

No. 74/75 - Spring/Summer 2007



# Women & Environments

international  
magazine

## WOMEN AND GLOBAL CLIMATE CHANGE

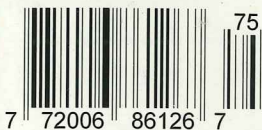
Global Climate  
Change and  
Women's Health  
KIRSTY DUNCAN

The Kyoto  
Protocol: A War  
on Subsistence  
ANA ISLA

Japanese  
Women's Roles  
in Climate  
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Women & Environments International is a unique Canadian magazine, which examines women's multiple relations to their environments — natural, built and social — from feminist and anti-racist perspectives. It has provided a forum for academic research and theory, professional practice and community experience since 1976. Produced by a volunteer editorial board the magazine contributes to feminist social change. The magazine is associated with the Women and Gender Studies Institute, University of Toronto.

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**ON THE COVER**

Tai Power Seeff grew up in Los Angeles, CA and at age 17 moved to New York City where she graduated from New York University's Tisch School of the Arts. She has lived and traveled around the world, and her work has been published in **National Geographic Traveler**, **Rolling Stone**, and Benetton's **Color's Magazine**. Tai is currently traveling through Rajasthan, Sikkim, and Bhutan, her first return India since 1999. Seeff photographed the girl fetching water, on the way to a nearby Dalit village. The Dalit are commonly known as Untouchables. Although they are considered to be unclean in the caste system, their village had freshwater, a resource that is often hard to come by. Young village girls are primarily responsible to fetch and carry these heavy jugs of water.



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**Canada**

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# WE Speak

## Women and Global Climate Change — A Word From the Issue Editors

"Climate Change, an issue for women?" asked some of our colleagues with raised eyebrows and frowns as we sent around notices for this issue. "How is climate change different for women?" is the next question. "Because women do different work, they have access to different resources and have different priorities in their lives in most societies including those undergoing noticeable climate change" is the short answer. Women provision for their families and communities; they grow food, maintain crops, gather cooking fuel, cooking, get children to school and to health services, look after elders, organize collective care, etc. Women manage these multiple responsibilities while they are historically more marginal to politics and to planning the resource base — food, crops, fuel, markets, transportation, forests, temperatures, water supplies and ecology — when climate changes impact. In this issue Duncan and Hemati and Röhr take up the global impacts of climate change.

In developed areas where women may drive or use public transportation, as fuel costs rise, their access to transportation diminishes more rapidly because they have less money. As food is less available locally, transportation costs shift the diet that a woman can plan for her family or increase the number of jobs or hours a woman will need to work in order to provide for herself and/or her family. The health effects of poorer food then translate into poorer school performance, higher health care costs, more absenteeism, shortened life span, fewer community hours and so on. Regmi and Eizaguirre discuss developed country strategies and examples.

On the other hand, in developing areas, provisioning is complicated by temperature changes, disease patterns, agricultural shifts, availability of water and fuel. Meanwhile neo-conservative international institutional strategies continue to privatize water, education, transportation, fuel, health services and other necessities for sustainable communities. And the women provisioning go further for food, water and fuel while they must earn more cash to pay for schooling, health care and shelter. Mwangi, Turner and Brownhill, Rakasakulthai provide insight into impacts and suggest strategies.

Women carry the massive burden of caring work in all societies and therefore feel both the cataclysmic, in hurricanes and drought, and the subterranean changes like shifts in planting and agricultural opportunities directly. These immediately-felt impacts of climate change position women to lead resistance in various ways that include alternative food production, art work, blockades and other forms of disruption. Brownhill and Turner document how some women have taken direct action to shut down oil companies that contribute to climate chaos. Zgola et al. and the Fredericks interview provide more examples of resistance giving hope and inspiration. ❧

## Putting This Issue Together

**Lorena Aguilar Revelo**, born in San José, Costa Rica, has a Master's degree in Anthropology. Her efforts towards a sustainable and equitable human development include more than two decades of practical experience in public policy development and design and eight years incorporating social and gender issues into the use and conservation of natural resources. Aguilar has provided technical assistance to international organizations, governments, universities, and water, environmental health, gender and community participation projects. Aguilar has been published widely and translated into English and French. She is presently the Senior Adviser — Gender, of the World Conservation Union.

**Leigh Brownhill** completed a Ph.D. at the University of Toronto in November 2006. She co-edited a special issue of *Canadian Woman Studies* (2002) and has published on popular struggles in Africa in the *Canadian Journal of African Studies*, the *Journal of Asian and African Studies* and *Feminist Economics*.

**Irene Dankelman** is an ecologist working in the area of environment and sustainable development with national and international NGOs, academia, governmental agencies and the UN for almost 30 years. She has specialized in the field of gender and environment and was published widely. She lectures on Sustainable Development at the University of Nijmegen, Netherlands, and consults with Irdana Advice.

**Sonja Greckol's** expertise is in Equity and Diversity and in Evaluation Methodology and, of course, gender equity in organizations. She has served on WEI's "Young Women and Work" issue editorial committee. But: "Closest to my heart — in the summer in particular — is writing poetry ... I am also an ace editor but not such a good proof reader."

**Prabha Khosla** is an urban planner with extensive international experience in local urban sustainability and participatory planning and governance, women's rights, gender, human settlements, social equity, water and environment. She develops capacity building materials and workshops on inclusive governance and democratic engagement at the municipal level. She is currently a consultant to UN Habitat. She is a founding member of Toronto Women's Call to Action, an Advisor to the Gender & Water Alliance and until recently the co-managing editor of *Women & Environments International Magazine*.

**Reggie Modlich**, a retired urban planner, was a founding member of Women Plan Toronto and later, of Toronto Women's Call to Action as well as a long standing board member and managing editor of WEI Magazine.

**Karla Orantes** completed an Hon. BA at the University of Toronto in Political Science and Ibero-American Studies. She worked in rural Mexico and did research in Cuba. She is currently working with the Center for Education on a job readiness program for people displaced by Hurricane Katrina. She has been involved with WEI Magazine since 2005.

**Rebecca Pearl** is an advocate and researcher focusing on the linkages between gender equity and sustainable development. She served as Sustainable Development Program Coordinator for WEDO (Women's Environment and Development Organization) and helped launch the Program on Economic and Social Rights and gender budget initiatives for UNIFEM (United Nations Development Fund for Women) in Ecuador. She consulted for UN agencies and international organizations, and now serves on the Board of WOCAN (Women Organizing for Change in Agriculture and Natural Resources Management).

**Kathy Raddon** recently completed her Masters in Environmental Studies at York University. Her interests are in eco-cultural criticism and literature, and her studies focused on the politics of Ontario's electricity system. Before beginning her MES, she managed Grassroots Environmental Products, a retail store downtown Toronto.

**Ulrike Röhr**, an engineer and sociologist by background, has been working on gender issues in planning, Local Agenda 21, building, energy, climate change, and broader sustainable development issues since the 1970s. Most recently, she has set up "genanet — Focal Point Gender Justice, Environment and Sustainability" in Germany, and has supported the Climate Alliance of European Cities' project on gender equality and climate policy.

**Terisa E. Turner** is associate professor of Sociology and Anthropology at the University of Guelph in Ontario, Canada. She co-directs the International Oil Working Group, an NGO registered at the United Nations secretariat in New York. With the IOWG, she assisted in enforcing the United Nations oil embargo against apartheid South Africa (1978-1990).

# Features

## A Huge Challenge and a Narrow Discourse

Ain't No Space for Gender in Climate Change Policy?

Minu Hemmati and Ulrike Röhr

### Why Gender In Climate Change Policymaking?

Humanity faces a huge challenge limiting the consequences of our behaviour and adapting to changing conditions of life: global warming and climate change signal, more frequent and more severe droughts, storms, floods, and rising sea levels. While we know that women carry specific burdens of changed climates, we must recognize that women can make specific contributions to climate protection. However, there is virtually no discussion of gender consequences of climate change and little mobilization of women to inform the policy and practices. Most sectors carry on with "business as usual". International agreements on climate are sketchy. The goals and targets set are much lower than they would need to be. Countries that are among the biggest emitters of greenhouse gases are not playing their part in the global community to deal with climate change.

Integrating a gender analysis adds to the quality, effectiveness, legitimacy, and likelihood of implementation of climate protection policies. For example, if we know more about why women and men use different modes of transport, we can develop public transport systems that make it easier for everyone to meet their transport needs without using private cars. In the absence of a gender analysis of climate-related policymaking, climate protection measures may increase the inequities for women. For example, replacing fossil fuels with renewable sources of energy can raise energy prices and create an additional burden for poor people, the majority of whom are women.



PHOTO M. HEMMATI

"You don't have to be old to be wise."

**We cannot have climate protection without justice, and we can't have justice without gender justice.**



Demonstration at COP11 in Montreal, 2005.

Redistributive measures are needed to avoid further impoverishing the poor.

The international debate about climate protection has focused on digesting scientific facts, projections, and developing technologies — like renewable energies, energy efficiency, bio fuels, economic or market measures, allowing developed countries to “buy” emission reduction credits by spending money on “clean” energy technologies in developing countries, or creating a carbon market, has also been a focus. It is questionable that such a narrow approach would satisfy the need to realize a vision of sustainable development in the context of climate change. Rather, the current discourse — at international and national levels — needs to be broadened, based on sustainable development as the overarching goal and the principle of gendering human development,

taking into view the environmental, social, and economic parts of the problem and of possible solutions.

There are differences between women and men in their respective access and control over to resources, their perception, attitudes and behaviour. From a sustainable development and from a gender and justice perspective, the climate debate is striking in several ways. Little consideration has been given to:

- Poverty (South and North) and its negative impacts on the global climate; e.g. poor people, mostly women, without access to other energy sources cutting down forests for heating and cooking;
- Over-consumption of resources in industrialised countries and by global elites; e.g. avoidable usage of energy for status purposes (luxury goods, housing and travel);

- Social implications of climate change outcomes and the threats these pose for poor women and men; e.g. farmers struggling with water shortages and changes in weather patterns;
- Strategies for adaptation: What can and should communities and nations in different parts of the world do to prepare for the future? How can we ensure that all groups in society are fully involved in planning and decision-making for adaptation?
- Questioning the dominant development paradigm that equates economic growth and well-being. While there are discussions about how to decouple economic growth and increasing fossil fuel use, economic growth itself is still understood as equivalent to increasing human well-being.

While we are not saying that integrating gender into climate-related policy-making would rectify all these shortcomings, taking a gender perspective will bring these issues to the table.

### What Are The Issues? Gender in Climate Policymaking

Energy, mobility and transport, agriculture and forestry, water, biodiversity, disasters and extreme weather, land use and urban planning, building and housing, and health are among the range of issues, practices and events that affect and are affected by climate and its protection. The availability of gender-disaggregated data varies considerably, depending on which issues and which regions of the world we look at. Below are a few examples of the knowledge we have. While much more research is needed to build a comprehensive knowledge base for climate policy making, these findings are a starting point, and sufficient to show that gender is indeed an important aspect of climate protection.

Energy production and demand are particularly closely linked to climate protection. From a women’s perspective in developing countries, we know of the lack of women’s access to energy; the need for affordable energy supporting women’s income generating activities; the high number of victims of indoor air pollution,

particularly women and children, and the need to replace inefficient biomass stoves; the physical burden of collecting firewood and the impacts on women's time; (see Eyzaguirre, Agyemang, Zgola et al. and Mwangi).

**Private and public transport:** For many industrialized countries, we know that women and men have access to different kinds of transport and that they use them for different purposes. For example, existing transport systems in many countries serve middle-aged, full-time working men well, but women more often depend on public transport, which does not meet their transport needs arising from paid work, household duties, and child and eldercare. Integrating a gender perspective would enable us to make transport systems both more user-friendly and more climate-friendly. If public transport routes and schedules were designed so that women can take their children to school and get to work in time, they would not need to use a private car.

**Risk perception is gender specific.** Women are generally more sensitive to risks and more averse to taking risks, including in relation climate change. Fewer women than men believe that governments are doing enough to address the challenge. They are more sceptical about technological solutions to environmental problems and are also much more critical of nuclear energy than are men. They are more convinced that we have to change our lifestyles to protect the climate.

Women's participation in planning and decision-making is still dismally low (see Eyzaguirre, in this issue). If it is true that women take smaller risks and would support either different or a wider range of solutions to climate problems, then it would be good if women were more influential in determining energy and climate policy, research & development, and investment. It would be interesting to find out if women would, if they had an effective voice in decision-making, invest more resources in climate protection, including motivating and enabling reduced energy consumption. Would women support investing in the wide-

spread use of renewables instead of further supporting nuclear technologies?

Adaptation, which must be context-specific and participatory, requires that all members of affected communities be part of a climate change planning and governance process. If women are not fully involved in planning and decision-making — using gender analysis and appropriate mechanisms for participation — the quality of adaptive measures will be limited and successful implementation will remain doubtful.

Health issues have arisen in various contexts. For example, during the hot summers of recent years in Europe, mortality rates among women of all ages were higher than among men. Future projections indicate a higher incidence of serious illness in older people and urban poor — among them being more women than men. Also, since it is primarily women who care for family members affected by extreme weather conditions and air quality, their illnesses put an additional burden on women and impacts their ability to work outside the home (see, for example, several articles in the Oxfam Journal 2002).

**Poverty:** It is widely acknowledged that climate change will likely hit the poorest people in the poorest countries hardest. Since women represent a disproportionate share of the poor, women are likely to be disproportionately vulnerable to the effects of climate change. Hence, all economic consequences of climate change and response measures need to be analysed by gender to identify and effectively counter disproportionate disadvantages for women.

Drought and deforestation also impact women in particular. In many developing countries, women are responsible for fetching water and firewood. These tasks become more difficult and time-consuming in the face of widespread climate changes. It is girls, more often than boys, who will drop out of school to fulfil these tasks. In addition, women will be further limited in their opportunities to engage in work outside the home.

Conflicts are predicted to increase in the course of climate change as natural resources such as water and arable land

become scarce. Integrating women and gender perspectives in conflict prevention and resolution processes has proven an effective success factor, and many traditional cultures indeed rely on women's skills to bring about harmony and collaborative problem-solving. A continued lack of women in power and decision-making is likely to hinder effective dealing with conflict.

Natural disasters particularly impact women's income, caring work, and safe-



Building a dam at COP6 in The Hague, 2000.

ty. In traditional disaster research, women are mostly seen as victims. Gender analysis in disaster research, on the contrary, suggests an alternative to the dominant approach of technologically supported disaster management: preventing disasters through sustainable development based on the participation of all community members and the contribution of everybody's skills.

#### **Where They Make Climate Policy: Relevant Organizations & Processes**

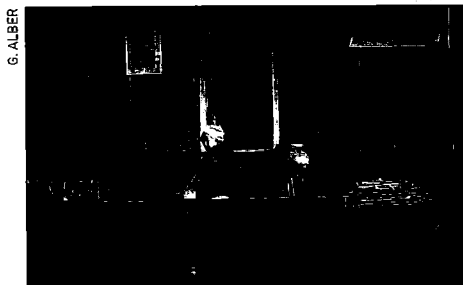
As climate science delivers more and more precise information about the changes occurring, the effects of climate change are becoming more visible and the projections more alarming. An increasing number of organizations and processes are becoming involved in the debate. We are focusing here on the key international ones, and add a few ideas on how women can get involved.

#### **UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC)**

The UNFCCC, an international legally binding instrument, is one of the environmental conventions that were agreed to at

the Earth Summit in Rio in 1992. It is a framework convention, and specific agreements, i.e. protocols, have to be developed to create targets, policies and monitoring mechanisms. The Kyoto Protocol is the first protocol created under the Climate Convention. Conferences of the Parties to the Convention (COPs) are held every year. Several thousand people attend these: 20-30% of them are government delegates, others represent the recognized observer constituencies like environmental NGOs, researchers, business and media. Women are not among the officially recognized observer constituencies although some women's organizations have registered as environmental NGOs.

Women were active during the first COPs (from 1995). Then there was a peri-



People living on the water: a Vietnamese women washing the dishes in front of her house.

od of low participation from women. Women's groups have picked up the strands again since 2002, holding side events, distributing statements, hosting an exhibition booth, discussing gender issues with delegations, and convening a Gender & Climate Caucus (see genanet website).

#### INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC)

This Panel is the main global scientific body that reviews, collates and publishes climate-related research. So far, IPCC has not paid any attention to gender issues in their assessment reports. In the 4th assessment report, due in 2007, more consideration will be given to 'cross-cutting issues'. Seven of those have been identified — including sustainable development, integration of mitigation and adaptation, and vulnerability — gender is not identified among them.

