



***The science, the consequences, the options:***  
**Branch Takes on Climate Change Project**  
**Shane Roberts**

In an outrageous distortion of the science behind climatic change, the recent movie *The Day After Tomorrow* had a global catastrophe precipitate virtually overnight. Did it vulgarize a serious issue as only Hollywood can? Or was it a justifiable way of dramatizing an emerging threat and grabbing a part of the public that is hard to reach with scholarly arguments about global warming?

Sometimes this debate is not about how to reach the public but about how best to carry the message to the world's most powerful elites. In late 2003, a hot story circulated about how the Pentagon had commissioned a foremost futurist to look at the implications of "abrupt" climatic change for the USA's national security. The resulting "scenario", written after consultation with leading scientists, warned of our world facing the risk of a disastrous cascade destabilizing international order. In a domino effect, extreme weather could reduce the world's carrying capacity by threatening supplies of food, water and energy, which in turn could generate mass migration, economic malaise and global conflict.

Like the movie, the futuristic scenario stirred editorial argument about the limits of current knowledge of what drives our planet's climate and whether experts should be sounding the alarm-bells and calling us to action before it is too late. Nor were these the only cases proving politics and science to be a volatile mixture. Sir David King -- the chief scientific adviser to the British government -- had his knuckles rapped for having publicly dumped on President Bush's administration for not taking climatic change and the Kyoto Protocol seriously enough. King went so far as to say this issue was *a more serious threat to the world than terrorism*. In Ottawa, though, he was well received by Canadian scientists and civil servants - many of whom already appreciate the dangers posed by global warming and are working to deal with it. Many of these people are prodded by an array of activists and nongovernmental organizations to increase public awareness and engagement in the issues. Canada may have made a good start. But our country is has a long way to go in reducing emissions of carbon dioxide into the atmosphere.

*We have taken the opportunity to host several leading climate change speakers this October, and we hope you plan to attend NCRB's conference.*

**Arctic  
Barometer**  
**Sara El Sonbati**

*"What happens in the globe happens first in the Arctic." – Michael Meacher, UK Minister of the Environment*

The effects of increased greenhouse gases in the Arctic are a concrete example of the reality of global warming and its threat to our civilization.

What is the impact of climate change on the Inuit? How has the Inuit Circumpolar Conference attempted to find solutions to environmental and human rights issues that concern our civilization as a whole?

*continued on page 12, Barometer*

**MARK YOUR CALENDARS:**

**DOES DRAMATIC CLIMATIC  
CHANGE THREATEN OUR  
GLOBAL CIVILIZATION?**

WED. OCTOBER 27, 7:30 PM  
CDN. MUSEUM OF NATURE &  
SAT. OCTOBER 30, NOON  
VOLUNTEER PLACE,  
330 GILMOUR

**ANNUAL GENERAL MEETING**

WED. OCTOBER 27, 6 PM  
CDN. MUSEUM OF NATURE

**Join the Debate, Join the Action. Attend our Event.**

For the evening of Wednesday, October 27, and the afternoon of Saturday, October 30, our Branch of the UNA in Canada invites you to join us for a conference on the question "Does Dramatic Climatic Change Threaten Our Global Civilization?" We are inviting experts and activists from the universities, government and civil society to help us with three questions that will equip us better to think globally and act locally:

- What can science tell us about climatic change?
- What could be the impacts on our lives and others around the world?
- What can and should we do to thwart the looming crisis in world affairs?

## **The UN's Environmental Agenda for the Early 21st Century**

**Shane Roberts**

In three core documents, the UN in 2000 laid out goals for humanity in the early decades of the 21st Century. Of interest to us for this special edition of *Communiqué* are the goals put forth for the protection of the global environment and the ecosystems upon which the future of humanity depends. While these landmark documents (the Secretary-General's Millennium Report, the General Assembly's Millennium Declaration, and the UNDP's Millennium Development Goals [MDG]) were penned by diplomats and world leaders, the principles they espouse and objectives they present are as much the fruit of endeavours by concerned people working around the globe at the grass-roots as they are of political elites.

In September 2000, leaders from around the world gathered at the UN's Millennium Summit and signed the Millennium Declaration. At the Summit, the General Assembly asked the Secretary-General to prepare a roadmap for meeting commitments made in the Declaration. The result was the Millennium Development Goals. Goal number seven is to ensure environmental sustainability and under it are two "targets". One is integrating the principles of *sustainable development* into country policies and reversing the loss of environmental resources. The second is to cut in half by 2015 the proportion of people without access to *safe water*. Currently more than one billion people lack access to safe drinking water and more than two billion lack sanitation. During the 1990s, however, nearly one billion people did gain access to safe water and the same number to sanitation, so we see that real progress can be made.

The original and still the boldest and most sweeping of the documents is the Millennium Report by Sec.-Gen. Kofi Annan. Formally titled "We the Peoples: the Role of the United Nations in the 21st Century", its fifth chapter is about "Sustaining Our Future". Like MDGs, it outlines both goals for tomorrow and progress to date. Kofi Annan cites the UN's Conference on Environment and Development in 1972 as a milestone in international recognition of the strategic importance of ecosystems and environmental sustainability to humanity's future. His report also discusses the Montreal Protocol for protecting of the Earth's ozone layer and subsequent progress in reducing emissions of CFCs as a success story that should encourage us.

