economic and environmental divides. This means the amount of these resources per person is declining, in spite of modern

technology. Other massive social and environmental problems Solving these problems will be much less difficult when we stop increasing the number of people affected by them. Two billion people live in poverty, more than the population of the entire planet less than years ago. Today there are more people suffering in misery and starvation in the world than ever before in history.