The IPCC, however, bases its reports

on published, peer-reviewed research and, since there is little available in the area of gender and climate change, the absence of gender can only be resolved by conducting gender-sensitive research on climate change as well as bringing relevant knowledge and hypotheses to the attention of the panel.

#### UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP)

UNEP operates climate change related activities in several of its centres around the globe. After having championed work on gender and environment issues in the 1980s, UNEP was not as significantly engaged during the 1990s. They have picked up the agenda again though, and published an overview booklet on women and the environment, and convened "The Global Women's Assembly on the Environment" in 2004 (See [www.unep.org/dpdl/cso/wave/Official.asp](http://www.unep.org/dpdl/cso/wave/Official.asp)). Gender was also on the agenda of UNEP's 23rd Governing Council in February 2005, which laid out a gender mainstreaming plan for the whole organization and its work. It remains to be seen when and how this decision is being implemented. Women will continue to monitor UNEP's progress by observing the number of women in decision-making posts, staff development measures and project criteria. They will also continue to collaborate with UNEP on specific programmes focusing on UNEP's organizational development and gender mainstreaming in its work.

#### UNITED NATIONS COMMISSION ON SUSTAINABLE DEVELOPMENT PROCESS (CSD)

The CSD was created after the Rio Earth Summit (1992) and is mandated to monitor the implementation of Agenda 21. It is now focusing on a new set of sectoral issues every biennial cycle, along with a permanent set of cross-cutting issues (including poverty eradication, consumption and production patterns, globalization, health, education, gender equality). Having been identified as one of the "Major Groups" in Agenda 21, women are participating actively in CSD sessions. However, there are few govern-

ments that support the attendance of women and gender experts financially. In addition, very few governments include gender experts in their delegations, while including NGOs has become a widespread practice.

#### Work in Other Agencies and Bodies

The United Nations Food and Agriculture Organization (FAO) has published an overview paper on gender and climate change 2005 (Lambrou et al. 2005), and is supporting the first review of existing research on gender & climate change (to be published by the present authors & FAO in early 2007).

The World Health Organization (WHO) is working on climate change under its "Global Change and Health" programme but has not paid much explicit attention to gender yet.

The G8, having focused on energy, energy security and climate issues in recent years, will continue this focus during its meetings in 2007. The G8 could, if it reversed its current practice of ignoring gender, set a very positive and influential example for others.

#### What We Need To Do

Bringing gender onto the climate change agenda needs investments in research, networking, and advocacy. And it will represent a much-needed innovation. In other words: it will be tough. Hence, we need a multi-pronged strategy, including the following components:

Closing knowledge gaps relating to gender and climate change: All climate protection measures and programmes and all instruments for mitigating climate change or adapting to climate change must be subjected to a gender analysis. All climate change related data, scenarios, etc. need to be disaggregated by gender. Gender experts and climate researchers need to engage in the issues.

Raising women's voices: Women must become involved in climate negotiations at all levels. But representation by numbers is not enough. We need women represented, gender experts, and preferably gender and climate experts.

Advocacy for gender mainstreaming in



policymaking, implementation, monitoring, and communication strategies and materials includes an array of practical steps:

- The Gender & Climate Caucus meets and advocates at UNFCCC meetings. These activities need to spread to regional and national levels as well as to other bodies and processes; women's organizations and networks that operate at these levels should take this up. These activities need to include bringing research and actions on gender and climate change to the attention of policy makers, and in particular the practices and campaigns of poor and of indigenous women, which should be sought, documented and given weight in negotiations.
- Mobilizing the international women's movement, including building on the considerable engagement of women in the anti-nuclear and peace movements. However, many women and women's organisations are not sufficiently informed about climate change and how it relates to women and gender. We need information tools and networking.
- Building networks & strategic alliances, for example, with the Global Women Environment Ministers Network, local government initiatives (e.g. Climate Alliance), trade unions, indigenous peoples' organisations, and environmental justice groups. Scientific bodies and conservation organizations are that traditionally are less inclined to include gender in their thinking should be urged to rethink this exclusion and should be kept informed about gender-related work.
- Prominent women's/environment advocates, environment ministers, leaders of regional groups, well-known scientists, business leaders, or journalists could "champion" gender & climate issues over a longer period of time.
- Timing: In 2005, international discussions began on protocol points to be in place for 2012. For new issues and aspects to be included in international negotiations, they need to be raised very early on in the process, and per-

sistently over time.

## Outlook

During recent international climate conferences, women have picked up the thread again and further developed their work around UNFCCC. An initial breakthrough was achieved at COP11 in Montreal (2005), where the first-ever statement of behalf of women was delivered to the closing plenary. A workshop held on the margins of COP11 helped to identify priority issues for future research. An exhibition booth and two "Climate Talk" events, one by the Ministers co-chairing the Global Women Environment Ministers Network, attracted a lot of attention (see the genanet website for details and documents).

General advocacy for women's rights and gender equity is crucial, but so is the ability to articulate in detail why and how gender should and can be integrated into climate related policymaking. Such expertise is hardly available within the process right now, and the participation of gender and climate experts — from the governmental or observers' side — would help formulate policies that avoid putting women at a disadvantage but rather be gender neutral or help to further gender equity.

There is a range of established analytical and practical tools that can and should be used, such as gender analysis, gender impact assessment, gender budgeting, and the knowledge and practical experience gained in participatory community development that is particularly relevant for adaptation. Even if we don't have all the necessary data yet, there is no reason to delay getting involved. The importance of climate protection and climate justice cannot be overstated — we need it now, and we need it to include gender analysis in order to get it right!

1 See <http://www.unep.org/dpdl/cso/wave/Official.asp>

**Minu Hemmati** A psychologist by background, Minu has been working as an independent advisor since 1998. Focusing on multi-stakeholder processes, and on gender & sustainable development issues and collaborating with governments, international agencies, non-government organizations, women's networks, research institutions, and corpora-

tions, Minu has wide experience with international policy making processes.

**Ulrike Röhr** is director of genanet — focal point gender, environment, sustainability, which aims to integrate gender justice within environment and sustainability policies. Ulrike's primary areas of work are gender issues in energy and climate change. She has been involved in engendering the UNFCCC process since the very beginning.

## Further Reading and Resources:

**Gender and Development. Climate Change.** Oxfam Journal Vol 10, No 2, July 2002

**Lambrou, Y. and G. Piana.** 2005. Gender: the missing component in the response to climate change. Food and Agriculture Organization of the UN. Rome, Italy ([http://www.fao.org/sd/dim\\_pe1/pe1\\_051\\_001\\_en.html](http://www.fao.org/sd/dim_pe1/pe1_051_001_en.html))

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# Global Climate Change and Women's Health

Kirsty Duncan

**F**or the first twenty years that climate change garnered international attention, gender issues were not on the agenda — although women (1) are generally poorer than men, and (2) are more dependent than men on primary resources (e.g. agriculture) that are threatened by changes in climate. Women often shoulder the responsibility for the household water supply and its purification; in Kenya, for example, carrying water may use up to 85% of a woman's daily energy intake.

Because women collect water, manage its household use, and grow irrigated and rain-fed crops, they know water's availability, quality, and reliability. Furthermore, as a result of this division of labour, women often come into contact with poor-quality water, and are more vulnerable to water-related diseases than are men. These diseases kill between five and twelve million people per year, most of them women and children. Millions more are sickened with diarrhoea, hepatitis, and trachoma that would be preventable with access to clean water and health care information. Women then also bear the main burden of caring for those who are ill. Yet, women, in most parts of the world, remain almost invisible in decision-making about climate change.

The Conference of the Parties (COP-8) however, has, at last, recognized that women are extremely vulnerable to climate change and that they may bear an unreasonably large share of the burden of adaptation. Human health depends considerably on investing in the well-being of women, as their physical condition largely determines the health of their children who are the adults of tomorrow. Moreover, being female or male has a major impact on an individual's health: the natural course of a disease may be different in women and men. Women and men may respond differently to illness,

and society may respond differently to sick women and men.

## DIRECT HEALTH IMPACTS

### (1) Thermal Extremes

In a warmer world, heat waves are expected to become more frequent and severe. The young, the elderly, the poor, the frail, and those who live in the top floors of apartment buildings and lack access to air conditioning, especially in large urban areas are particularly vulnerable. Men and women differ in their response to extreme heat. Women sweat less, have a higher metabolic rate, and have thicker subcutaneous fat that prevents them from cooling themselves as efficiently as men. Women are therefore less able to tolerate heat stress. In 1984, average daily temperatures rose from 21.1° C to 28.9° C during a heat wave in New York. Elderly women were at highest risk of heat-associated death: among those aged 75-84 years, death rates rose 39% for men, and 66% for women; among those over 85 years old, increases were 13% for men and 55% for women. More recently, a heat wave struck France in August 2003. Excess mortality in August was 14 802; in all age groups female mortality was 15-20% higher than male mortality.

Fortunately, heat-related health impacts can be reduced through behavioural adaptations, such as the use of air conditioners, increased intake of fluids, the development of community-wide heat emergency plans, and improved heat-warning systems. Unfortunately, these measures are often unavailable to women in developing countries.

### (2) Extreme Events

With increased temperatures, extreme weather events are likely to increase. Gender significantly affects the daily lives of women and men, before, during, and

after an extreme event. Women who are battered, immigrants, indigenous, isolated, poor, refugee, and seniors are particularly vulnerable to such events. Gender-specific health impacts of extreme weather events include: mental stress as a result of providing emotional care during and after the crisis, and increased violence. Police reports of domestic violence following the 1980 Mt. St. Helen's volcanic eruption increased by 46%. Following the 1993 Missouri floods, the turn-away rate at shelters rose 111%, programmes sheltered 400% more flood-impacted women and children than anticipated and in 1998, a Montreal Police Chief reported that 25% of calls received during the 1997 ice storm were from abused women. Gender-based violence may lead to psychological distress. A recent study found that 30-40% of all battered women attempted to kill themselves at some point in their lives.

Women must be included in disaster prevention, mitigation, and recovery strategies. Specifically, women must be engaged in: family, household, and workplace preparation for extreme weather events; response and recovery; emergency site organization; physical and emotional care for children; and organizing kin and friendship networks.

## INDIRECT HEALTH IMPACTS

### (1) Nutritional Health

In developing countries, particularly in Africa and Asia where women farm cash crops and cultivate paddies, women are responsible for up to 80% of food production. Food production may be undermined, both directly and indirectly through plant or animal diseases and pests in regions vulnerable to climate change. Some studies indicate that the number of hungry and malnourished people in the world could increase by ~10% due to climate change.

Consequently, women are likely to experience a decrease in nutritional health, as they are often the first to go hungry in an attempt to protect their families.

## (2) Respiratory Health

Climate change is likely to increase acid precipitation, particulates, and smog. Current health effects of air pollution range from severe, uncommon events (e.g. death) to mild, common events (e.g. throat irritation). Air pollution currently harms more than 1.1 billion people each year, and kills three million annually. Ninety percent of these deaths occur in developing countries, where air pollution is at its worst. Women and children do most of the cooking in developing countries. About 2.5 million women and children die each year from respiratory infections due to indoor air pollution. Traditional cook stoves produce carbon monoxide, hydrocarbons, pollutants, and smoke that affect the health of those who tend the stoves. (More than two-thirds of deaths are associated with indoor air pollution, which affects mostly women and children.

In South Africa, children living in homes with wood stoves are almost five times more likely than others to develop respiratory infections severe enough to require hospitalization. In rural Mexico, coal smoke exposure can increase lung cancer risks by a factor of nine. Air pollution may affect females more than males: females may inhale particles deeper into their lungs, and since they have fewer red blood cells, they may be more susceptible to the toxicological influences of air pollutants. Worsening air quality due to climate change will therefore further impair the health of women and children who already suffer from indoor air pollution. Improved biomass cook stoves, such as the Upesi stove developed in Kenya, conserve biomass resources, decrease the time and energy needed for collecting fuel and cooking, and emit 60% less smoke.

## (3) Vector-borne Disease

An estimated 20% of the world's population is at risk of contracting malaria. The disease causes more than 300 million acute illnesses and kills at least one million peo-

ple every year. Malaria kills an African child every 30 seconds, and remains one of the most important threats to the health of pregnant women and their newborns. Malaria is particularly sensitive to weather and climate. Precipitation, for example, determines the presence or absence of mosquito breeding sites.

All models predict increases in transmission of malaria in a warmer world. Pregnant women are particularly vulnerable to malaria because they are twice as attractive to malaria-carrying mosquitoes as non-pregnant women. Moreover, pregnancy reduces a woman's immunity to malaria, making her more susceptible to malaria infection, and increasing her risk of illness, severe anaemia and death. Maternal malaria increases the risk of spontaneous abortion, premature delivery, stillbirth, and low birth weight — a leading cause of child mortality.

Fortunately, insecticide treated nets (ITNs) offer substantial protection against malaria; the proper use of ITNs combined with treatment for malaria can reduce malaria transmission by as much as 60% and the overall young-child death rate by one-fifth.

## (4) Water-related Diseases

Schistosomiasis is a water-based infectious disease caused by five species of the fluke (parasitic worm) *Schistoma*. Symptoms vary but include bloody urine and liver disorders. The occurrence of schistosomiasis is particularly linked to agricultural, and water-development schemes. High-risk groups for schistosomiasis are school-age children and specific occupational groups such as irrigation workers and women who use infected water for their domestic purposes.

Climate change could expand the range of the disease, or create greater need for irrigation, particularly in arid regions. Potential increased transmission of schistosomiasis could be reduced by constructing irrigation systems that are not conducive to snails which are necessary for the disease.

## ADAPTATION

Regrettably, those with the least resources have the least capacity to adapt

and are the most vulnerable. Vulnerability is likely to be differentiated by gender.

According to Amartya Sen, "The voice of women is critically important for the world's future — not just for women's future." The equal participation of women is absolutely necessary to meet changing climatic conditions. ❖

**Dr. Kirsty Duncan** is an Adjunct Professor at the University of Toronto, an Author, and an international speaker. She previously served as Canada's health representative to the Intergovernmental Panel on Climate Change (IPCC).

### Further Reading and Resources:

Duncan, K., Guidotti, T., Cheng, W. et al. 1998. Health Sector. In **The Canada Country Study: Climate Impacts and Adaptation**. Koshida, G. and Avis, W. Environment Canada:Ottawa. pp. 501-590.

Duncan, K. 2006. Climate change, health, and women. Climate Change and Health Impacts Atlantic Conference 2006. St. John's, Newfoundland and Labrador, March 23-24, 2006.

World Health Organization. 2003. Climate Change and Human Health — Risks and Responses. WHO: Geneva.

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# Mud Maps

Artwork of an Aboriginal Australian Woman Inspires Action on Climate Change

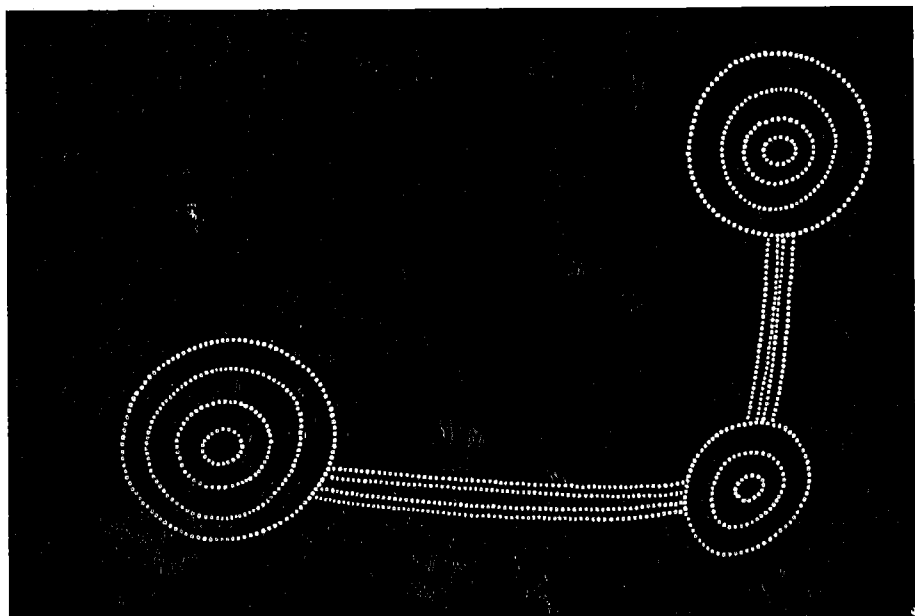
**Bronwyn Fredericks**

## Introduction

Dr Pamela Croft is an artist and member of the Kooma clan of the Uralarai people in South West Queensland, Australia. In the interview that follows, she discusses her perspective as an Australian Aboriginal woman and how her land-centred artwork inspires action around climate and other environmental changes.