The Secretary-General lists water, food, bio-diversity and climatic change as next challenges to meet. His call for attention to the crisis over water has been heard with it being made one of the MDGs. Securing the availability of water for communities everywhere would go a long way toward assuring worldwide food security, but it will not be enough to provide adequate food for our planet's six billion inhabitants and their children. Kofi Annan has hopes that progress in biotechnology and bioengineering will contribute by giving us crops and livestock that are more resistant to disease and suited to a wider range of environmental conditions. At the same time, Annan realizes how crucial it is that our species recognize its dependence and place in a wider web of life. Respect for our interdependence

## **Communiqué**

Newsletter of the United Nations Association in Canada (UNA Canada) -  
National Capital Region Branch  
Bulletin d'information de l'Association canadienne pour les Nations Unies (ACNU),  
Division de la Région de la Capitale nationale

Note: The views expressed by the contributors to *Communiqué* are not necessarily those of the United Nations Association in Canada - National Capital Region Branch. Articles, comments, suggestions, letters to the editor, or enquiries about branch activities, are always welcome:

Nota: Les opinions exprimées par les collaborateurs/trices ne reflètent pas forcément ceux de l'Association canadienne pour les Nations Unies, Division de la Région de la Capitale nationale. Nous invitons vos suggestions et vos opinions. Veuillez faire parvenir votre correspondance ainsi que vos demandes d'information sur nos activités, à l'adresse suivante:

**UNA Canada-NCRB  
ACNU-DRCN**

**NOTE: NEW ADDRESS**

**309 Cooper, Suite 300  
Ottawa ON Canada K2P 0G5**

**Tel: (613)-232-5751 x254**

**Email: [info@ncrb.unac.org](mailto:info@ncrb.unac.org)**

**Web: [www.ncrb.unac.org](http://www.ncrb.unac.org)**



**COMMUNIQUÉ**  
September 2004 Septembre  
Volume 14 No. 1

### **Thank you to our contributors:**

Tara-Marie Andronek  
Nathalie Rainville  
Robin Collins (editor/layout)  
Rachel Deslauriers  
Alexandra Fischer  
Jean-Pierre Maisonneuve  
Sarah Meharg  
Shane Roberts  
Semira Selman  
Sara El Sonbati

with Nature means that we must take steps to protect bio-diversity - one of the core goals identified by the UN Secretary-General.

Another area of concern for sustaining our future cited by Annan is climatic change. He points to global warming and the seemingly related rising toll of destruction by natural disasters as

*continued page 12*

Chelsea: Lauréat du prix environnemental *Nations in Bloom 2003*

## Penser Globalement, Agir Localement

*Rachel Deslauriers*

Depuis 1992, les gouvernements locaux ont fait des efforts considérables pour atteindre les objectifs d'Action 21 et ainsi intégrer le développement durable à leur mode de gestion. En temps qu'interface entre les gouvernements et la population, les municipalités ont la possibilité d'influencer les citoyens pour atteindre un monde respectueux, juste et équitable. L'Organisme des Nations Unies supporte ces initiatives et avalise une compétition internationale permettant aux communautés locales d'échanger sur le sujet en partageant leurs savoirs et leurs initiatives. La compétition internationale *Nations in Bloom* maintenant appelée *The International Awards for Liveable Communities* est la seule compétition internationale pour les communautés locales qui se concentre sur la gestion de l'environnement et la viabilité des communautés. L'objectif de cette compétition est d'encourager les meilleures pratiques, l'innovation et le leadership instituant une communauté durable environnementale et active qui améliore la qualité de vie de ses citoyens.

La municipalité de Chelsea, au Canada, fut le lauréat du prix 2003 pour ses pratiques environnementales. Par le passé, ce prix prestigieux fut remporté par les communautés de Ptju, Slovénie; La Coruna, Espagne et Mikeli, Finlande. C'est grâce à ses initiatives avant-gardiste et une implication autant politique que communautaire dans la préservation

de l'environnement que la municipalité de Chelsea, une municipalité bilingue d'environ 6,500 personnes située aux abords des collines de la Gatineau, a pu se démarquer au niveau international.

Différents programmes offerts par la municipalité ont pu améliorer la santé de l'environnement et de la communauté: la vidange systématique aux 3 ans des fosses septiques pour diminuer les possibilités de contamination de la nappe phréatique; l'abolition de l'usage des pesticides sur tout le territoire; la protection des terres humides; la réduction des déchets menés au site d'enfouissement grâce à un programme actif de compostage résidentiel et la réduction des gaz à effet de serre.

Finalement, le programme H2O Chelsea, subventionné en partie par le fonds d'action de développement durable (FAQDD) ainsi que par la Commission de coopération environnementale de l'Amérique du Nord (CCEA), permet la mesure et l'évaluation de la ressource en eau et l'obtention d'information scientifique qui servira à la planification et à la ges-

tion municipale. Ce programme, partenariat entre une ONG, la municipalité et une université, permet aussi d'accroître la responsabilité du citoyen à l'égard de l'environnement en incluant des bénévoles dans toutes les étapes de réalisation du projet.

