**JAEI ENVIRONMENTAL CORNER**

## **11 July - World Population Day**

***World Population Day*** is an international awareness campaign celebrated internationally on Monday, 11th July, to increase people’s awareness of worldwide population issues.

The campaign was launched in 1989 by the United Nations Development Programme (UNDP) Governing Council as the global population exceeded five billion on 11th of July 1987. In 2012, the global population was approximately 7,025,071,966, the UNDP **stressed the need to end global poverty and inequality and that** the world’s focus should be on improving the welfare of the people by introducing the *Millennium Development Goals* (MDGs) - eight poverty reduction targets that the international community agreed to strive to attain by 2015. In January 2016, The 17 ***Sustainable Development Goals*** (SDGs) replaced the original 8 Millennium Development Goals.

**Over-Population: A Serious Environmental Problem**

*“There was an old woman who lived in a shoe*

*She had so many children she didn't know what to do*

*She gave them some broth without any bread*

*Then whipped them all soundly and put them to bed.”*

If the old nursery rhyme serves as any indication, people have been concerned about overpopulation for centuries.

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.

It would be difficult to drive down any popular street in this country without seeing some new development. It begs the question: how are we going to get the food to fill all these new supermarkets if the fields keep getting smaller? It seems we are running out of room on this planet of ours, and before we know it, we will way past the maximum carrying capacity for the Earth.

People are in the frame of mind that if we run out of room in one town, we can just simply spread out more. We can move people into areas that are less populated, and we can continue to reproduce and expand at an alarming rate. What most people don’t understand when they continue to build more shops and houses is that we are quickly running out of the natural resources necessary to sustain the population we have right now!

**Fresh Water and Overpopulation**

Fresh water is one of the biggest concerns with overpopulation, and this poses a huge environmental threat.

75% of planet Earth is covered in water. 97.5% of that is ocean and only 2.5% is freshwater. 70% of freshwater is divided into glaciers and ice caps and the remaining 30% into land surface water, such as rivers, lakes, ponds and groundwater. Most of the freshwater resources are either unreachable or too polluted, leaving less than 1% of the world's freshwater, or about 0.003% of all water on Earth, readily accessible for direct human use.

The government sustains the rights to fresh water. There are more people consuming water than is being replaced - demand will exceed supply. In many rural areas where water sources have dried up, only dust remains which in turn pollutes the air with dust particles that further contribute to health problems.

Freshwater ecosystems – the diverse communities found in dams, rivers, and wetlands – may be the most endangered of all. Some 34 percent of fish species, mostly from fresh water, are threatened with extinction. In extent, freshwater ecosystems are quite limited, yet, they are highly diverse and contain a disproportionately large number of species. “

 *“We never know the worth of water till the well is dry.” ~Thomas Fuller*

**Landfills**

For decades, many landfill managers have been emphasizing just how quickly they are running out of space. The more people there are on the planet, the more waste is being produced. Some of this waste is quite toxic, and even landfills which are double-lined are finding that some toxic substances are leaching into the soil and the groundwater supply. This poses even more of a risk to our freshwater supply, and can contribute to the decimation of many species sharing the earth today.

**Biodiversity**

Another problem we face is the lack of biodiversity. As the population grows, there is more demand for certain plants: trees for paper, food, plant fibres for clothing, etc. We thought the solution was to simply re-plant whatever we consume. This has led to problems, however, in biodiversity. Because many of the plants and crops we sow are of the same age and genetic makeup, they are more susceptible to problems from disease and pests. Plants which may have had slightly different genetic makeup may have had a small impact on loss due to disease, but when they are all from the same genetic strain we face the issue of total annihilation of a particular crop. The greater the population, however, the greater the demand for certain crops, meaning less biodiversity.

**Species Extinction**

Humans are currently causing the greatest mass extinction of species since the extinction of the dinosaurs 65 million years ago at rates 1000 to 10,000 times faster than normal. The 2012 update of the IUCN Red List of Threatened Species shows that of the 63,837 species examined worldwide, 19,817 are threatened with extinction - nearly a third of the total. If present trends continue, scientists warn that within a few decades, at least half of all plant and animal species on Earth will be extinct, as a result of climate change, habitat loss, pollution, acidifying oceans, invasive species, over-exploitation of natural resources, overfishing, poaching and human overpopulation. Human overpopulation has been dominating planetary physical, chemical, and biological conditions and limits, with an annual absorption of 42% of the Earth’s terrestrial net primary productivity, 30% of its marine net primary productivity, 50% of its fresh water, 40% of its land devoted to human food production, up from 7% in 1700, 50% of its land mass being transformed for human use and atmospheric nitrogen being fixated by humans than all other natural processes combined. Compared to the natural background rate of one extinction per million species per year, we are now losing 30,000 species per year, or three species per hour, which is faster than new species can evolve.