## Residing Within Country

To many Aboriginal Australians, Country means place of origin in spiritual, cultural and literal terms. It refers to a specific clan or a tribal group or nation of Aboriginal people and encompasses all the knowledge, cultural norms, values, stories and resources within that area. The notion of Country is central to Australian Aboriginal identity and history, and contributes to overall health and wellbeing. Women and men both have a central role within Country, in terms of ownership, care and rights. The increasing shift of Aboriginal people to urban or other areas does not mean that one's connections to Country are lost, or that the significance of Country is no longer present. Instead it means that many Aboriginal Australians now pass through, dwell in, and live within the Country belonging to other Aboriginal Australians. It has been estimated that Aboriginal Australians have lived on the Australian continent for over 100,000 years. As a result we have a long history of relationships connected to Country: Australia's landscapes and seascapes and all the animals and plants and peoples that inhabit them.



"Mud Map" artwork.

Dr Pamela Croft names her Country as that of the Kooma clan of the Uralarai people in South West Queensland. She lives in Keppel Sands on the Capricorn Coast in Central Queensland within the Countries of the Darumbal (mainland and coastline) and the Woppaburra (Keppel Islands), areas that are intricately linked through history and relationship to each other. This region is at the southern end of one of the world's greatest wonders and World Heritage Site, the Great Barrier Reef. Throughout broader Australia, the region is marketed as the 'Beef Capital of Australia' and where 'the beef meets the reef.' Croft has practised as a visual artist since the mid-1980s and uses both Aboriginal Australian and Western techniques, education and style to tell stories about identity, sense of place, and the effects of colonization. She was the first Aboriginal Australian to earn a Doctor of Visual Arts.

## Mapping Darumbal Country

In her artwork, Dr Croft focuses on concepts of place, space and change within Country. She undertook a recent series of artwork on the muddy banks of the upper regions of Pumpkin Creek at Keppel Sands. Pamela is familiar with how the moon and the sun impact the tidal flows and how the time of year

affects the temperature of the water. She has traced the tracks of animals and other people who at times dwell within the area. She has watched, observed, hunted and gathered in ways of Aboriginal women, past, present and future.

In the Creek, Pamela used special paper to capture the gentle nomadic nature of the tides, which result in delicate patterns left on the mud that change with each ebb and flow of the water. The crabs imprinted their presence as they foraged for food, so too did the ibis and seagulls. This evidence of water and animals became stories, recorded in the mud like texts that have been imprinted within the artwork. Croft later used the paper as canvases for her artwork and added local ochres — black, brown and red to symbolise the water's connection to land, people, place, and a sense of past, present and future. The colours and lines flow within the artwork just like the contours of the Creek. They are tied within the artwork to a sense of Country that binds water, land, animals and us as human beings. Over time, the changes in Country became mapped in Croft's "Mud Map" and other artwork.

## Interview with Dr Pamela Croft

I interviewed Dr Croft in her studio at Keppel Sands in January 2006 to talk about her artwork and her messages about climate change in Country.

PAMELA CROFT

DR PAMELA CROFT [PC]: I am a Kooma woman of the Uralarai people. I give honour to the Darumbal dreaming ancestors and acknowledge the Darumbal people as the Traditional Owners of the Capricorn Coast where I now live. I additionally give honour and acknowledgement to the Woppaburra people who are the Traditional Owners of the Islands and waters off the Capricorn Coast mainland where I sometimes dwell and forage for food and items for my artwork. It is important to me to recognize that the site of my home and studio and where the majority of my artwork has been carried out is within Darumbal Country and Woppaburra Country.

DR BRONWYN FREDERICKS [BF]: Pamela, can you tell me about the foundations of your artwork?

PC: Most of my artwork is land-centred. From the positioning of an Aboriginal women, I try to portray the importance of tradition, recognition of ancestors, respect for uniqueness in spiritual expression and facilitate an understanding of history and culture, a sense of place and connections to family and community. I try to challenge non-Aboriginal people to come to an understanding of our world.

BF: Your "Mud Map" series of artwork is of particular interest. It details the movements in the water, the tides, and the animals found in different areas of Pumpkin Creek. What has undertaking this type of artwork told you about the environment?

PC: Scientists, politicians and environmental activists talk on the TV about global warming, greenhouse emissions, nuclear power and renewable energy resources. There are advertisements on TV that tell me to use different light bulbs and to change my showerhead to conserve water. They are looking at the big picture things. I see the day-to-day things, the changes in the water along the coastline, in the Creek and on the land that laps the water. I see what is happening to the mangrove areas. I have witnessed the removal of the areas where the crocodiles used to forage for food. The process of undertaking the "Mud Maps" reveals all of this. The process maps out the connections to place and reveals sets of relationships

including the physical, physiological, social, spiritual and metaphysical. It also maps the botanical, colonial and the Indigenous layers of memories within the landscape sites. They are showing changes within the sites, within my mapping.

BF: What are the changes that have been mapped and how do you know there are changes within the environment, within Country?

PC: When I sit in the Creek I can feel the temperature of the water and I used to know exactly when the seasons were changing. Nowadays, it is harder to pick. The temperatures of the waters around Darumbal Country and Woppaburra Country have changed. The fish follow the tides and the temperature of the water. Other animals follow the fish, like pelicans, and other sea birds. With the warmer water, we now all have less fish. We have to go further out from the coastline to forage for food. The temperatures are not uniform — some areas seem to have changed more than others. The corals tell me that I am not lying. You see, the corals change colour, they become bleached when the waters get too warm. Some corals might regenerate; it is hard to say. We hear on the TV in Australia that the frequency and severity of the reef bleaching is inevitable. It concerns me that there will be further deterioration of the reef. To me, that says that other aspects of the reef will also deteriorate and die.

BF: What about the animals within the reef, along the coastline and in the creeks?

PC: There are now not as many crabs and ibis and seagulls. In my last series of "Mud Maps" there were so few crab prints. It really bothered me. I will be going back down into the Creek soon to do another series of Mud Maps to see if the crabs have returned or if they are no longer there.

Fishing has become a problem. The biodiversity within the waters has been damaged by large-scale commercial fishing and by the large number of people recreational fishing. People have fished for more than just what they need for food. There have been incidents where fish have just been left or discarded. In 2001 a big cod washed up on the beach



Water helping us see, connecting the knots artwork (close-up).

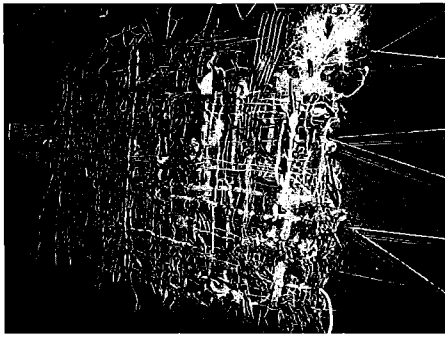


The Giant Cod washed up on Keppel Sands beach.

near the Creek. It had been pulled up by a big trawler chasing smaller fish and just discarded. I tried to incorporate that incident into my artwork at Yeppoon main beach but the local Council didn't take it up. Maybe it was too political. What has happened now is that there are large areas where there are no fishing zones. This is vital if the area's ecosystem and biodiversity is going to be fixed up and protected.

BF: You have also concentrated on the pollution that washes up on the beach in some of your other artwork.

PC: Pumpkin Creek, Coorooman Creek, Long Beach and the other beaches in the area are always scattered with litter from people on boats out at sea. Most of the litter washes in with the tides. In 1997, I made a huge net from all the rubbish that



Water helping us see, connecting the knots artwork on display.

washed up on the beach. I used small bits of other nets along with small pieces of rope, twine, rubber and plastic. I also incorporated all the skeletons of sea animals that I found trapped within the rubbish. I assembled the net across one entire side of my house and members of my community would watch as it progressed into this huge net. Sometimes they would also bring me bits that they had found too. The ocean would cast the rubbish out of itself as if knowing the destruction it does within the water.

BF: Tell me, Pamela, what do you try to do in your artwork when you put them into the public domain?

PC: Through my artwork, I try to ask people how they know about Country, how do people understand Country, and how will they contribute to the care of Country for



Dr Pamela Croft in Pumpkin Creek.

now and the future. What decisions and actions will they take that will impact on the natural activities within the Darumbal landscape, the Woppaburra landscape, Country, and the other landscapes on this continent and on this planet? I ask how can we all best work to safeguard the landscapes and seascapes so they can continue to be enjoyed; and so that future generations will be able to see and know Country as we see it today and as it was seen yes-

terday? I want to ask the people who view my work: What are you doing? ❧

**Bronwyn Fredericks** is an activist, writer, and educator from the Queensland region of Australia who has been involved with Aboriginal organisations for over 25 years. She is currently working with the Queensland Aboriginal and Islander Health Council (QAIHC), a State body for Aboriginal and Torres Strait Islander community controlled health services.





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# Solar Cooking to Improve the Environment

A Women's Association and Women Researchers Take up the Challenge

Melissa Zgola, Marian Zeitlin, Oumar Diene, Mame Birame Ndiaye and Ismael Diallo, with the collaboration of engineering students Daouda Diawara and Bray Rozoumka

## The Mékhé Solar Oven Project

This is the story of the Senegalese solar oven and the women's group, "Femmes de Ndiop." Senegal is a west-African country suffering from deforestation and rapid desertification. The women there endure chronic respiratory problems, and in some instances blindness, from the smoke produced by wood fire cooking, since women spend much of their days to prepare meals for their families. However, this country has an amazing treasure: exposure to intense sunlight. A women's group in the neighbourhood of Ndiop, in Mékhé, a village two hours from Dakar, wants to make a difference. This group of 120 women have banded together to actively take steps to ameliorate the health and quality of life of the women in the village, in addition to improving the environment by reducing their impact on deforestation and climate change.

Abdoulaye Touré, a Mékhé native, has spent the past twenty years perfecting and promoting a solar oven, specific to the climate and society of Senegal. His inspiration came in the 1970's, when it became disturbingly clear that Senegal had a deforestation crisis. Arable land would be sucked into the ever expanding Sahara to the north, and the livelihood of Senegal's agriculture would be at risk. Much of this crisis was due to wood scavenging for food preparation. The government stepped in, offering subsidized liquid butane gas as an alternative fuel. Unfortunately, wood remained the cheaper alternative, and the poor continued to use it to cook. Touré wished to provide a cheap cooking alternative for the women in his village, to abate the negative environmental impacts associated with scav-

enging for and burning wood, and to eliminate the health problems associated with standing over a fire all day. He welcomed volunteers to join his project and the Senegalese women's NGO CRESP (Centre de Ressources pour l'Emergence Social Participative) became involved. When the oven prototype was in good working condition, the project received funding from the Global Environmental Fund's Small Grants Programme. The Grant allowed for the design and implementation of the research project and the production and subsidized sale of 100 test ovens over a 20 months period.

The project was on its way. In May 2005, CRESP, Dr. Oumar Wane of the UNDP's Global Environmental Fund, and ten women nutrition interns from the University of Laval started adapting local recipes for solar cooking. Each of the Canadian nutrition and dietetic students lived in the home of one of the women leaders of "Femmes de Ndiop" for 12 weeks. They worked each day on testing and replicating favourite home



An enthusiastic family who participated in the experiment. Also pictured are Fatoumata Lo and two interns.

recipes in the solar oven given to the household. Together they created a simple cookbook, for most of the 55 recipes and other uses for which the women used the ovens. Local carpenters manufactured and the women purchased 50 ovens on the instalment plan for a subsidized price of \$30 each.

## Mid-term Evaluation

One year later, CRESP and the Department of Mechanical Engineering of the University Cheikh Anta Diop (UCAD) of Dakar, organized a volunteer team. It consisted of two UCAD researchers, former Tufts university professor Marian Zeitlin, volunteer from Engineers for a Sustainable World (ESW) Melissa Zgola, two student interns in mechanical engineering from UCAD's Polytechnic School, and four secondary school teachers from Mékhé. The team interviewed and collected observations from 88 households of "Femmes de Ndiop," women who had bought or were eligible to buy solar ovens. They discovered that although 44 households had purchased ovens, construction weaknesses



User Guide for the Senegalese solar oven.

and wear and tear had limited the number of families able to use their ovens to 30.

Melissa Zgola from ESW and the UCAD interns verified local units of measure and cooking times. They also collected and analyzed information on consumption of cooking fuel before and after the 30 families started cooking with their ovens. They determined that the partial substitution of solar cooking for butane gas, firewood and charcoal has successfully reduced the use of butane gas canisters by almost a third, firewood by almost two thirds, and charcoal by more than half. The effect of these reductions was emission cuts in terms of CO2 equivalents — contributors to global warming — by more than 40%.

### Early Promising Results

The following tables give a snapshot of these impressive effects. They provide

simple mean values from 10 families from different socioeconomic groups, who vary in their choices of fuel; gas being the most expensive and convenient, and wood the cheapest, most labor-intensive and worst in terms of smoke inhalation. Further analysis will take these factors into account, in addition to increasing scarcity and rising prices of bottled gas, some substitution of charcoal for gas, other market factors, differences in household size, and other methodological details.

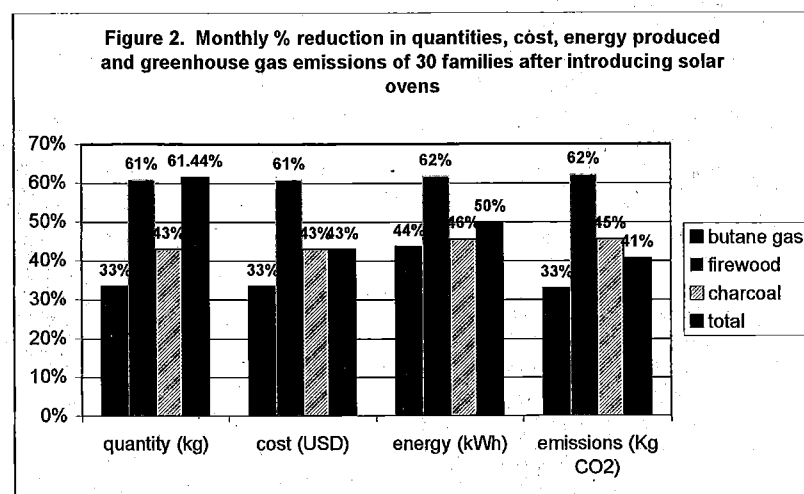
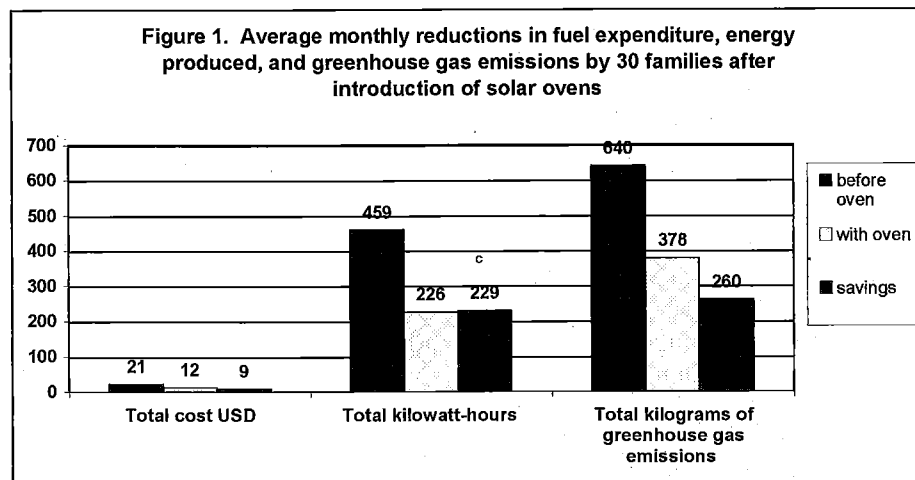
Figure 1 shows average monthly costs, energy produced in kWh, greenhouse gas emissions and savings per family after introduction of the ovens. The total fuel cost before the introduction of the ovens was about \$21, about 13% of Senegal's minimum wage. Figure 2 illustrates percentage reductions as well as total reductions per family.

The more than 60% reduction in use

of firewood saves the equivalent of a 125 pounds of tree per household per month and supports another goal of the project: to reduce smoke exposure during cooking. Wood smoke had been causing respiratory illness and blindness. Other favourable goals are to protect Mékhé's near-desert ground cover, save natural resources and decrease gas emissions that lead to global warming. Families who cook predominantly with firewood are poorer than those who can afford gas or charcoal. They are now motivated to cook as much of their food as possible in their solar ovens. Aside from the bulk and the smoke of wood cooking, women appreciate the time they save by using the solar oven — wood fires need more tending than gas or charcoal. All this increases the comparative convenience of solar cooking.