Bien que ces projets collaborent à l'atteinte des objectifs de développement durable de la Municipalité, celle-ci continuera, avec les citoyens, groupes et entreprises à intégrer dans leurs actions, projets et politiques des valeurs d'équité sociale, d'efficacité économique et d'intégrité environnementale. Tous les partenaires s'engagent à mettre de l'avant des pratiques saines et innovatrices afin d'offrir aux générations présentes et futures une qualité d'environnement équivalent ou même supérieure à celle d'aujourd'hui.

L'*International Award for Liveable Communities 2004* se déroulera à Niagara, du 14 au 18 Octobre 2004. Pour de plus amples informations sur le concours et les laurats, vous pouvez consulter leur site web: [www.nationsinbloom.com](http://www.nationsinbloom.com)



*Impacts of the UN Millennium Report, Declaration and Development Goals*

## **Progress Toward Sustainable Forests?**

*Alexandra Fischer*

The world's forests contains 50 to 70 percent of the world's terrestrial species. They help regulate climate, reduce desertification, lessen the risk of flooding and landslides, supply basic necessities, and provide important social-economic, cultural, recreational and spiritual benefits.

The Millennium Report by Kofi Annan outlines the UN's vision of the main problems facing the world, as well as the priorities for action. The report warns of the high level of deforestation -- at a rate of 65 million hectares of forest between 1990 and 1995 alone -- as a result of the increasing demand for forest products, overharvesting, conversion to agricultural land, disease and fire. The report also mentions the importance of maintaining biodiversity to ensure long-term food security as well as the health of the world's people.

In the Millennium Declaration, adopted by the General Assembly, countries resolve to "intensify [their] collective efforts for the management, conservation and sustainable development of all types of forests" and to "[fully implement] the Convention on Biological Diversity". At the UN Millennium Summit, the Millennium Development Goals were established to show how the commitments in the Declaration could be achieved. Goal 7 of the eight Millennium Development Goals, is to "ensure environmental sustainability" including by "integrat[ing] principles of sustainable development into country policies and programs, and revers[ing] the loss

of environmental resources".

Given the importance of reducing deforestation and preserving biodiversity as highlighted in the Millennium Report, the Millennium Declaration and the Millennium Development Goals, the question is, what progress, if any has been achieved on these fronts?

Unfortunately, a review of the first annual global progress report on the achievement of the Millennium Declaration and Millennium Development Goals, as well as the regional reports, indicate a general trend towards increased deforestation and a reduction in overall forest cover.

In Africa, forests are being lost at a rate of 1.3 million hectares per year. In Asia and the Pacific, a comparison of forest cover in 1990 with 2000 reveals that some countries such as China have increased forest cover, but overall forest cover has decreased, particularly in Indonesia, Malaysia, Myanmar, Nepal and Sri Lanka. In Arab countries, forest cover has increased in Tunisia and the United Arab Emirates. However, losses have surpassed gains overall, particularly in the Comoros, Somalia and the Sudan.

The regional reports for Latin America as well as for the Eastern European states published thus far have not examined environmental issues. However, the trend towards increased deforestation is evident in Latin America; a recent study

released in Brazil indicates critical rates of deforestation. In 2002, deforestation levels in the Amazon had risen by 2% to a whopping 9,169 square miles, according to government statistics.

Throughout the world, the main threats to the world's forests remain: conversion to agricultural land, cattle ranching, fuelwood gathering, and commercial logging. The impacts are great: loss of biodiversity, soil erosion, flooding, and the loss of livelihoods for many of the poorest members of society. With the world's population growing, the need to ensure that forests continue to provide vital environmental services and resources, through forest conservation and sustainable development, has never been greater.

### **NCRB EVENT DOES DRAMATIC CLIMATIC CHANGE THREATEN OUR GLOBAL CIVILIZATION?**

**CHECK OUR INSERT  
FOR DETAILS OR CON-  
TACT THE BRANCH**

**PHONE:  
232-5752 x254  
(991-5345)**

**EMAIL:  
INFO@NCRB.UNAC.ORG**

## Forests and the Impact of International Agreements

*Alexandra Fischer*

Given the alarming rates of deforestation at present, it is important to consider what is being done to reverse this trend. Are there any signs of hope that the international community is taking this issue seriously?

While an international forest convention does not exist, some international agreements may play a role in reducing levels of deforestation, though their impacts have yet to be fully demonstrated. The 1997 Kyoto Protocol, which has not yet come into force due to an insufficient number of ratifying states, could lead to increased forest cover through the Clean Development Mechanisms. These mechanisms enable developed countries to provide support to forest conservation projects in the developing world in order to offset their own greenhouse gas emissions. While the role of forests as carbon sinks remains hotly contested, the impact of these mechanisms on forest conservation is promising.