**Climate Change**

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."* The consensus is unequivocal: human activities are causing climate change. The effects of climate change are profound and far-reaching. Learning the hard way that we can't separate the economy from the ecological systems that support it, climate change, perhaps the greatest challenge and threat humanity has ever faced, has been left largely unchecked by world leaders to continue unabated threatening the basis of civilization itself.

**Depletion of Natural Resources**

As the human population continues to explode, finite natural resources, such as [fossil fuels](http://www.everythingconnects.org/fossil-fuels.html), 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. A study by the UNEP [Global Environment Outlook](http://www.unep.org/geo/geo4.asp), which involves 1,400 scientists and five years’ worth of work to prepare, found that *"Human consumption had far outstripped available resources. Each person on Earth now requires a third more land to supply his or her needs than the planet can supply."* The structure of the world's ecosystems has changed more rapidly in the second half of the twentieth century than at any time in recorded human history, and virtually all of Earth's ecosystems have now been significantly transformed through human actions."

**More Intensive Farming Practices**

Intensive farming practices produce more and cheaper food per acre and animal, which has helped feed a booming human population and may prevent surrounding land from being converted into agricultural land, but has grown to become the biggest threat to the global environment through the loss of ecosystem services and global warming, has led to the emergence of new parasites and re-emergence of parasites previously considered to be 'under control' by creating the conditions for parasite growth and is responsible for 80% of tropical deforestation Furthermore, intensive farming kills beneficial insects and plants, degrades and depletes the very soil it depends on, [creates polluted runoff and clogged water systems](http://wwf.panda.org/what_we_do/footprint/agriculture/impacts/soil_erosion/), increases susceptibility to flooding, causes the genetic erosion of crops and livestock species around the world, decreases biodiversity, and destroys [natural habitats](http://wwf.panda.org/what_we_do/footprint/agriculture/impacts/habitat_loss/).

**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 and possibly to achieve a false living standard.

**Increased Emergence of New Epidemics and Pandemics**

A World Health Organisation report shows that environmental degradation, combined with the growth in world population, is a major cause of the rapid increase in human diseases. Overpopulation exacerbates many social and environmental factors, including overcrowded living conditions, pollution, malnutrition and inadequate or non-existent health care, which wreak havoc on the poor and increase their likelihood of being exposed to infectious diseases.

**Increased Habitat Loss**

Human overpopulation is a major driving force behind the loss of ecosystems as well as irreversible damage to these systems.

**Natural Resources**

Despite modern technology, vital non-renewable and renewable resources are declining at rapid rate. Massive social and environmental problems, political instability, loss of freedoms, vanishing species, rain forest destruction, desertification, garbage, urban sprawl, water shortages, traffic jams, toxic waste, oil spills, air and water pollution, increasing violence and crime continue to worsen. The burgeoning global population (and indeed our own Country’s’ population) will continue to pressurise natural resources availability.

**Where to from here?**

In his book**,** *State of the World 2012: Moving Toward Sustainable Prosperity,*Worldwatch Institute President Robert Engelman suggests *“Nine Population Strategies to Stop Short of 9 Billion”*

1. "Provide universal access to safe and effective contraceptive options for both sexes."
2. "Guarantee education through secondary school for all, especially girls."
3. "Eradicate gender bias from law, economic opportunity, health, and culture."
4. "Offer age-appropriate sexuality education for all students."
5. "End all policies that reward parents financially based on the number of children they have."
6. "Integrate lessons on population, environment, and development into school curricula at multiple levels."
7. "Put prices on environmental costs and impacts."
8. "Adjust to an aging population instead of boosting childbearing through government incentives and programs."
9. "Convince leaders to commit to stabilizing population growth through the exercise of human rights and human development."

<http://www.worldwatch.org/nine-population-strategies-stop-short-9-billion>

### **A Christian Voice**

Of course, most Christians would disagree that people are “destructive, filthy creatures,” but many may quietly or subconsciously agree that “overpopulation” leads to a scarcity of resources as well as more poverty and environmental degradation

So what can we realistically do in mitigation of this problem?

* Seriously consider our own environmental footprint – what are we doing to reduce it to the absolute minimum each day
* Consider the SDGs carefully – what actions can we personally take to bring about these targets
* Please pray for those working to combat poverty in all its forms.
* Pray that world leaders will follow up commitments to fulfil the SDGs with the appropriate actions.
* We pray because we're desperate for God - to walk with him... in step with his will for the world.