Figure 3 shows changes in use of the three types of fuel. The average family cut their use of butane gas from three to two large bottles per month, but they cut back far more in their use of firewood.

The neighbourhood of Ndiop is registered as an "ecovillage," a member of the Senegal Ecovillage Network, and in turn a member of the Global Ecovillage Network (GEN). When a village joins the network it demonstrates their commitment to reach sustainability and creates opportunity to share project ideas with other ecovillages. Every time that one of the ecovillages pilots a successful program, CRESP, which is the headquarters for GEN Senegal, takes on the challenge of extending the program to the other 32 member villages. In Mékhé, the solar oven project is complemented by a budding reforestation project. A nursery maintained by the women consists of seven native tree species that will be used for shade and aesthetic purposes around the village. In the future, trees grown in the nursery can be used as a renewable source of fuel. Care for the nursery and replanting involves all of the women. It reinforces the importance of a sustainable ecosystem by involving women in caring for their surroundings. Although the data show that far more trees can be saved by solar cooking than by reforestation, both are essential.

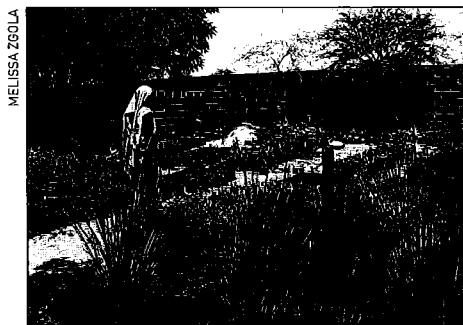




Substituting solar energy for gas does run into some problems. Senegal's preferred national noon meal, "thieb bu diene," is prepared by steaming fish, rice and vegetables together. Steam-cooking is not possible in the solar oven. Most established citizens of Mékhé, with enough means, will continue cooking with gas. Lastly, families with ample means also wait until after sunset to prepare a 9 pm supper, after the sun has set for the day, thus precluding solar cooking.

### Next Steps

Future analyses will profile family



MELISSA ZGOLA

Ngone Ndoye tends to the nursery in Ndiop.



OUMAR DIENE

Baking Demonstration

types, their use of fuel and other characteristics. It will include:

- Monthly frequency of preparing each recipe, using solar ovens, and other fuels. This makes it possible to measure patterns of increased usage of the ovens over time and changes in dietary habits brought about by solar cooking (reduction in consumption of cooking oil, for example).
- Constraints to the use of the solar ovens, including limitations in size and capacity of the standard oven and large households needing several standard ovens.
- Extensive use of the ovens for small scale commercial food preparation. This can contribute up to 2,500 CFA (about \$5) net income per day, not including the food consumed by family members. This is an income larger than the local minimum wage.
- Socio-demographic data on the families, including ethnicity, occupation, education and income (using detailed monthly expenditure data as a proxy measure). This permits identification of who will most likely to purchase and use the ovens.

### Encouraging Conclusions

An early, yet important conclusion of this study shows the environmental benefits of even partial use of solar cooking. These benefits are significant enough to justify high priority to provide even interim and imperfect solar cookers to women in Africa. The availability of solar cookers and the knowledge of how to construct them locally

— as is carried out by carpenters in Mékhé — also safeguards against rising prices and sudden shortfalls in butane gas supplies. Solar cooking decreases environmental degradation and desertification which leads to the scarcity of fuel wood and charcoal. In addition, our project has found solar cooking to benefit especially women by:

- Empowering women by reducing meal preparation time,
- Reducing respiratory diseases and blindness caused by smoke,
- Increasing the capacity of poor women to generate income by selling solar-baked cakes, sandwich meats, sauces, "hard-boiled" eggs, and
- Fuel-cost reduction for the poorest households, generally led by women, who cannot afford butane gas or charcoal.
- Offering high quality informal carbon offsetting for individuals and organizations at a rate of \$12 per mT over 2 years: \$120 per oven per family, including CO2 performance reports.

In short: a win-win solution, for the environment, women and their communities! ❄

**Marian Zeitlin** is co-founder and co-director of the non-governmental organization CRESP (Centre de Ressources pour l'Emergence Sociale Participative) Senegal, and former professor of social science research methods and program design at the Friedman School of Nutrition Science and Policy, Tufts University; Melissa Zgola is a volunteer with Engineers for a Sustainable World (ESW) and a graduate of Cornell University. Daouda Diawara and Bray Rozoumka are students in mechanical engineering at the Polytechnic School of University Cheikh Anta Diop (UCAD); Oumar Diene, Mame Birame Ndiaye and Ismael Diallo are Project Managers with CRESP Senegal.

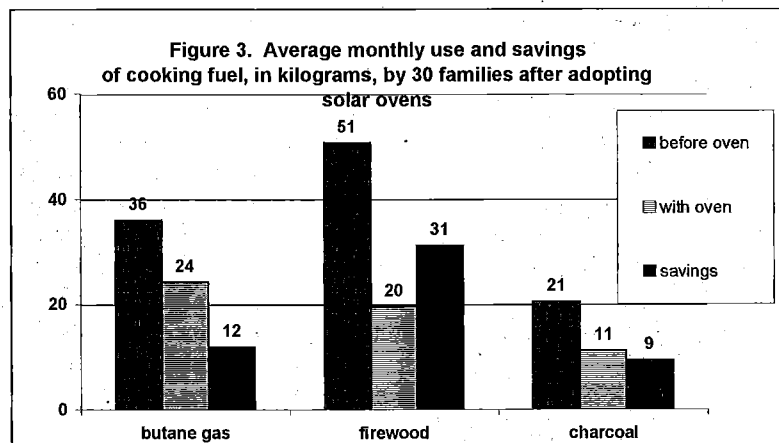
### Further Reading and Resources:

CRESP Senegal: [www.cresp.sn/defeng.htm](http://www.cresp.sn/defeng.htm)

CRESP Ithaca: [www.cresp.cornell.edu/](http://www.cresp.cornell.edu/)

Engineers for a Sustainable World: [www.esustainableworld.org/](http://www.esustainableworld.org/)

Cornell University: [www.cornell.edu](http://www.cornell.edu)



# Climate Change and Canada

## An Untapped Opportunity to Advance Gender Equality?

Jimena Eyzaguirre

This year marks a period of reflection on Canada's action on climate change. A change in federal leadership and a planned review of national programmes provides a window of opportunity to recraft a path forward. Such a path could achieve significant and sustained cuts in Canada's greenhouse gas emissions and help communities adapt to climate change impacts. Although federal climate policy has been extensively criticized, the failure to address gender differences in government policies and programs has not been identified. This near-total blind spot stands in contrast to Canada's adoption of the *Beijing Platform for Action* at the Fourth United Nations World Conference on Women in 1995 which commits to the integration of a gender perspective across government policies and programs.

Climate change is an environmental concern shared across Canada. The extent of media coverage on the issue, public outcry over government action or inaction, and results from public opinion polls reveal the sensitive and complex nature of the challenge. Climate determines how and where we live. Warming temperatures, changes in rain, snow, and ice patterns, rising sea levels, more frequent and intense weather-related disasters — such as floods, droughts, extreme heat waves, forest fires, and violent storms — have the potential to disturb ecosystems and pose a threat to human health, safety, and well-being. Reducing the impacts of climate change requires a shift away from activities and behaviours that increase the concentration of greenhouse gases (GHGs) in the atmosphere, mainly through the combustion of fossil fuels.

Tackling climate change demands two complementary policy responses — mitigation and adaptation. Mitigation involves curbing the emission of GHGs.

Adaptation prepares societies for future climate impacts and those that will take place regardless of mitigation. Women play special and gender-specific roles in both types of policy response, yet these roles remain poorly understood.

The lack of analysis and debate in Canada on the linkage between gender and climate change is typical. In United Nations forums mention of gender is recent; it first appeared as a discussion topic at side events complementing the 2002 and 2003 rounds of international climate negotiations. Dialogue that does take place focuses mainly on developing countries, where differences between men and women in income, education, economic opportunities, and access to and use of energy resources, highlight the relevance of gender in designing climate policies and programs. However, the *Climate for Change* project, funded by the European Commission in 2004-2005, and emerging evidence from other sources argue against assuming gender neutrality in climate policy in industrialized countries as well.

Based on a review of federal climate policies and programs to date, there are reasons why Canadian policymakers would be well justified in paying closer attention to gender issues in designing and assessing future responses to climate change. Gender equality refers to the ability of men and women to realize their full human rights and potential to contribute to society, and benefit from the results. It requires that society value the differences and similarities between men and women, and their varied roles.

### Canada's policy response to climate change

Women remain under-represented in positions of power within Canadian governments. Today, one in five Members of

Parliament are women. Participation rates of women in provincial/territorial legislatures and municipal councils are equally low. Within Natural Resources Canada and Environment Canada — two lead federal departments on climate change — female employment is below the federal public service rate as a whole. Men occupy most executive positions.

Canada bypassed the chance to foster increased participation of women in developing the national response to climate change after our decision to sign on to the Kyoto Protocol in 1997. At the time, the Canadian federal government set up a consultative process to develop options for addressing climate change, involving sixteen sectoral working groups of about 470 "experts" in total. Industry, academia, non-governmental organizations, and governments were represented. Each group analyzed the costs and benefits of tackling climate change and recommended options to reach the national GHG emissions target. On average, for every female expert, seven male experts sat at the table. The only group in which women were not the minority was in public education and outreach.

Since 1997, federal climate change investments of over \$1.5 billion have failed to reverse trends in Canadian GHG emissions. Emissions have risen steadily since 1990 levels and are now about 35 percent over our Kyoto target. Information-provision, modest financial incentives, and funds for research and development (R&D) of "clean" technologies have been the main instruments to induce change in behaviour across Canadian society. Investments have also gone into expanding the market opportunities for Canadian businesses to transfer clean technologies to developing countries and to gain access to carbon credits from GHG-reducing projects.

## The role of women in climate change policy

What are the special interests and roles of women to consider in climate change policy? At present, the lack of publicly available data disaggregated by sex is a barrier to answering this question for Canada. Government reports on household emission trends or on the performance of government programs do not report on gender-specific outcomes. Outside of Health Canada, there appears to be no evidence to suggest that federal departments are concerned with the link between climate change and gender equality in Canada. In contrast, program funding provided through the Canadian International Development Agency (CIDA) to developing countries for action on climate change is more likely to support equality in outcomes for both sexes. This is due to CIDA's use of gender-based analysis, a tool used to make policies and programs reflective of women's concerns and experiences.

At the same time, women are increasingly engaged in climate change discourse, are active in a range of policy dimensions, and represent disciplines pertaining to natural and social science, business, and technology. For example, since the 2000 launch of Climate-L, a list service of the Manitoba-based International Institute for Sustainable Development, the relative proportion of annual submissions by women has nearly doubled, from 20 to about 40 percent of total postings. Consideration of this reality in developing climate policy is a point of entry towards gender equality.

Below are four reasons to push forward on these small initial gains.

### Four reasons to account for gender issues in climate change policy

#### Reason #1: Establishing goals and priorities in climate protection requires the insights and expertise of both men and women.

Limiting the adverse effects of climate change requires adjustments in individual and collective behaviour with potentially far-reaching social, economic and ecolog-

ical consequences. Everyone has a stake in these decisions. To maximize the effectiveness and efficiency of policy solutions, both women and men need to participate in shaping the future of Canada's economy, in making decisions on natural resource and environmental management, in setting research agendas, and in prioritizing investments. In other words, both women and men should be involved in deciding and influencing who gets what and when. To date, Canadian women have had a limited role on both accounts.



Highway driving.

#### Reason #2: Preferences and abilities to reduce greenhouse gas emissions differ between Canadian men and women.

Differences in emissions profiles between women and men are important considerations for programs targeting households. In Canada, patterns in personal mobility, use of electrical home appliances, and space heating / cooling account for over 80 percent of household-level GHG emissions. Comprehensive studies documenting gendered differences across Canada in these areas are lacking. However, selected city-level studies on transportation indicate that transit ridership tends to be greater for Canadian women than for men; women make shorter, multi-

destination trips when driving, tending to cater to other family members' travel needs. Women are generally more concerned with vehicle safety and less concerned with power and acceleration than men.

Policymakers must consider the extra cost and effort required to make personal adjustments in response to climate policies, and whether these might disproportionately affect women. For example, given the transportation patterns noted above, how might the effect of policies aimed at limiting the use of personal vehi-

cles differ between men and women?

In terms of choice of policies, some evidence indicates that women have less confidence in technological solutions than men. For example, a 2005 study by the Energy and Materials Research Group at Simon Fraser University on Canadians' attitudes towards the capture and storage of carbon dioxide emissions — a type of GHG — in underground geological formations suggests that women are less likely to support the application of this technology than men.

Finally, if information campaigns and volunteerism form a significant part of policy, the information, messages, and incentives provided to the public need to resonate with women and men and take cultural



Transit.

considerations into account to be effective.

### Reason #3: Vulnerability of women to the impacts of climate change tends to be different from that of men

In Canada, as in most countries, social-economic trends still place women at a disadvantage in absorbing any additional costs associated with recovering from or preparing for the effects of climate change. Women tend to live on lower incomes than men and are more likely to live in poverty. Within the female population, indigenous women have even lower incomes and higher rates of poverty. Women are also more likely than men to be responsible for child-care and care of aging relatives, the health of these two groups being particularly at risk from the effects of climate change.

Canadian research focused on understanding gendered differences in vulnerability to climate change impacts is sparse. One exception is a 2004 study on the 1998-ice storm in Québec, Eastern Ontario, and New Brunswick, profiled by Health Canada's bulletin *Health Policy Research*. This study concluded that pregnant women's exposure to stress and anxiety affected the general intellectual development of children born shortly after the storm.

Gender trends among other demographic factors in studying the health effects of extreme weather events, yield

interesting results. For example:

- A 2000 study following up on the health impacts of the 1996 Saguenay flood among affected residents in Québec revealed that the physical and psychological effects of the flood were greater for women than for men. Women are at greater risk of suffering from psychological effects than men, since they often are faced with the need to recover from the event while continuing to fulfil household and external demands.
- A 2005 project by a University of Toronto researcher and Environment Canada dealt with differences in risk perception during extreme weather events and implications for disaster management strategies. In this study, the results of a survey on attitudes during the passage of Hurricane Juan through Nova Scotia in 2003 show that women generally felt more vulnerable to the effects of the storm than men. The perception of vulnerability could both limit engagement in risky behaviour and act as a deterrent to taking decisive action in the event of a disaster. An awareness of difference in risk perceptions among residents of a city or community can help identify barriers to successful adaptation.

### Reason #4: Governments are responsible for ensuring the fair distribution of benefits of climate policy and programs

Who has benefited from federal investments to address climate change? How are information and subsidy programs affecting the behaviour of women and men with respect to energy use and personal mobility? Are both women and men able to access and prosper from investments in R&D for clean technologies and climate impacts research?

Despite the imperative to advance gender equality that climate change policy presents, federal policies and programs implemented in Canada have been gender-blind. Today, we cannot say with certainty that federal climate policies and programs implemented since the late nineties reflect the aspirations, views, concerns and actions of Canadian women. The federal govern-

ment should strengthen climate change policy to address this critical shortcoming. A first step would be to identify the types of policy responses that are most relevant to the discussion. Non-governmental organizations and universities can assist in this process of discovery. Our commitment to gender equality demands that we use all areas of public policy towards this goal, climate change is no exception. ❧

**Jimena Eyzaguirre** has worked on climate change issues since 2000, as an academic, NGO representative, consultant, and public servant. Currently, she is a policy analyst and an active member in the Women's Network at Natural Resources Canada.

#### Further Reading and Resources:

**Climate-L** — A list service provided and maintained by the International Institute of Sustainable Development [www.iisd.ca/email/climate-L.htm](http://www.iisd.ca/email/climate-L.htm)

Database of research projects funded under the **Federal Climate Change Impacts and Adaptation Program** [www.adaptation.nrcan.gc.ca/home2\\_e.asp?CaID=9&PgID=23](http://www.adaptation.nrcan.gc.ca/home2_e.asp?CaID=9&PgID=23)

European project **Climate for Change** — gender equality and climate policy [www.climateforchange.net/](http://www.climateforchange.net/)

Hanson, R. (2005) Hurricane Juan: A comparison of impacts and vulnerability: Implications for natural hazard mitigation. Presentation at the conference: **Adapting to Climate Change in Canada 2005: Understanding Risks and Building Capacity** [adaptation2005.ca/abstracts/hanson\\_e.html](http://adaptation2005.ca/abstracts/hanson_e.html)

Health Canada (November 2005). **Climate Change: Preparing for the Health Impacts**. Health Policy Research Bulletin, Issue 11. [www.hc-sc.gc.ca/sr-sr/pubs/hpr-rpms/bull/2005-climat/index\\_e.html](http://www.hc-sc.gc.ca/sr-sr/pubs/hpr-rpms/bull/2005-climat/index_e.html)

Statistics Canada (2006). **Women in Canada: A Gender-based statistical report**.