The Convention on Biological Diversity (CBD), adopted at the Rio Conference in 1992, has been ratified by 186 countries as of February 2004. This Convention has three main goals: “the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits from the use of genetic resources.” CBD could have an important impact. At the 6<sup>th</sup> Conference of the Parties to this Convention in 2002, an expanded Programme of Work on Forest Biological Diversity

was adopted, though this is not legally binding. In addition, the agenda of CBD is expanding to include resource management issues such as the harvesting of wood and non-wood forest products and illegal logging.

An Intergovernmental Panel on Forests (IPFF) was established between 1995 and 1997, followed by an Intergovernmental Forum on Forests (IFF) from 1997-2000 to work towards consensus on the management, conservation and sustainable development of forests. These fora led to the development of proposals for action and to the establishment of United Nations Forum on Forests (UNFF) in 2000, which is working on “policy development, forest-related action, ... international collaboration and the implementation of the IPP/IFF proposals for action”. The Collaborative Partnership on Forests (CPF) was set up to provide support to the UNFF.

While these developments show potential, IFF and CBD do not have targets or deadlines for meeting obligations. Also both suffer from insufficient resources and capacity for carrying out action proposals and lack real teeth for enforcement. Finally, there is a need for greater coordination between IFF and CBD and other parties involved in forest conservation and sustainable management. Examples of such organizations include the Food and Agriculture Organization (FAO), International Tropical Timber Organization (ITTO), the Center for International Forestry

Research (CIFOR), The World Conservation Union (IUCN) and the Global Environment Facility (GEF).

Besides these international agreements and organizations, several developments may also contribute to sustainable forest management. Worldwide, there has been a trend towards forest certification, whereby forests are certified to be managed sustainably, thus enabling consumers to make more environmentally friendly choices when purchasing forest products. Depending on the stringency of standards used to certify forests, this trend could lead to better forest management and greater biodiversity conservation. In addition, the level of environmental awareness is arguably increasing worldwide, which could translate into greater forest conservation and sustainable development.

Canada must lead by example by reducing its own level of clearcutting and fully implementing the Convention on Biological Diversity through a strong comprehensive national strategy and action. In addition, Canada should invest in forest conservation projects in other parts of the world and be an active player in international fora related to forest conservation and sustainable management.

# A Bridge to Nowhere? The Reconstructed Bridge of Mostar

*Sarah J. Meharg, Ph.D.*

The emergence of cultural property reconstruction as a method of post-war reconciliation has recently come to the fore with the celebrated reconstruction of the Bridge of Mostar on 23 July, 2004. Targeted more than ten years earlier by the Bosnian Serbs, and later destroyed through a Bosnian Croat strategic debacle, the reconstruction of the Bridge has been touted as the most significant post-war reconciliation project in modern history. Innumerable nation-states donated to the project and an astounding mélange of organizations, including UNESCO, supported the project through the provision of donations, services, materials, expertise, and media exposure. Now that the Bridge has been physically reborn, how is it to meet the extraordinary expectations of the international community, and more importantly, the expectations of the people that depend on it for more than work and leisure, but for identity itself? In fact, where is this bridge leading?

The historical narrative of the Bridge was linked to identity formation. The old Ottoman Bridge was commissioned by Suleyman the Magnificent in the late 13th Century as a gift of advanced architecture and aesthetic to the people of Mostar. Between 1991 and 1995, the Balkan conflict saw the mass targeting of such cultural properties in an attempt to erase contested cultural identities and eliminate those elements that constructed identities. This strategy of identicide was applied throughout the Balkans and was the precursor to cultural genocide, culminating with the destruction of the Bridge

of Mostar in 1994. Its destruction was intended to challenge those who used the Bridge as an identifying symbol and from the moment its keystone plummeted 17 meters into the Neretva River, the rhetoric surrounding its reconstruction has been the reconciling of contested identities – of



the local populations, of the fractured Balkan nation-states, and of the international community writ large. The intended outcome of re-bridging the shores of the River was to symbolically re-bridge, or reconcile, the disparate warring parties involved in the Bosnian conflict and previous centuries-old cycles of conflict throughout this region. Although the Bosnian Muslims have been instrumental in the reconstruction project, and the Bosnian Croats grudgingly so, the Serbians have declined any involvement, politically or otherwise. Unfortunately, the failure to integrate all parties linked to the Bridge's destruction reduces this reconstruction project to merely a bridge to nowhere.

Creating a multi-ethnic Mostar may require more help

than the conciliatory rhetoric of bridge building. Although the project has helped people to meet half-way in their attempt to bridge ethnicities and territories, the old Bridge is still destroyed somewhere in the minds of the local populations. How places are destroyed, who destroyed them, and whose responsibility it is to reconstruct them, is of critical importance to the reconciliation process, both for places, and the people who actively use those places.

We can never bring the old Bridge back, but it remains that a new bridge now exists in its place. In a way, this bridge can become a place to respond to the new post-war culture of the people of Mostar. They will certainly layer it with symbolic narratives of conflict, rebirth, and identity, and over time, it will become quite distinct from its forbearer. Although not all parties are willing to reconcile and the international community project objective has become moot, the local population can reconcile with this place and perhaps build new meaning for themselves. The new bridge needs to be released from the rhetoric of reconciliation and left alone to be just a bridge. Only with time will people make it a bridge to somewhere.