Status of Women Canada (December 2006). **Equality for Women: Beyond the Illusion**. The expert panel on accountability mechanisms for gender equality — final report.

# Gender and Drought Hazards in the Rangelands of the Great Horn of Africa

## Is Gender Equity the Only Solution?

Margaret Mwangi

Droughts are frequent and widespread in the Greater Horn of Africa and are the most injurious climatic hazard that devastates livelihoods. Today, about 200 million people live with this age old, but intensifying phenomenon hovering over all things living, especially women.

### The Context and Patriarchy of Pastoralists in the Horn of Africa

Over the ages, humans have evolved three ways to survive in the fragile ecology and unpredictable climate of the region (Figure 1). Some groups are arable or sedentary farmers growing crops and tending their animals in stable settlements. Others are pastoralists, migratory groups whose livelihood depends on animal husbandry alone. They prevail in dry — or rangelands, areas unsuitable for arable farming and prone to droughts. A third way of life combines the above into agropastoralism. Droughts and soil conditions dictate when and where people live by these options.

In the El Nino period of 1997/8, with excess rainfall in the whole region, no one migrated. Most years, however, a few areas in the region have a “good year” while others suffer from droughts, forcing people to migrate. Pastoralism is the predominant form of livelihood in the Greater Horn of Africa. Drylands cover 100% of Somalia and Djibouti and 80% of Kenya. Seventy percent of Somalia’s population are pastoralists. Currently the region is recovering from a devastating drought that started in 2004 and ended this year causing 15 million pastoralists to struggle with food shortages and starvation. The light areas in Figure 2 indicate the areas of the region that were depleted

by this drought.

Social systems reflect ecological and climatic conditions of a region. In these drought prone areas, loss of human lives and livestock, food shortage, and conflict over already scarce resources have made pastoralist life a necessity for the majority of the population. These conditions have shaped the social structure and assigned men and women very distinct roles among all pastoralist tribes in the region. Families are patriarchal and almost always polygamous. Men are the breadwinners; they own land, livestock and any other property, including women who are considered less important than livestock and whose rights, duties, obligations and status men define. Men care for and migrate with their livestock, manage grazing and water resources, provide security, arrange marriages, communicate with outsiders, raid to increase their livestock and make all major decisions affecting family and the community. On their migrations, men take along their sons and young wives who have to provide them with food, water, sex and house building. When droughts occur, men start migrating in search of more viable pastures along traditionally established migration pathways across the vast rangelands.

Women are mainly responsible for childbearing and domestic chores; they cook, fetch water and fuel wood, wash clothes, take care of children, sick and elderly and build houses. Those too weak to migrate are left behind: the old, the very young and marginal livestock. A Miombo-Network funded study conducted in Kajiado District, Kenya in August 2005, found that over 80% of women are left behind in times of drought-induced

migration. While women can and do influence the domestic decisions of their men, they play no role in the decision making for their communities.

Women are forced to assume men’s responsibilities for the security of the household, the care and survival of those left behind under increasingly unsustainable conditions. As women cannot own land and livestock or access employment, loans or any other entitlements, women-headed households are very vulnerable. Although traditions demand elder male relatives support such families in times of drought, this duty is often ignored and women and their dependents are left without means of survival. Widowed, disabled and deserted women are particularly at risk. Medical and sanitary services for women and girls plummet; malnutrition rates intensify especially among children. Before puberty and marriage girls are made to drop out of school to fetch ever more distant water and fire wood for their families. Boys help tend the herds when not in school or accompany the men on migration. In one of the most devastating droughts that affected the Greater Horn of Africa in 2000, a United Nations report commented:

*“...vulnerable persons such as women and children have been forced to walk great distances within their countries or across borders seeking refuge and humanitarian assistance... Timely assistance is the difference between survival and death for a large section of the 13.4 million people, mostly women, children and elderly persons, whose households and communities have succumbed to several vicious cycles of drought, and instability...”*

Today increasing population pressure, farming, immigrating pastoralists, refugees from other drought stricken areas hamper migrations. Drought fall-back zones are disappearing causing a reduction and erosion of grazing areas. This greatly reduces the productivity of the herds. Some pastoralist families

migrate to urban centres to take up menial jobs. There, many depend on uncertain relief food from government and other agencies.

Governmental and institutional resource management policies and planning in the Greater Horn of Africa are influenced solely by men. Since women

are excluded from policy-making and participation in all public institutions that influence society, policies do not address the needs of women, nor are their roles appropriately acknowledged. Likewise, drought policies are designed only by men; these policies are silent about the vulnerabilities of women to climatic hazards. Ignoring the realities and needs of half of their societies, but undermines the viability and effectiveness of any drought response.

### Pastoralist Women Hold Key for Survival

Looming climate changes increase the frequency and severity of droughts and threaten the traditional pastoralist way of life. In response, women have become involved in local initiatives to diversify their livelihoods. In the process women are organizing themselves. Most are informal groupings; they cooperate and help each other with everyday chores, when sick or widowed. Many self-help groups are associated with religious groups such as mosques, or churches. In some communities women practice some farming. The Turkana women of northern Kenya, who traditionally do not migrate at all, grow sorghum and millet on riverine swamps and other watered sites. The Maasai women make and sell handicrafts.

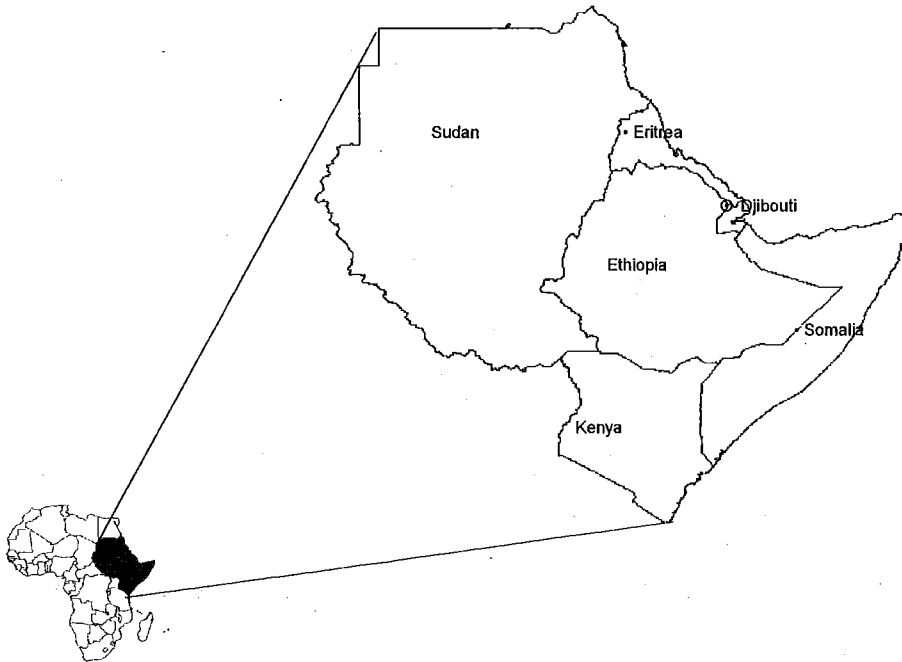


Figure 1. Location of Greater Horn of Africa. Predominant pastoral groups include Afar (Djibouti), Afar, Kunama, Nara, Saho, Tigre, Tigrinya, Hidareb (Eritrea), Afar, Borana, Galla, Merille, Saho, Somali (Ethiopia), Borana, Burji, Gabra, Galla, Maasai, Pokot, Rendile, Samburu, Somali, Turkana (Kenya), Afar, Somali (Somalia), Baggara, Dinka, Kababish, Mundari, Nuer, Toposa (Sudan).

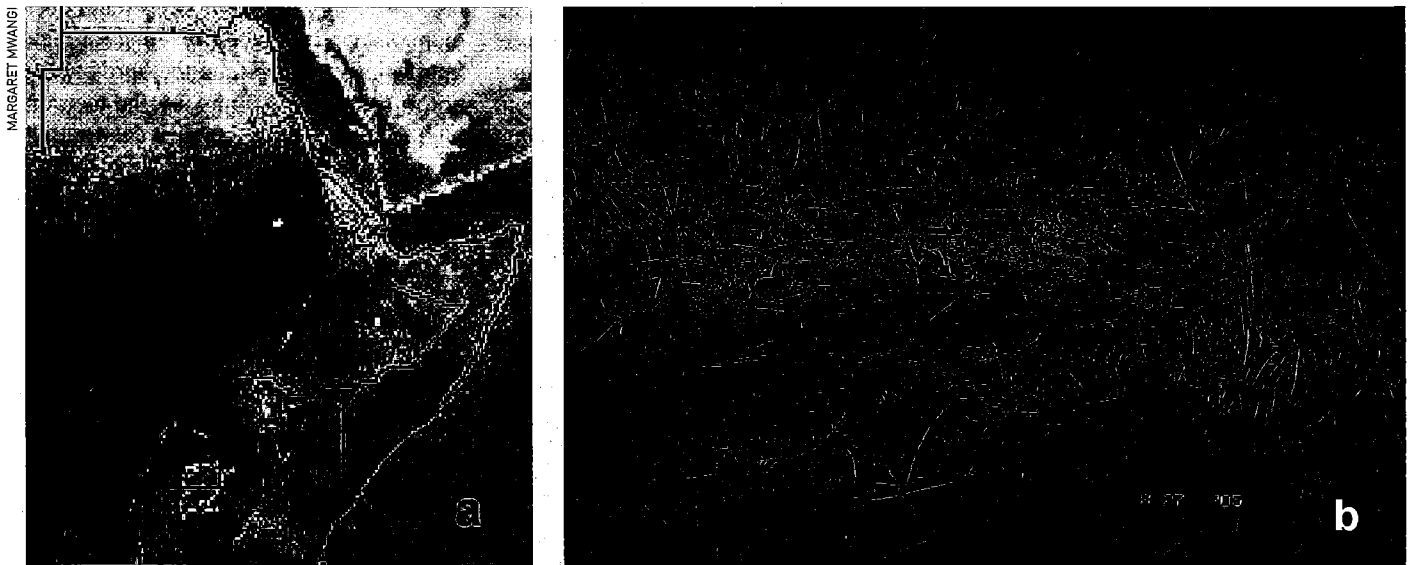


Figure 2. (a) Satellite image captured during the devastating drought of August 2005. Note the depleted forage conditions shown in light shades. (b) Non-palatable vegetations like these are common occurrence in pastoralist lands in times of drought.

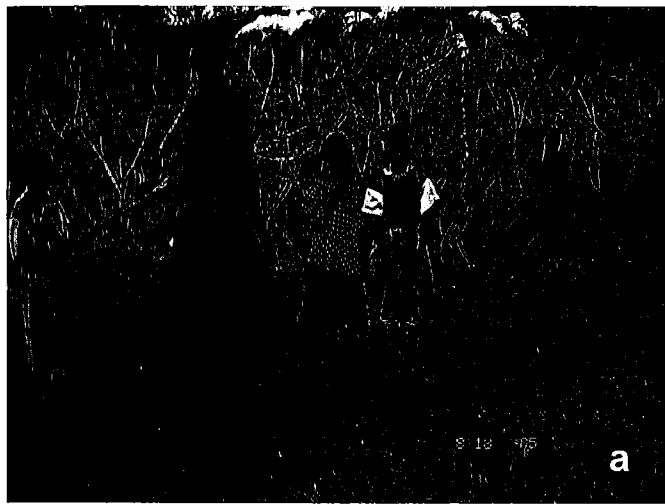


Figure 3. (a) Maasai pastoralist woman with children at home, and (b) a typical Maasai pastoralist house.

MARGARET MWANGI

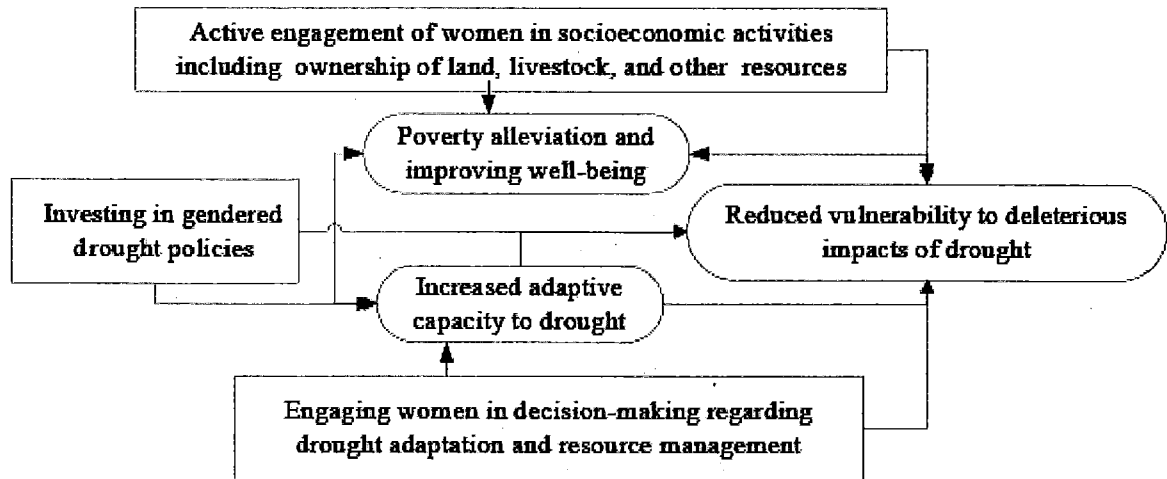


Figure 4. A framework showing the benefits of women's involvement in drought management.

In Laikipia and Kajiado districts of Kenya, women's groups have taken to harvesting rainwater. A few groups are registered as NGO's. In this way, pastoralist women help improve the welfare of their families and communities. However, these efforts are very localised.

To rescue this male-driven pastoralism from its current vulnerabilities to drought and climate change, women are a human resource that can and needs to be tapped. Thanks to their everyday management of these during the men's absence, they have profound knowledge of ecosystems and the tasks which ensure the livelihood of

their households and communities. Already women have proven receptive to diversifying their livelihoods. Their input in formulating and implementing drought policies and strategies can provide complementary and necessary priorities for drought adaptation.

Women's active participation in socioeconomic activities, community decision-making, the right to own land and livestock and control over reproduction would greatly empower them. They could then become more sedentary and pursue other sources of livelihood such as producing and trading in handicrafts and

dryland farming. This would provide a basis for allowing girls to stay in school. It would also allow women and their households left behind during migration to become less vulnerable and dependent on men. A framework to promote a gender balanced awareness and understanding of drought is contained in the diagram in Figure 4. The concept aims at enhancing adaptive capacity of pastoralist women, and indeed of the greater pastoralist community by creating a more diversified and sustainable way of life. Although it is debatable whether climate change policies, at national, and interna-

tional scales, are gender mainstreamed, local, national and international support in facilitating assessments of vulnerabilities and providing tools toward feasible adaptation to frequent and intense droughts is necessary. Future research needs to identify and operationalize specific gender issues and assist women in integrating these into policy frameworks.

With increasing droughts due to climate change, the survival of pastoralist societies hinges on women participating in all aspects of their communities equally, and to the fullest of their abilities, creativities and energies. It will be up to their men to understand the writing on the wall. Will climate change bring gender equity to the pastoralist women of the Horn of Africa? ❧

**Further Readings and Resources:**

FEWSNET. Famine Early Warning System Network. [www.fews.net](http://www.fews.net)

IELRC. International Environmental Law Research Centre. [www.ielrc.org](http://www.ielrc.org)

IIRR., Cordaid., and Acacia Consultants. 2004. **Drought cycle management: A toolkit for the drylands of the Greater Horn of Africa.** International Institute of Rural Reconstruction, Nairobi; Cordaid, The Hague; and Acacia Consultants, Nairobi.

International Center for Research on Women (ICRW). [www.icrw.org](http://www.icrw.org)

ReliefWeb. ReliefWeb of the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). [www.reliefweb.int/rw/rwb.nsf/AllDocsByUNID/a86cee02819d0494c12568f60030f87b](http://www.reliefweb.int/rw/rwb.nsf/AllDocsByUNID/a86cee02819d0494c12568f60030f87b)

UNEP. 2004. **Africa environmental outlook: Case studies: Human vulnerability to environmental change.** United Nations Environmental Programme, Nairobi, Kenya.

**Effects of Drought on Nomadic Pastoralism: Impacts and Adaptation among the Maasai of Kajiado District, Kenya.** The pilot study of the project was conducted in August 2005. This is an ongoing-project funded by the Miombo Network.