*Dr. Meharg is a Senior Research Associate at the Pearson Peacekeeping Centre, Ottawa Liaison Office. She can be reached at: [smeharg@peaceoperations.org](mailto:smeharg@peaceoperations.org)*

*Photo: Mostar Bridge re-opening ceremony, 23 July 2004, [General Engineering].*

# L'UNESCO Coordonnera la Décennie des Nations Unies pour l'éducation en vue du développement durable (2005-2014)

*Jean-Pierre Maisonneuve*

L'Assemblée générale des Nations Unies proclama le 20 décembre 2002 la période de 10 ans commençant le 1er janvier 2005 Décennie des Nations Unies pour l'éducation en vue du développement durable (Résolution 57/254). L'Assemblée désigna alors l'Organisation des Nations Unies pour l'éducation, la science et la culture (UNESCO) comme organisme

responsable de la promotion de la Décennie. Son mandat sera d'élaborer un projet de programme d'application international en définissant les liens de la Décennie avec des programmes d'éducation existants -- tels que le Cadre d'action de Dakar adopté au Forum mondial sur l'éducation en 2000 et la Décennie des Nations Unies pour l'alphabétisation.

Les objectifs de la Décennie des Nations Unies pour l'éducation en vue du développement durable sont:

- Promouvoir l'éducation en tant que fondement d'une société plus viable pour l'humanité;
- Intégrer le dével-

oppement durable dans le système scolaire à tous les niveaux;

- Renforcer la coopération internationale en faveur

la culture du Japon; M. Carl Lindberg, Secrétaire d'État adjoint du Ministère de l'éducation et des sciences de la Suède; et M. Steven Rockefeller, Président du Rockefeller Brothers Fund. Au cours de cette réunion, ces experts ont fourni des conseils à l'UNESCO sur la Décennie, sur l'ébauche du Programme



de l'élaboration et de la mise en commun de pratiques politiques et de programmes novateurs.

Le 20 juillet 2004, une réunion du Groupe de haut niveau pour la Décennie des Nations Unies pour l'éducation en vue du développement durable fut convoqué par Koïchiro Matsuura, Directeur général de l'UNESCO. Ce groupe était composé de principaux experts dans le domaine: le Prof. Alpha Omar Konaré, Président de la Commission de l'Union africaine et ancien Président de la République du Mali; le Dr Akito Arima, sénateur et ancien Ministre de l'éducation, des sciences, des sports et de

d'application internationale, et sur les activités de lancement de la Décennie.

En tant qu'organisme responsable de la coordination de la Décennie, l'UNESCO compte élaborer, de concert avec plusieurs autres partenaires, une conception globale de l'éducation en vue du développement durable.

Pour obtenir de plus amples renseignements sur la Décennie, consultez les sites Web: [www.unesco.org](http://www.unesco.org) et [www.unesco.ca](http://www.unesco.ca).

*Image: "Young Salaseca Indians in Ambato, Ecuador" (UN Photo #155084)*

## Giving a Jolt to Green Harvesting

*Tara-Marie Andronek*

**I**t contains the world's most commonly used psychoactive drug. It's the second most traded commodity on the planet and you've probably had it today. With over 400 billion cups consumed per year, from regular to exotic, coffee is the most preferred beverage among adults. According to the Coffee Association of Canada (CAA), 63% of us must have our fix daily.

Coffee is not only about craving caffeine in the morning. Canadians enjoy a variety of blends, aromas and roasts, but how coffee reaches us may impact economic demand and government policy. Coffee is harvested when the trees on which the coffee fruit, called a berry or cherry, turns red and reaches maturity, which usually takes about three to four years. The coffee beans are actually the seeds contained in the ripened berries and are picked using two methods either by hand or machine. Strip picking picks the entire crop, and takes both ripe and unripe cherries in one large pass often using mechanical harvesters. Selective picking is a more detailed process and involves making several passes through the coffee trees by hand in eight to ten day intervals to ensure that only the ripest berries are chosen. This is more time consuming and expensive, thus the dominant reliance on strip picking.

So how does the environment fit into our daily cup of Joe? While there is no agreed upon def-

inition of sustainable farming in the coffee market, coffee can be grown without chemical fertilizers in a manner that seeks independence from non-renewable resources, minimizes pollution and is kind to the environment. Organic gardening techniques -- such as composting and reusing coffee husks as heating fuel -- replace natural nutrients to the land, preserve mineral content and have been



found to even increase yields over time. Shade growing intersperses the coffee trees with other plants for biodiversity to preserve vanishing wildlife habitats. Terracing the plants prevents destruction of arable crop lands and discourages soil erosion. These methods take time, money and effort to implement but 'green' harvesting of coffee is possible.

But as a nation of coffee consumers, what can Canadians do? While buyer demand is the primary instigator for the fast and inexpensive production of coffee, coffee producers can still implement green harvesting methods. There is, however, a limit to how much

influence members of the coffee industry can have. Change also needs to be effected by government initiatives such as sustainable export development and trade agreements. Government import and distribution guidelines play a critical role in both consumer choices and international policies that affect the lives of those in coffee producing countries. Key areas include customs regulations, product labeling and trade policy that affects which brands are organically sound, safe and able to enter the Canadian market. Currently, the CAA is one of many worldwide organizations that promotes the establishment of partnerships with non-government organizations in developing countries that are committed to fair compensation and education of coffee workers and building infrastructure to aid local communities which also creates economically viable ways of bringing coffee harvests to market. Fair trade, co-operative programs and green harvesting may be viable solutions to also assuring consumers that their coffee was purchased under fair conditions -- which may make it easier to swallow that extra tall, low foam, half-caf, medium roast, vanilla almond brew you can't live without.

## Sustaining Water Supplies in Global Climate Change

### Nathalie Rainville

The recent push to address the problem of greenhouse gas emissions seems to have resulted in the revitalization of some of the world's forests. The United Nations Environmental Programme (UNEP) reports that a "greening of the biosphere" over the last twenty-seven years has led to a six percent increase in the rate of photosynthesis. According to UNEP, this important development may be a result of advances in agriculture and the implementation of successful conservation programmes around the world.

Despite the greening of the biosphere, cloud cover is diminishing at a startling rate, 80 million people tap the earth's stressed water supply every year and more than 1 billion people lack access to safe drinking water and proper sanitation. Depleting water supplies and poor sanitation cause an estimated 80 percent of all diseases in the developing world. This unfortunate situation has resulted in the establishment of the UN Millennium Development Goal (MDG) of halving, by 2015, the proportion of people without access to drinking water or proper sanitation.

One key supplementary target that has received international attention is the integration of sustainable development into country policies and programmes. Since the Millennium Declaration laid out by all UN Member States at the Millennium Summit in September 2000, there have been improvements in international environmental regulations. The 2002 World Summit on Sustainable Development provided an opportunity for world leaders to address environmental issues within the context of poverty reduction, sparking the initiation of multi-lateral approaches to the environmental crisis.

Despite the policy shifts among several world governments designed to address the water crisis, agricultural growth continues to account for 70% of the world's freshwater use while corporations use an additional

20% to generate nuclear, hydro and thermal power. The lack of proper water management has resulted in the continued exploitation of water in the name of industrial growth. Meanwhile, groundwater reserves are drying up as their exploitation out-runs nature's ability to renew this life-sustaining resource.

Water is the lifeblood of an ecosystem. It provides the regeneration needed to ensure environmental balance. Water conservation is of extreme importance especially in

The rate of warming of the earth's surface is expected to be greater in the next 100 years than has occurred in the last 10,000...

developed countries where water consumption reaches 500-800 litres consumed per capita on a daily basis (compared to 60-150 litres in developing countries). Government policies inviting the active conservation of water in developed countries will ensure the accumulation of freshwater reserves.

Meanwhile, global warming continues unabated, and affects some parts of the world with severe droughts. According to the Intergovernmental Panel on Climate Change, western parts of the United States and parts of Mexico continue to experience severe drought conditions. On a global level, drought has increased by 50% in the 20<sup>th</sup> century with very little change in wetland conditions. The rate of warming of the earth's surface is expected to be greater in the next one hundred years than has occurred in the last 10,000 years of civilization.

The growing concern for the earth's warming has stimulated concerted energy conservation and carbon dioxide reduction

programmes in several UN member countries. Recently, the World Conservation Monitoring Centre (WCMC), now part of the UN Environment Programme, has produced a Cloud Forest Conservation Agenda meant to address the MDG goal concerning the water crisis. The report underlines the importance of conserving the world's cloud forests, which not only sustain biodiversity, but also provide water to millions of people.

According to the WCMC, cloud forests (which retain the moisture from the fog covering the peaks of trees) is essential in providing abundant freshwater supplies to countries plagued by dry seasons. For instance, during the dry season one hundred per cent of the drinking water used by the citizens of Dar es Salaam, Tanzania is retrieved from the cloud forests of the Uluguru Mountains.

In a world where approximately one third of the world's population lives in countries where water consumption exceeds the total supply by 10 per cent, it is important to take care to adopt sound conservation programs. Canada can contribute to the resolution of this important work by increasing development assistance to Asia, where 60% of the cloud forests flourish. It is also important to support the WCMC's efforts by "integrating cloud forest conservation into land use and resource use management plans."

Beyond this type of support, Canada should also be actively implementing good conservation practices at home by pressuring agriculture and power industries to adopt corporate socially responsible practices. Since Canada's natural resource sector affords us a growing economy, our country should be a world leader in sustainable development, and in providing future generations with an abundant reserve of freshwater and a diverse biosphere.

# Environmental Displacement of Populations

## *Semira Selman*

Links between environment and forced migration are an important issue to consider, especially in light of climatic change. Environmental pressure (desertification, lack of water) leads to land competition, poverty, abuse of ecologically fragile areas and further impoverishment. This in turn places pressure on political and ethnic relations.