**Margaret Mwangi**, currently a PhD candidate in the department of Geography at the Pennsylvania State University; has a Masters degree in Environmental Studies, and a BSc. Forestry (Hons). She previously worked with the International Center for Research in

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# Temperatures Rising

Understanding the Relationship Between Climate Change, Conflict and Women

Mimi Osei-Agyemang

**I**n many developing regions of the world where the balance of peace is barely maintained, imminent climate change events could eventually tip the scales and cause unprecedented social and political catastrophe. Climate change in its many forms threatens and destroys the viability of these traditional societies and their ways of life. Most societies still burden women with all or most care giving and domestic chores while all but excluding them from the economic and public realm and rendering them vulnerable and powerless in the face of such catastrophe. Yet, climate change has been overlooked as a catalyst in the present humanitarian crisis in Darfur, Sudan. As global atmospheric temperatures have been rising, Darfurians have been reaching their metaphorical boiling points. The severity of the situation in Darfur should compel each of us to attempt to understand the relationship between climate and conflict, and to anticipate what the consequences of global warming might be for women in vulnerable regions.

Global warming describes the increase in the atmospheric concentration of greenhouse gases (GHGs) that causes an elevation in global atmospheric temperatures and long and short-term climate and weather patterns. The debate between scientists — and governments — from around the world has centered on the extent to which anthropogenic activity is impacting the rate of change. What we do know, with relative certainty, is that these changes are occurring at an exponential rate and that there is some correlation between human activity and the concentration of GHGs in the atmosphere.

Yet, even as climate scientists are making headway in convincing policy

makers and the public of the realities of global warming, we have not succeeded at communicating how these major ecological changes will affect human societies. In regions of the world where there is little economic development, low Human Development Indices, tenuous infrastructure, and fragile socio-political conditions, the risks and consequences of micro- and macro-climate change events are much greater. Thus, it is imperative to understand what may be described as *socio-climatic* impacts of global warming. Socio-climatic impacts are defined here as the relationship between human society and the climate. These are the dynamic results of interacting and correlating climatic and ecological factors and social factors impacting humans embedded within a specific cultural context.

As a result of continued global warming, climate change will cause more fre-

quent and more extreme weather events, such as drought, flooding, tornados, hurricanes, and other hydro-meteorological disasters. These disasters have the potential to devastate human settlements and imperil human health on vast scales. Much of the infrastructure used for shelter, transportation and the supply of water, electricity and natural gas will likely be irreparably damaged in many places. Vector-borne diseases (human diseases that are transmitted by any animal vector) will proliferate, and more people will face ill health, famine and starvation.

Climate change will wreak havoc on human settlements and human health, but the greatest, although least-known, threat of climate change is to human relationships, including those between men and women. New ecological challenges and stresses on natural resources will disturb favorable or symbiotic human relation-



Refugee Mother and Child in Darfur. Climate change events, such as desertification, will dramatically impact human relationships, especially between men and women, in vulnerable regions of the world.

ships, and lead to more episodes of intense conflict and violence in many places. Poverty-stricken parts of the world suffer especially, because the consequences of violence are so severe, particularly for disenfranchised women who typically suffer the most in times of war and devastation.

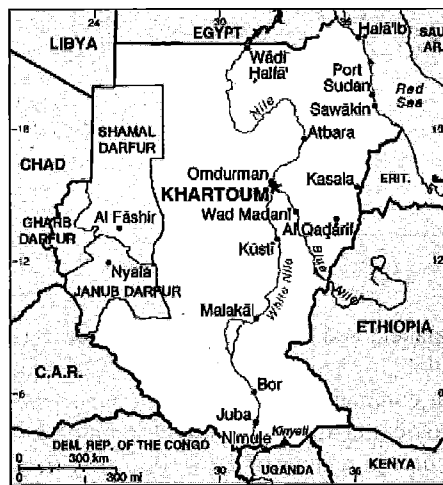
### Consider Darfur

Situated adjacent to the Red Sea and bordering nine other countries, Sudan is like a small model of Africa. It replicates the enormous biodiversity, cultural diversity, tumultuous history, and corrugated terrain characteristic of the entire African continent. The country has a population of 39 million people, divided into over 130 different cultural groups. According to the UNDP's Human Development Index (a measurement index of human progress that combines indicators of real purchasing power, education, and health), Sudan is a Least Developed Country (LDC), ranking 139 in 2004.

### Basis for the Current Conflict

From the time when Sudan established its independence in the mid-1950s, the country has been continually devastated by violence and corruption. Since February 2003, the conflict has intensified between the Janjaweed, a Baggara militia group and the non-Baggara people (including the Fur, Zaghawa, and Massaleit ethnic groups) in the western state of Darfur. In this time span, more than 400,000 people have died as a result of the violent conflict, malnutrition, and disease. There is large-scale destruction throughout the villages in Darfur. Nearly 1.65 million people are internally displaced, and 200,000 Darfurians refugees are in Chad.

Women in Darfur have experienced the brunt of the brutality. Since 2003, tens of thousands of women have been displaced, raped, and killed. The violence against women has received international attention. According to Dr. William F. Schulz of Amnesty International, U.S.A.: "Government forces and allied groups in Darfur are waging war on women's bodies." The National Organization for Women



Sudan with Darfur Area

(NOW) has reported that rape is being used as a weapon of terror and ethnic cleansing in Darfur.

Climate change has played a quiet, but critical role in creating this crisis. Several ecological devastations occurred within the life span of one generation. These micro- and macro-climate change include diminishing and erratic rainfall, seen in the floods and torrential rains of 1988 and accelerating desertification such as the practically continuous Sahel drought since 1967. These major ecological changes have only been accentuated by the near doubling of population in less than a quarter of a century (15.4 million in 1970 to 25.4 million in 1990), the displacement — both internal and external — of some six million people, the doubling of livestock numbers within 20 years, deforestation on a massive scale, renewed civil war in the South, and the aggressive expansion of legal and illegal rain-fed mechanized farming.

The hyper-arid, semi-arid and dry sub-humid lands cover an area of 178 million hectares in Sudan, and all of this area is affected to various degrees by one or more of the desertification processes. Desertification has reduced the amount of land that is available for herding, grazing, and farming, replacing the once fertile land with arid desert and sand.

Within Darfur, the stratifications between cultural groups are emphasized by religion and, as the ecosystem has evolved, ethno-cultural divisions have

reinforced the contests for resources. Today, intermarriage and socio-economic interaction have obscured the historical territorial boundaries in Darfur, but the significance of land to cultural and ethno-religious identity remains.

About 7% of the Sudanese population is nomadic or semi-nomadic. These groups are also typically Arabic Muslims; whereas the sedentary agriculturalist populations in Darfur are Christians and non-Arabic Muslims, or they practice traditional animist religions.

Although the literature is unforthcoming about the roles of women in Sudanese society, it is estimated that women comprise nearly 27% of the total labor force. Most women are in the agriculture sector. In both the nomadic pastoralist and sedentary agriculturalist groups, women fulfill similar roles related to childcare, household management, some culture-specific activities, and animal care. While men are generally responsible for herd management, women are charged with milking animals and marketing dairy products. This is a result of gender-specific perceptions of milk. Women in the nomadic or semi-nomadic population are also typically responsible for building and rebuilding shelter as their communities relocate.

In Darfur, the nomadic tribes have historically passed through lands belonging to other tribes with fairly little disharmony. But as the Sahara has expanded (more rapidly throughout the 1970's and 1980's), a consequence of climate change and desertification, the grazable land has diminished. There has been less and less fertile area to share, and this has incited conflict between the two groups.

Nomadic cattle herders began to disrespect previously determined boundaries and began invading the settled peoples' land. As the climate changed, the farmer's tolerance for this invasion diminished and the conflict became violent.

Until the 1970's, the local tribal leadership handled disputes that could lead to major inter-tribal conflict (i.e.: land disputes, murders, or theft). Then, President Nimeieri abolished the tribal system, changed land laws, and attributed ownership to the state. The State began appoint-

ing the local administrators based on their loyalty to the political regime. This corrupted justice and impartiality at the local level. This corruption has continued until today. The Janjaweed militia (birthed from the Arabic nomadic tribal groups in Darfur), backed by the predominantly Arabic Sudanese government, is responsible for the indiscriminate attacks and widespread and systematic crimes against humanity, including killing, torture, rape and other forms of sexual violence against women, forced displacements and pillaging.

All of this violence and death has been brought about by the coinciding changes in the climate and the socio-political structure in Darfur. Despite what has been reported, the conflict in Darfur is not solely motivated by religious or ethnic intolerance. These are dangerous oversimplifications (as analyses of African societies often are.) They disregard the possibility that the harsh socio-climatic impacts experienced in Darfur can also be experienced in other places.

Many countries throughout Africa, Asia, South America, the Middle East, and Eastern Europe, have all of the conditions that existed in Darfur before the conflict: low Human Development Indices, unstable agro-economies, fragile socio-political situations, a history of violence, and corrupt governments. Women in these countries where patriarchy and gender inequality are so deeply embedded, are acutely vulnerable.

In general, natural disasters and epidemics, like those that climate change events may incite, uniquely affect women. For example, many Pakistani women were not saved in the recent earthquake due to the cultural views that prohibit male rescue workers from touching women who are not in their immediate family. Disease proliferation can also have a distinct impact on women related to cultural perceptions about women's health, accessibility to healthcare, and treatment-seeking behaviors.

Observations from Darfur and throughout history show that war, now also a recognized potential socio-climatic outcome of climate change, usually has especially dire consequences for women.

The word "Dar," itself, means 'homeland,' and the last Sultan of Darfur dictated the traditional attribution of land in the 20th century. The land has never been precisely demarcated geographically, yet self-perception and cultural identity are inextricably linked to the generally observable tribal regions of Darfur.

During wartime, women are charged with supporting the household when their husbands are fighting or are killed or injured. This is universal, but is very challenging for women in undeveloped regions where there is little economic opportunity for men, much less women. Where social traditions have prevented women from taking part in the economic and public spheres, women tend to be victims of the violence during conflict and suffer rape, torture, abuse, displacement, or death. Desertification, as in Darfur, currently affects more than 70% of the earth's dry land. As other places also begin to experience these and other socio-climatic impacts of global warming and climate change, what will be the result for human societies and for women, in particular? Climate scientists are reporting that temperatures are rising. It is time we understand this metaphor, especially in terms of women. ❧

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**Further Reading and Resources:**

Burr, J. Milliard and Robert O. Collins. **Requiem for the Sudan: War, Drought, and Disaster Relief on the Nile.** HarperCollins, 1994.

Burr, J. Milliard and Robert O. Collins. **Darfur: The Long Road to Disaster.** Markus Weiner Pub, 2006.

Deng, Francis Mading. **War of Visions: Conflict of Identities in Sudan.** Washington, D.C.: Brookings Institution, 1995.

Report of the International Commission of Inquiry on Darfur to the United Nations Secretary-General. Available at <http://www.ohchr.org/english/darfur.htm>



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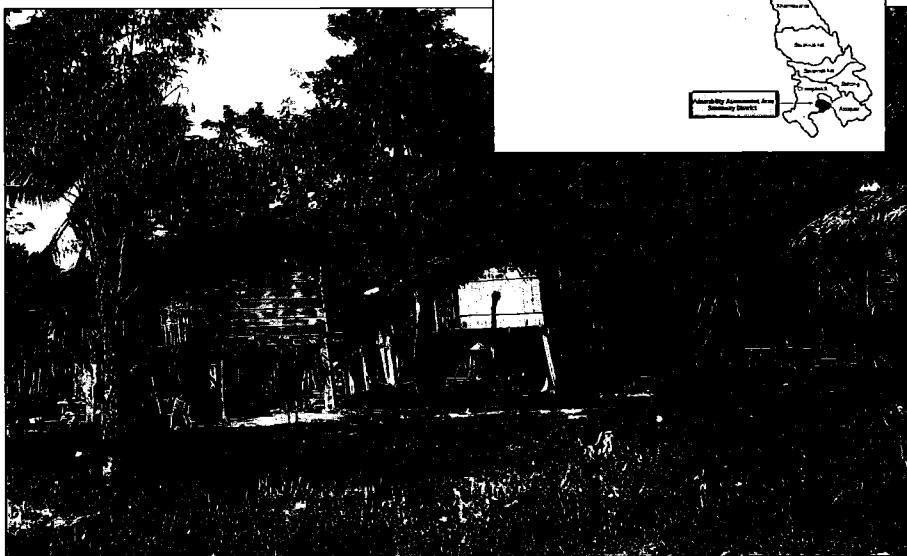
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# Livelihoods and Adaptation in the Mekong Wetlands, Laos

Vivian Raksakulthai

**W**etland resources of the Mekong River are critical in the lives of the people of southern Laos. This study focused on Sompoi and Intee villages in Attapeu Province, one of the poorest provinces in the country. Villagers sustain their families through a number of livelihoods including rice farming, fishing, handicrafts, and selling non-timber forest products (NTFPs). Communities have dealt with floods for hundreds of years. They have developed a number of ways to survive, if not thrive, in this environment by drawing on the plentiful resources of the wetlands around the community and on the hardiness of individuals. The populations of both villages (475 in Sompoi and 1,434 in Intee) live without electricity, running water, or latrines. Floods affect households in several ways, depending on health, age, wealth and gender. Wealthy families may own four or more hectares of land, more than a dozen heads of livestock, a tractor, car, or boat, over a dozen fish ponds, a surplus of rice, household appliances, and jewelry. Poor families may own less than three hectares of land, a few fish ponds, no cattle, only a six months' supply of rice, a bicycle, and a minimum of household equipment. Widows are particularly prone to poverty. Thus there is a relatively small gap between rich and poor. This promotes the overall resilience and cohesion of the community, although it may increase the vulnerability of individual families.

According to the Inter-Governmental Panel on Climate Change (IPCC) and numerous climate studies, extreme climate events, including floods, are likely to become more frequent and/or severe with future climate change. The rainy season will begin one month earlier (see graph). It will also shorten by one month, with no changes in the overall amount of rain for that season, so that flooding is



Women Collecting Firewood. Top: Map of Laos.

likely to become more intense. At other times of the year, climate change may also bring prolonged droughts during an extended dry season. The Mekong wetlands also face increasing population, deforestation, and watershed degradation. Based on current rates of deforestation and overfishing/overhunting, villagers will no longer be able to rely heavily on the plants and wildlife in wetlands.

This poses a great threat to poor communities living in southern Laos. Because the damage is not life threatening, families will often take a lax attitude towards preparing for these floods. Yet each year several families are kept in or drawn into the grind of poverty by these losses. The potential of climate change to increase floods and to pull a greater proportion of the community into poverty is very real. Understanding how floods currently threaten women and men in communities, how floods impact various types of households, and how households cope, can provide insights to new ways to promote adaptation to climate change.

Consideration of livelihoods and adaptation strategies brought about by flooding coincides with discussions of basic development needs. Villagers requested road access, latrines, and better education services. There are currently only five teachers for 200 children in Intee. Several women requested family planning as one of their most pressing needs, as poor households tend to have a larger number of children.

## Flood Hazards and Vulnerabilities

While floods can play an invigorating role in the Mekong ecology by bringing fish and other species into the wetlands and depositing nutrients in the soil, floods of greater intensity or duration than expected will severely affect communities. "Normal" floods occur during August, September, or October, lasting approximately three days. They are a half to one meter high in the village and up to several meters in the paddy fields.

**Rice and Paddy Field Losses** If, from the perspective of the villagers, only one

indicator is used to assess vulnerability, it is whether the family has sufficient rice. Wealthier families may still have enough rice stocks to continue feeding the family throughout the year in spite of losses. The poor, however, do not, as they own less land and have larger households. Severe floods occur roughly every three years, and each time up to 50% of the households must find new land to farm, which may be located further away and be less fertile.

**Livestock Losses** Losing livestock to a flood is the most serious blow to long-term livelihoods and family security. One buffalo equals enough rice to feed four or five people for an entire year; losing a buffalo is a terrible setback in the family's savings.

**Disease** People reported a number of gastro-intestinal diseases that would persist for weeks after a flood and prevent them from working. In a "normal" year, families in Intee would spend almost one-third of their income on medical treatment. For Sompoi, treatment is hours away in the Attapeu regional hospital. Medical attention is often put off until it is too late. When food is in short supply, women may become malnourished because they first give food to their husbands and children. Nang Vieng, a woman in the area, explained, "I have no choice but [to eat] less and less as my husband need[s] food to go fishing while the five little children cannot go without."