In many instances, environmental problems are a catalyst for conflict, which is an immediate source of population displacement. Climate change will create greater environmental pressure, especially through destructive extreme weather events, and we can expect more frequent catastrophes, in forms such as droughts and tornadoes. If these events become more frequent, they will exhaust local and international funding aid and will place undue pressure on the governing institutions which in turn can trigger conflict and unrest.

This issue has been of concern to the UN -- and the United Nations High Commission for Refugees (UNHCR) will inevitably be faced with increasing demands for its services and resources. According to the current projections of rising sea level and increased tropical cyclone intensity, many of the small island states may become uninhabitable. This could lead to an unprecedented event where UN member states would geographically cease to exist. The international community should prepare itself for such an event by planning how they would deal with suddenly stateless populations.

Although there is much debate about the specific terminology defining 'environmental refugees' and the merit of isolating environmental factors as sole sources of forced migration, it is nonetheless important to consider the environment and its effect

on migration. Without proper mitigation strategies, factors such as desertification, deforestation, lack of water, salinisation of irrigated lands, and bio-diversity depletion can all lead to environmental displacement of populations.

The character of the state will be crucial in dealing with these issues, because a strong and efficient state will be better able to put coping mechanisms in place. Weaker states will be left vulnerable to additional environmental pressures. This

is why there is a need for fundamental change in North-South relations in order to avoid forced migration.

There is a need for policies which foster sustainable development, remove the worst of the debts, and provide adequate aid in order to strengthen developing countries and their ability to cope. Developed countries do have the power to deal with the root causes of forced migration and can eliminate practices which worsen the situation in developing countries.



*UN WFP photo*

### Are the Dutch Feeling the Heat?

The Netherlands, with a significant proportion of its territory lying below sea level, is vulnerable to global warming causing rising seas and heavier rainfall. "If we have a sea level rise of two meters, we have no control, no possibility of solving that. It's unthinkable," the Dutch environment secretary stated. (8 Sep.04, Daily Telegraph)

*Biodiversity,  
continued from page 11*

ingness-to-act level within the public, who in turn need to pressure political leaders to act. One concern is that if it is felt that species are "ultimately doomed", (what is known as *conservation blight*), interest in spending money and readjusting lifestyles will diminish. The result will be worse, even sooner, and likely spectacularly irreversible.

# Climate Change and the Threat to Biodiversity

## Robin Collins

An influential article in *Nature* in January 2004, "Extinction Risk from Climate Change", (co-authored by Chris Thomas of the University of Leeds and eighteen others), called for the "rapid implementation of technologies to decrease greenhouse gas emissions and strategies for carbon sequestration". This was in light of their conclusion that reduced habitat availability due to climate change would likely cause the extinction of large numbers of species. Based on the mid-range estimates for climate warming by 2050, the researchers predicted that between 15 and 37% of species in the regions under study (specific biomes of Australia, Brazil and South Africa) would be threatened with extinction or would die off entirely.

Estimating the impact of rapidly changing climate by the use of predictive modeling is an extremely complex and sometimes controversial business. Several authors reacted to the *Nature* article (see correspondence in the July 1, 2004 issue, for instance.) Debates aside, there does appear to be consistency among the simulations indicating that a doubling of atmospheric CO<sub>2</sub> concentration will cause "warming worldwide, most likely between 2° C and 3° C" (see *Nature*, August 12, 2004). Predicting effects on organisms, species and biological regions is difficult because living things have a certain capacity for adaptation. Models need to extrapolate futures based on many assumptions about living networks and their interrelationships, while using some data from the geological record.

The earth's climate has always been in flux, which is why predictions must take into consideration what we can deduce from those 5° Celsius drops in global temperature that were evident during "recent" periods of glaciation.

Current climate shifts produce raised sea levels, lengthened growing seasons and heightened flood risks on a scale outpacing expected natural shifts. The rate of change, however, indicates

the source is at least partly anthropogenic (they have a human causation).

A "Global Climate Change and Biodiversity" conference was held at the University of East Anglia, UK, in April 2003, bringing together several researchers and organizations (including British conservation and wildlife groups, and the UNEP-World Conservation Monitoring Centre).

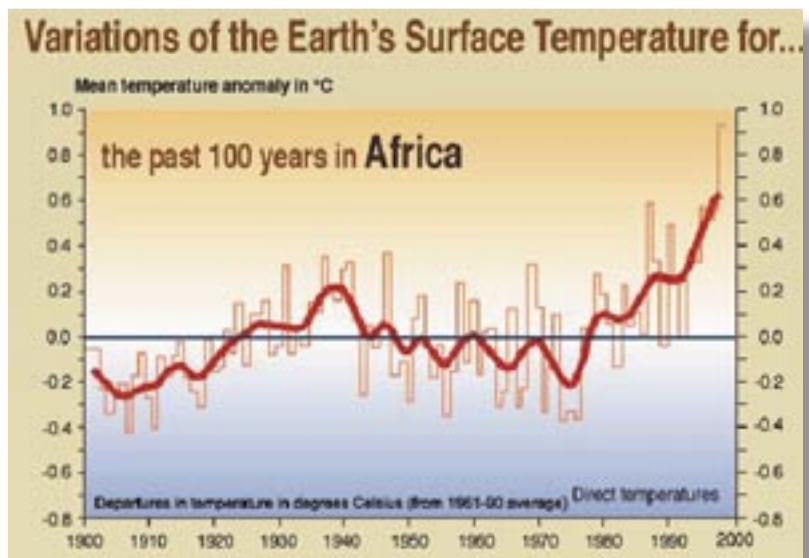
The summary report points out that there are "significant uncertainties about the relationships of species distribution and climate change, and about species' abilities to migrate and re-distribute". For that reason, the reliability of climate model predictions is crucial. Models showed that "10%" of high latitude species or species with "narrow habitat breadth" are particularly vulnerable, and may become extinct. Several participants noted that socio-economic and land use pressures (themselves impacted by climate change) "are likely to be vastly more important as drivers of biodiversity change than climate