**Equipment and Supplies Losses** Most houses are built on stilts. Fishing equipment, firewood, and other household items are stored below. Although it is men who generally use boats and cast nets, the division of labour between women and men is more equal for fishing than farming. The most important items lost during floods are fishing equipment, which is vital for a family's livelihood floods. Long wooden boats provide the family with transport, and enable the family to recover goods, search for cattle, travel to desirable fishing grounds, or get supplies in neighboring villages or Attapeu. Women on the other hand, depend on pots, bowls, blankets, knives, and clothing to cook and look after families. While these losses seem minor by contrast, losses of these items can threaten families equally.

**Damage to Homes** Even during severe floods, most homes remain undamaged, but some households lose the small huts located near their paddy fields. Poor farmers who tend to have paddies farther away will often go to live in these huts for weeks at a time. While men and women both contribute to rice production, men are more likely to stay in the field huts while women stay in the village with the children.

### **Coping Mechanisms and Some Recommendations**

Not all of the coping mechanisms are effective in maintaining or improving livelihoods but they do allow families to meet immediate needs.

**Alternative Food Sources** When the flood season arrives, most villagers change their livelihood activities from farming to fishing. Many farmers in Intee dig small fish ponds in the paddy fields. The number of fish ponds is an indicator of wealth. Women are primarily responsible for growing vegetables and herbs, such as taro, long beans, soybeans, cabbage, mustard greens, coriander, basil, and chili. They also help gather a variety of wildlife in the surrounding area, including crabs, fish, frogs, toads, lizards, snails, and squirrels. Wildlife is a seasonal resource of food, and in group discussions, almost everyone said they rely on the forests and wetlands to some extent. However, those who must hunt for food year-round are considered the poorest. Villagers recorded a decline of several species of wildlife. People are beginning to ignore restrictions and indigenous conservation practices, and thus threaten the viability of wetlands.

In recent years, wild meat is declining more rapidly than wild vegetables; thus, women are gaining a larger role in providing the family's food. This is actually for the better, since it helps diversify people's mostly rice-based diets. A nutritional assessment in 2003 found that villagers in Attapeu increased their intake of vitamins and protein by consuming almost 200 species of aquatic plants and animals throughout the year. However, the cultural preference for rice dictates that most vegetables are grown only where rice cannot

be and people become very anxious when rice is scarce. *There is a need to enhance knowledge of nutrition and the importance of a varied diet. Rice production can be improved through increasing the number of crop cycles per year and promoting stress-tolerant varieties. Both men and women need training. The government also plans to expand irrigation to reduce water variability. Such measures must not damage the landscape or lead to salinization.*

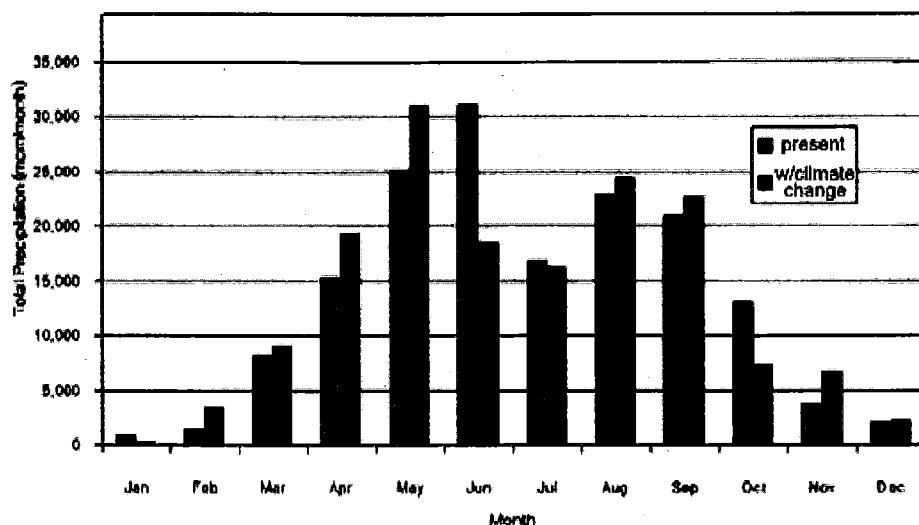
**Community Safety Nets** The social structure in communities throughout Laos includes a tradition of communal sharing and assistance in rebuilding houses and sharing food. One woman noted that in addition to losing animals in floods, her livestock has diminished each year because she gives chickens to her children and neighbors in need. Others confirmed that meeting their household food requirements was sometimes difficult because they must share resources. All but the wealthiest have to borrow rice some time. A few of the poorer women voiced feelings of exclusion from this social network as they cannot reciprocate even over the long term. *They try to contribute to the community by performing chores such as cooking or washing up during village celebrations.*

**Wage Labour and Selling Goods** Employment as a wage labourer is primarily an option for poorer men. The wage for cutting wood in the saw mill or working a paddy field is approximately 10,000 kip (\$1US) per day. Women make handicrafts, such as mats, tables, and rice containers from bamboo, rattan, and pandan leaves. Men make fishing equipment and furniture or try to sell extra fish. Most of these items are taken to the market in Attapeu. In one year, a villager reported an income of 300,000 kip from selling firewood. Less dependence on natural resources can reduce the vulnerability to severe flooding and droughts. *Agroprocessing, eco- or agro-tourism and the promotion of handicrafts can diversify livelihoods. For example, women can set up small shops.*

**Selling Livestock and Major Assets** Selling off assets, particularly livestock, is one of the most common coping strategies. Families sell chickens and pigs before livestock or land. Men are respon-

## Climate Change Projection of Rainfall in the Korat Plateau

Source: Snidvong et al, 2003



sible for cattle and women for smaller animals such as chicken, ducks and pigs. Poorer families have to work for years before gradually recovering some assets. Villagers requested agricultural extension services, livestock management training, and information on caring for animals.

**Going into Debt** One of the more ineffective, yet common, coping strategies is going into debt. The interest rate on loans is incredibly high—the standard rate quoted was 500% regardless of season or flood. Families have one year to pay it back, and then after one year, the interest increases by another 60%. Oftentimes, families must sell buffalo to pay back the debt. Very wealthy families own large boats and can travel into town or to surrounding villages to buy rice and come back to sell it. This causes some animosity within the community. “Parents can eat from the forest, but children don’t want to have goi [wild yams] every day,” said one farmer, explaining why he would go deeply into debt to buy rice. *New kinds of credit and savings, such as microcredits, may prove more effective and should be considered.*

**Flood Preparedness and Evacuation to Higher Ground** When district officials announce a flood, villagers prepare boats, rice, clothes, and other necessities to take to higher ground. They harvest the rice early. While both men and women prepare the family belongings, several women complained that their husbands do not

help enough and do not watch over the children during dangerous times of floods. In Intee, women’s biggest concern during a flood is the safety of their children because they do not know how to swim. In Sompoi, near the river, most of the children grow up learning to swim by playing in the river. *A program teaching all children how to swim should be considered.*

In both Sompoi and Intee, families reported instances when they have evacuated the village for approximately three to four days, while the waters recede. They stay with relatives in the highlands. But when a flood lasts longer than a few days, they worry they are imposing on relatives and friends.

In 2002, the government gave a flood warning and villagers successfully moved to an emergency shelter about three km away. However, villagers tend to believe that flood warnings are inaccurate. It is a significant effort to pack up and move to higher ground: those with small boats have to make repeated trips to transport everything and people are reluctant to heed the warnings. *Improving climate forecasting through the meteorological office, agricultural extension, water resource management could enhance flood preparedness. Indigenous methods of forecasting also need to be researched and supported. Increased communication between remote villages and district and*

*provincial headquarters would also strengthen institutional capacities for flood preparedness and development efforts in general.*

**Relief Assistance** Villagers received external assistance ranging from five kg per person as a one-time handout to two hundred kgs per household from the government or other organizations following floods. Other agencies gave seeds for one year’s crop or supported flood mitigation efforts. However, external assistance in response to floods and other climate disasters cultivates dependency. Measures that will introduce new livelihoods, or enhance existing ones that are threatened by climate risks may be preferable.

The villagers’ desire for road access, latrines, better education and other services will have a profound impact on their traditional way of life. These will mean trade-offs from men, women, and the environment. Ignoring effects on women and the environment is increasingly proving to be at the risk of all humanity. It is crucial therefore that the implications for women and ecology be respected in finding new ways to adapt to climate change. ❖

**Vivian Raksakulthai** works on climate change and environmental management to strengthen community resilience in Asia. She’s provided training and technical assistance for various international organizations and NGOs and is based in Bangkok.

### Further Reading:

Action Aid, 2003. Participatory Poverty Assessment (PPA): Livelihoods and wetlands Attapeu Province, Laos. Bangalore: Books for Change, a unit of Action Aid

Mekong Wetlands Biodiversity Conservation and Sustainable Use Programme, 2005. “Vulnerability Assessment of Climate Risks in Attapeu Province, Lao PDR”. Vientiane: Mekong Wetlands Biodiversity Programme

Snidvong, A., S. Choowaew, and S. Chinvano, 2003. “Impact of climate change on water and wetland resources in Mekong River Basin: Directions for preparedness and action” Background paper prepared by the Southeast Asia START Regional Center. Report Number 12. July 2003.

# The Kyoto Protocol

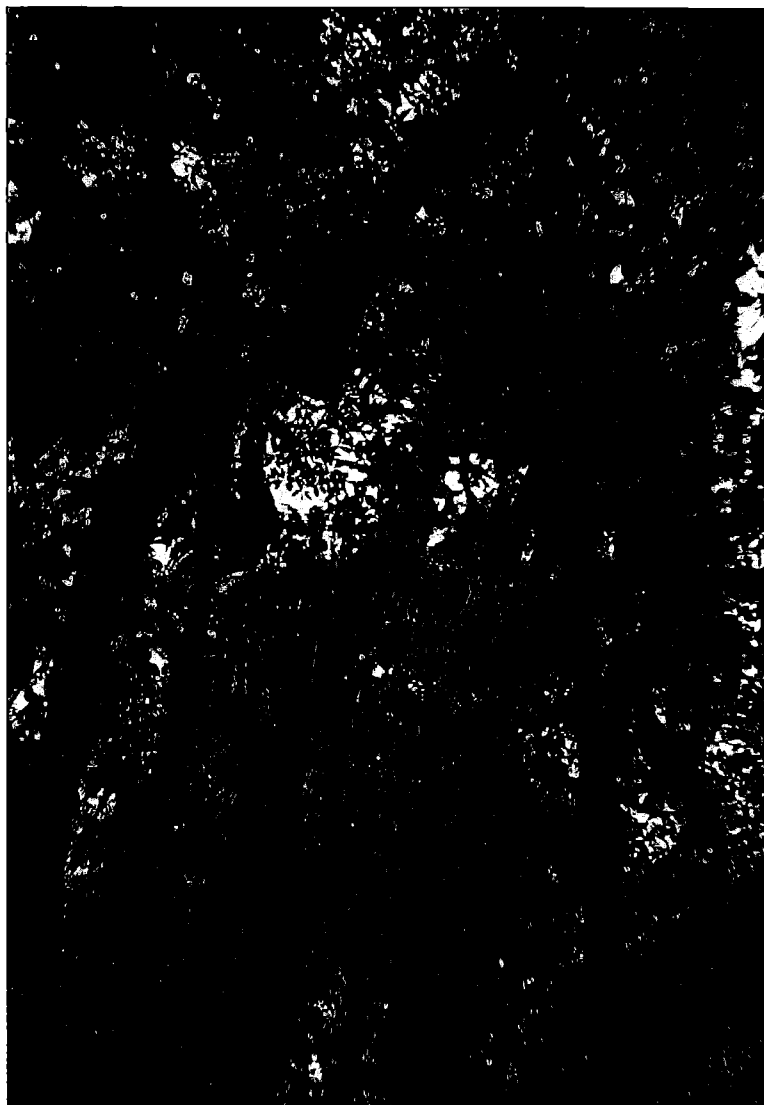
## A War on Subsistence

Ana Isla

**D**ispossession and prostitution loom for Costa Rica's rural women and children as rainforests are converted into oxygen credits under the Kyoto Protocol. In Costa Rica, local communities, especially those living in the tropical rainforests, depend for survival on the bounty provided by the forests and women's non-wage labour. With the Kyoto Protocol, neoliberals have redefined forests as 'oxygen generators', a concept that indebted countries have embraced. This world view destroys sustainable ways of living and creates destitution and real misery because it is used to justify the expulsion of local communities from the bounty of their forests, thereby undermining their basic support systems. The global environmental crisis has highlighted the fact that forest vegetation stores carbon that, if released, would contribute to trapping heat in the atmosphere, driving up temperatures and speeding up climate change. Selling oxygen from the rainforest has become part of the 'sustainable development' agenda in the Kyoto Protocol. Governments first agreed to tackle climate change at the Earth Summit in Rio de Janeiro in 1992. The Kyoto Protocol was the follow-up to the United Nations Framework Convention on Climate Change (UNFCCC) that set a non-binding goal of stabilizing emissions at 1990 levels by 2000.

### The Rainforest as Natural Capital: Selling Oxygen and Generating Carbon Sinks

In the sustainable development framework, forests have become 'natural capital', but in reality they are much more. The trees and other plant life in the world's rainforests are an essential mechanism for flood control. In the forest, trees are connected directly to each other through the



ANA ISLA

Costa Rican rainforest.

multitude of creatures that relate to them as food, shelter or nesting place; through their shared access to water, air and sunlight; and through an underground system of fungi that links all the trees as a super-organism. Rainforest peoples are also members of this super-organism.

At the 1997 negotiations on the Kyoto Climate Change Convention, industrial countries agreed to create mechanisms to reduce the emissions of gases responsible for the greenhouse effect. Among the six targeted gases is carbon dioxide (CO<sub>2</sub>), discharged disproportionately by the industrial world. However, reducing gas emissions involve high costs for industry.

The major emitting corporations, with the backing of their governments, proposed a self-interested 'solution:' create a global market in carbon dioxide and oxygen, focused on the forests of indebted countries. According to the scheme of the Climate Change Convention, countries or industries that manage to reduce carbon emissions to levels below their designated limits will be able to sell their 'credits' to other countries or industries that exceed their emission levels.

The Kyoto Protocol introduced a new conceptualization of the world's rainforests. Now they are valued economically in terms of the amount of carbon they



Costa Rican rainforest from the air.

sequester. Carbon emissions became subject to trading on the open market, a process that developed easily in indebted Costa Rica. The government of Costa Rica signed agreements for forest conservation, management, reforestation, and the sale of environmental services to Norway, Germany, Holland, Mexico, Canada, and Japan (El Estado de la Nación 1996: 129).

This type of 'solution' allows the industrial world to continue polluting as long as it can purchase carbon credits from indebted rainforest-dense countries. Meanwhile, emissions produced by an increase in coal and oil burned — mainly in the industrial world — proceed unimpeded. The carbon trade is a colonial relationship with marked class and gender biases that affect the nature of indebted countries, along with subsistence production, and the lives of women.

### **Paying the Price of the Kyoto Protocol: Crises of Nature and Rainforest Dwellers**

The scheme to sell oxygen is transforming the rainforests of Costa Rica. Private forest farms have been established. Reforestation is particularly promoted among large-scale agricultural entrepreneurs in association with international capital. Tax relief, under a scheme

called Fiscal Forestry Incentives, subsidizes reforestation using foreign forest species of high yield and great market acceptance, such as melina (used by Stone Forestall, a United States corporation), and teak (used by Bosques Puerto Carrillo and Maderas). The corporations are allowed to cut the trees after ten years of growing and to transform them into wood for floors and/or paper.

Between 1996 and 2001, around 121,000 to 147,000 hectares of foreign trees were planted in Costa Rica; 50% of the species are melina and teak (MINAE, 2001), and the rest are eucalyptus. These monoculture tree farms, with the enthusiastic backing of the government, first required the cutting of all native trees and vegetation. This increases the extraction of nutrients and, with it, the devastation of the productive capacity of the soil. Then chemical fertilizers are applied on a massive scale. This has negative effects on soil fertility, water retention and on biological diversity.

The scheme to sell oxygen has also transformed functioning local communities. In Costa Rica, the state's project of selling CO<sub>2</sub> credits expropriated the small- and medium-sized landholds, without compensation to the owners. By August 1999, the government owed US\$100 million to the evicted campesinos/as. Around

that time, it offered to pay US\$6,703.45 per hectare to the expropriated families (Vizcaino, 1999). However, by 2001, the government still had not paid for 14,917 hectares of land. This represents approximately 745 families that the conservation areas system has made landless without compensation.

In 1994, the government declared the Arenal Volcano as a National Park area, extended its area from 5 hectares to 12,010 hectares and forcibly evicted entire communities. In 1996, the government also declared La Cuenca de Aguas Claras a forestry reserve. Snatching forests from local communities who depend on them to sustain themselves has become a death sentence for small- and medium-sized landholders. Communities who used to live off the forest are declared enemies of the rainforest. The international corporate world justifies the eviction of rainforest dwellers by false claims that displaced people will find employment in the cities.