change." The conference also found that there is a scarcity of field-based experimental work indicating the adaptability of biodiversity to climate change.

Most living species in the Earth's current inventory have not felt the impact of major climate change; yet "460 of 920 species studied have shown distributional change and, for 81% of these, climate change is the cause of change". There seems to be a narrow band of variation, above which many species can no longer adapt (although that is uncertain). The 2003 report notes that "[i]f we manage to contain global warming to a 2° C rise, there will be some species loss... [at 4° C] there will be many species lost, few management options and enormous financial cost. At the upper most predictions of around 6° C temperature rise, the outlook is dire."

The conference concluded that scientists and conservationists need to "get political" if they are to ramp up the awareness-and-will-

*continued, page 10*



Above: UNEP graphic

Top: Monteverde golden toad may be a victim of climate change.

**Barometer, continued from page 1**

At a meeting in Alaska in October 2000, the Arctic Council initiated an assessment of the impacts of climatic change in the circumpolar world. The World Meteorological Institute and more than 250 scientists are working on elaborating a comprehensive and detailed assessment of climate change which is to be presented by the end of this year.

The Governing Council of the United Nations Environment Programme sees the Arctic as a "barometer" of the world's environmental health. The effects of climate change include risks such as:

- permafrost melting has forced people to move inland because it is destroying the foundation of buildings and is eroding the seashore. A NASA study of satellite data revealed a 9% loss of global sea ice over the past decade.
- decimation of marine species dependent on sea ice include polar bears, seals, walrus.
- the demise of Inuit whose hunting is part of

**UN agenda, continued from page 2**

a pivotal problem. The economic losses from natural disasters, much of it tied to extreme weather, are undermining development. While natural forces beyond human control are also at play, the prevailing scientific evidence is that human activities are significantly disturbing global environmental and ecological systems which govern levels of atmospheric carbon dioxide (CO<sub>2</sub>) and consequently climate. Reducing emissions of CO<sub>2</sub> will be one of our foremost challenges.

To make progress, Annan believes we require a new ethic of "global stewardship". He spells out four priorities for advancing this stewardship. First is public education and consciousness-raising among consumers about the environmental consequences of their choices, especially as "more and more of us live in cities, insulated from nature." Second is the development and incorporation of "green" accounting in policy-making, so that costs inflicted by pollutants can be measured and factored into national accounts. Third, a combination of regulations and incentives is needed to make markets and the private sector part of the solution and not the problem. Fourth, Annan calls for more scientific information to fill large gaps in our knowledge, and for this he cites the planned Millennium Ecosystem Assessment, a major international collaboration to map and track the health of our planet.

In the General Assembly's Millennium Declaration, Annan's proposals are endorsed. But, to ensure the Secretary-General's ideas receive more than just diplomatic lip-service, we must find ways to work in

their culture and necessary for their survival as a people.

Consequently, in December of 2003, the Inuit people of Canada and Alaska launched a human rights case against the United States because of the increasing danger of climate change. The Inuit Circumpolar Conference intends to petition the Inter-American Commission on Human Rights in order to seek a declaration from the commission that by failing to curtail its greenhouse gas emissions, the U.S. has violated the human rights of Inuit, including their rights to property, culture and subsistence -- as outlined in the 1948 American Declaration on the Rights and Duties of Man. In Canada, the Inuit rights to hunt are protected by our Constitution.

Sheila Watt-Cloutier, Chair of the Inuit Circumpolar Conference, argues that there is a need for "far-reaching, long-term global commitments to reduce emissions of greenhouse gases if the Arctic is to be protected and if our human rights, particularly our human rights to subsistence, are to be respected."

**"We must spare no effort to free all of humanity, and above all our children and grandchildren, from the threat of living on a planet irredeemably spoilt by human activities, and whose resources would no longer be sufficient for their needs."**

**(UN General Assembly,  
8 Sept. 2000)**

concert with environmentally progressive politicians to generate and sustain support for green policies. And as well, we need to examine our personal life-styles and reshape our communities to assure the children of the Earth inherit a healthy planet.

[Chapter #5 of Kofi Annan's Millennium Report is at [www.un.org/millennium/sg/report/summ.htm#5](http://www.un.org/millennium/sg/report/summ.htm#5)]