### **Crises of Women and Children: Destitution and Prostitution**

The power of the industrial world to change the definition of forests to 'oxygen producers' exacerbates inequalities. As a new structure of accumulation emerges, the disintegration of the ecosystem that supported the survival of local communities has destructive effects on the sexual division of labour and the degree of women's oppression. These policies result in displacement and impoverishment, forcing rural families to migrate to San Jose and tourist areas in the hope of earning an income for themselves and their dispossessed families. Introduced into the cash economy, impoverished women have little option but to earn all or part of their living as prostitutes. Prostitutes in Costa Rica are women working to support children and family members. They are in the market not by choice, but out of necessity.

Since the early 1990s, pressured by the IMF and World Bank, indebted Costa Rica has become the hemisphere's premier eco-tourism and tourism destination. Eco-tourism promoters promise a world



of leisure, freedom and good taste — all risk free. Tourism projects an image of women and children as exotic and erotic. These images of Costa Rica entangle the economic relations of domination between creditors (the industrial world) and debtors (the indebted periphery) on the one hand; with the psychological relations of hypermasculinity on the other. As Costa Rica becomes impoverished by the debt crisis, we can see the marks of those changing international power relations on the bodies of Costa Rican children and women. White rich men move across borders for racialized sex tourism. In Costa Rica, most pimps that profit from sex-tourism are men from the patriarchal industrial world — the US, Canada, Spain and others. They bring with them the political economy and culture, material relations and particular perceptions of how the world works (Pettman 1997:96). A report by Victor Malarek (CBC, 2004) made clear that Canadian men engage actively in sex-tourism. Another growing problem is trafficking. Many teenagers in the sex industry in Costa Rica are victims of trafficking from Nicaragua, Guatemala, and Honduras. Traffickers threaten to kill these young peoples' parents and siblings if they identify the criminals.

As Costa Rica slides into a more subordinated position, the country becomes a paradise for paedophiles. In an economy increasingly based on dismantling the commons, complicit Costa Rican governments do not want to stop the sex trade industry. Government officials know that the sex trade is virtually the only way left for

women and children to earn a living. Further, the government protects the sex industries because they generate hundreds of millions of tourist dollars per year for the state to pay its debt to the IMF and the World Bank, or bribes from organized crime groups to corrupt politicians. In Costa Rica, sex tourism also includes young men's bodies that are consumed by both men and women tourists from the North.

The redefinition of the rainforest as 'oxygen generator' by the Kyoto Protocol destroys sustainable ways of living and reveals a new form of slavery in the 21st century — massive sexual slavery. First world white males, with the complicity of local governments, go to exploit the economic hardships of the inequality crisis created by global capitalism. The messages of power from the industrial world and its privileged males mean that Costa Rican nature, women and children are inferior. Thus, converting the forest for capital accumulation condemns Costa Rica's rural women and children to death or prostitution. The situation of Costa Rica as a country is analogous to the situation of its prostitutes — both of them are kept in financial debt by their pimps — the IMF, the WB, large environmental groups, commercial banks and powerful countries in the first case and traffickers and brothel owners in the second. They live in debt bondage: neither the country nor the sexual slave can ever earn enough to pay off their debts to become an autonomous country/being.

Costa Rican women and men, with the support of some local municipalities, have

grasped the real meaning of 'conservation' through carbon trade and are no longer silent. They are defending their rights to a secure livelihood. In their battles, men and women have uncovered the class, gender and colonial relations of so called 'sustainable development' in the alliances between their 'national' government and international capital. The international women's movement must join their Costa Rican sisters in their struggle to expose the fallacy of 'sustainable development' and the Kyoto Protocol. No blank cheque to the Kyoto Protocol! The Kyoto Protocol must be supported only if it is committed to reduce greenhouse gas emissions by imposing limits on the gases produced by the factories and lifestyles of the north world. ❧

**Ana Isla** is an Assistant Professor cross appointed between the Women's Studies Centre and the Department of Sociology at Brock University, Canada. Using an ecofeminist framework, she is writing a book on the Canada/Costa Rica debt-for nature investment.


**Further Reading and Resources:**

El Estado de la Nacion en Desarrollo Humano Sostenible (1996) Primera Edicion 1997. San Jose, Costa Rica.


MINAE [2001] Plan Nacional de Desarrollo Forestal 2001-2010. San Jose, CR. 80 p.

Pettman Jan J. (1997) "Body Politics: international sex tourism" in Third World Quarterly, Vol 18, No. 1, pp. 93-108.

Vizcaíno, Irene (1999) "Deuda millonaria por las expropiaciones." En La Nación, Newspaper, 29 de agosto.



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# Gendered Struggles for the Commons

Food Sovereignty, Tree-Planting and Climate Change

Leigh Brownhill

**T**he negative effect on the atmosphere of emissions produced by the burning of fossil fuels is well-known. Less well-known, however, is the detrimental impact of deforestation. According to the November 2006 *Stern Review*, emissions from deforestation are greater than the emissions produced by the entire global transport sector. Africa has the fastest rate of deforestation in the world. Commercial logging and subsistence farming are the main sources, according to the *Stern Review* and UNEP.

As women make up the majority of subsistence farmers in Africa, are they implicated in this widespread deforestation and resultant climate change? To answer this question we must find out what drives African subsistence farmers to cut down trees. "Population growth" is the typical answer from neo-liberal analysts whose interests lie mainly in protecting multinational corporations' profit-generating activities. They charge that African women have too many children. Family planning policies and income generation projects are proposed as ameliorative actions to combat poverty and ecological degradation. Some go so far as to suggest that more industrialization is necessary in Africa in order to remove subsistence farmers from the land. But a different answer and different solutions emerge when the gendered conflict between subsistence and commercial uses of land in Africa is taken into account.

Let us take the example of Kenya, where 75% of household energy needs are supplied by firewood. Wangari Maathai, Kenya's former assistant Environment Minister and a 2004 Nobel Peace Prize winner, argues that a country needs to maintain at least ten per cent indigenous forest cover to achieve "sustainable development." She estimates that Kenya has less than two per

cent of such forest cover remaining.

In 1992, Maathai spoke to an international audience at the Sierra Club about how she returned to Kenya in the 1970s after some years of education abroad to find that ancient fig trees were being felled throughout her home area. These trees were traditionally never cut down and even the twigs were not picked up from the ground or burned as kindling. Fig trees were sacred, in part because they acted as protectors of the vital water catchment areas. During the expansion of tea plantations in the 1960s and 1970s, the fig trees were sacrificed. Desiccation of the soil quickly followed.

## Fig trees were sacred, in part because they acted as protectors of the vital water catchment areas.

Subsistence farmers in East Africa began to cut down the fig trees not because they no longer respected their age-old customs. Nor did they encroach on the forests because they were having too many children. They cut the trees because there was not enough food produced after coffee and tea began to be widely grown and exported from Kenyan farms both large and small. When world market prices for African export crops fell, many male 'heads of household' put more land under coffee and tea to make up the shortfalls in income. When prices rose, these farmers had further incentives to expand cash crop production. In the process, women's food gardens were plowed under.

The World Bank and other international institutions touted commercial farming as Africans' way out of poverty. Beginning in 1980 the Bank encouraged

the conversion of food farms to export cash crop plantations with development policies, programmes, research, grants and loans. But the more farmers planted coffee, tea, sugar, cut flowers and cotton, the less land was available for food production. Starvation and malnutrition have become endemic, especially for people in East Africa's burgeoning city slums and in the arid and semi-arid regions where people's access to food and water is increasingly at risk. Anemia, stunted growth and vulnerability to disease affect millions, especially women and children.

Women have been at the forefront of resisting commercial policies and promot-

ing a return to a food-centred political economy. To address deforestation, Wangari Maathai founded the Green Belt Movement in 1977 under the auspices of the National Council of Women of Kenya. The Movement sought to counter the decline in ecological resources and the loss of principles of stewardship. Maathai had observed these coinciding developments with the advance of commodity production in farming areas. With minimal funding and with self-help efforts, the Green Belt Movement established branches, first throughout Central Kenya and then throughout Africa.

The Green Belt Movement encouraged women's groups to plant trees. Seminars educated women in rural areas about how trees might be planted along boundaries and in different sites within the homestead. The women could choose trees for their fruit-bearing capacity, med-

icinal qualities, ritual purposes, firewood-producing capability, water catchment protection or for their decorative appeal. Women also began to plant trees on public land, including their children's school compounds, church yards, public squares, road verges and other common lands. Through advocacy and a massive educational campaign, the Green Belt Movement encouraged the return to indigenous seeds and cultivation techniques which raised soil fertility and slowed desertification.

When women planted trees, they also strengthened their claims to the land. Women's tree-planting activities were partially based in customary practices which devolved responsibility for food provision to women. While running tree nurseries and reforestation public areas may not have been 'customary' practices, women did apply customary cooperation and indigenous environmental knowledge to these activities. With this heritage, women contributed to the success of the Green Belt ventures and laid the groundwork for a new form of women's power: the power to heal the heavily damaged ecology, first in Central Kenya and later across the country and the continent.

The Green Belt Movement used tree-planting as an entry point into wider discussions and actions in five areas: food security, the negative impacts of petrochemical-based agricultural systems on health and environment, genetically modified seeds, civic education and voter regis-

tration. Tree planting and associated activities were adopted by hundreds of women's groups, many of which continued to engage in other types of activities such as merry-go-rounds, or collective savings groups, shared work on each others' farms and collective care for common resources. By creatively combining sever-

plantation agriculture, and return land to indigenous uses. In addition, women are directly protecting forests and water catchment areas from real estate development, logging, plantation agriculture and mining. The subsistence uses of the land that peasant farm women pursued were, however, direct challenges to private

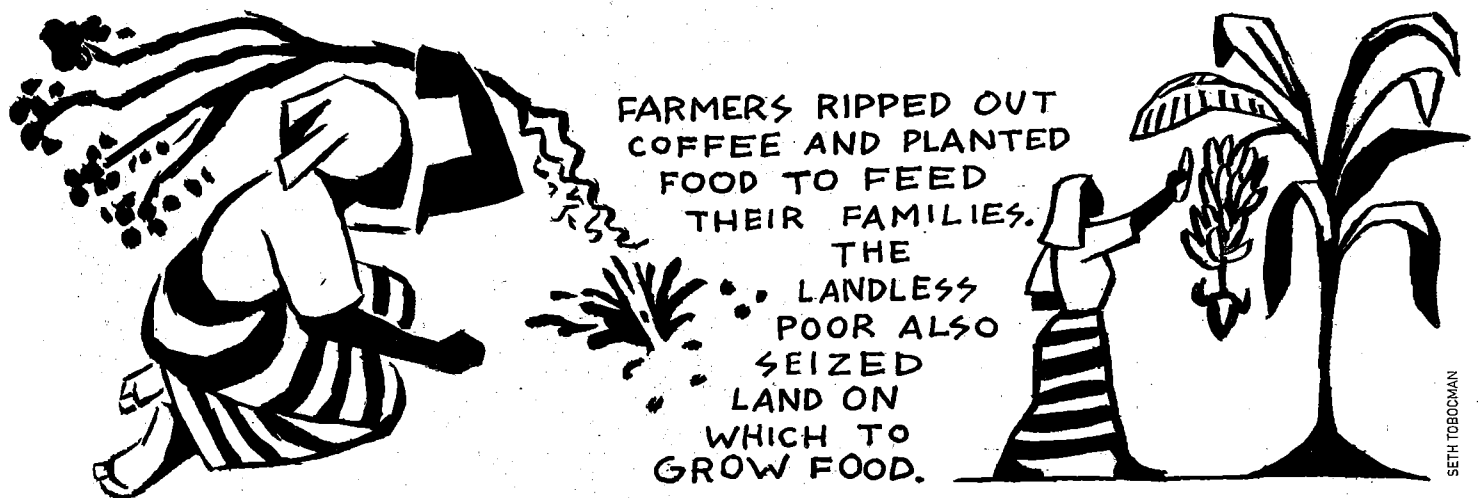
## Women were becoming more and more adamant about the need to limit plantation agriculture and return land to indigenous uses.

al of the most pressing needs of Kenyan peasant women, the Green Belt Movement engaged hundreds of thousands of rural Kenyans in expanding and defending their rights to control and protect land on which, by the new millennium, they had planted some 20 million trees.

Although the Green Belt activities addressed soil erosion, food insecurity and income generation needs of the rural people, Maathai herself was vilified by President Moi in the 1980s. Why did the activities of this ecological movement raise the ire of businessmen and others in the government? The land on which women planted and defended their trees was clearly land not available for mechanized plantation style cash crop production. Women were becoming more and more adamant about the need to limit

interests who wished to buy forest land, clear it and either 'develop' or subdivide and sell the land. For the land speculator or plantation owner, the Green Belt Movement was an impediment to trade.

Where industrial logging, mining, plantation agriculture, ranching, real estate development, manufacturing, and private 'game parks' monopolize large areas of arable land, the land is no longer available for the production of food for local consumption. In Kenya, as in many other parts of Africa, those displaced by industrial and plantation development have to search elsewhere for land on which to secure a livelihood or fill the hopeless urban slums. Those looking for land clear forests to create space for food production. It is in this way that in Africa, like in Asia and South America, commercial logging and export



SETH TOBOCMAN

oriented large-scale farming contribute to the destruction of the local environment and the earth's climate.

Rural and urban women's engagement in reforestation in Kenya is integrated into a larger subsistence-oriented farming system focused on self-provisioning and women-controlled trade. This indigenous approach to farming replicates what international social movements call 'food sovereignty' or the right of farmers to choose what to grow, to feed themselves and their communities, and to be free from pressures to commercialize production to the exclusion of food security. With its food-centred land and water use practices, the Kenyan peasant women's 'food sovereignty' movement builds upon their subsistence political economy. This political economy is remarkably free from petroleum product dependence. Food self-sufficiency also helps reduce the need for transportation and hence, petroleum products to move food from producer to consumer.

As Kenyan women engage in reforestation, they shift agricultural practice toward indigenous biodiverse and mixed farming systems. The overall implications of women's reforestation practices and subsistence food production include most prominently the realization of a post-climate destroying agriculture. This realization emanates from a communal culture that is in opposition to the post-colonial culture of international exploitation and environmental destruction.

With the dramatic increase in the price of petroleum products in 2005 and 2006, following the US military onslaughts in the Middle East, the practices of Kenyan rural women have been thrown into crisis. This follows from food growers' confrontations with small and large entrepreneurs who give priority to the production

mate change, can only make small gains unless an overall transformation takes place. This transformation requires an end to the commercializing policies and activities which strip Africa's environment and deny Africans' access to the necessities of life. This transformation also requires 'energy sovereignty' via a strong empha-

## transformation requires an end to the commercializing policies and activities which strip Africa's environment and deny Africans' access to the necessities of life.

of charcoal from any available trees. This charcoal-intensive response to the high price of kerosene and other cooking and heating fuels directly counters women's prioritization of tree-planting and small-scale, biodiverse food production.

In Kenya and elsewhere in Africa, where rain-fed agriculture is the dominant economic activity, extractive industries such as commercial logging, mining and export-oriented agriculture are part of the climate change problem, leading to a downward cycle of deforestation, ecological decline, drought, conflict, famine and disease. African women's pursuit of 'food sovereignty' through shifting land-use practices towards conservation, food production and other uses which mitigate cli-

sis on the localized development of solar, wind and water power, all of which have tremendous potential in Africa.

This article presents alternatives to the recommendations arising from mainstream climate change studies. The Stern Review and other reports suggest that a carbon trading world can provide solutions to climate change. Carbon trading relies heavily on the privatization of nature that exacerbates social inequality and allows industrialists to continue their rapacious activities. Within the carbon trade clauses of the Kyoto Protocol, women's collective tree-planting activities are not recognized as contributing to the reversal of climate change.

To return to the original question about

THEN THEY TORE  
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ARAP  
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OF THE PEOPLE,  
WHICH INCLUDED  
SOME OF THOSE  
WHO HAD  
PARTICIPATED  
IN THE  
PROTEST  
AT  
FREEDOM  
CORNER.



SETH TOBOCMAN

African women's contribution to climate change via deforestation, it is pertinent to ask whether Africans should be expected to stop growing food so that African land can instead be allocated to the extraction of resources such as petroleum, hardwood, gold, diamonds, titanium and other minerals, and the production of exported agricultural products such as chocolate, coffee and tea? Or should Africans simply keep their food-producing activities out of large areas of forest which have been sold to northern industries as carbon sinks? The answers are clear enough if one is a stockholder or CEO in a mining venture. For the rest of us, the priority should be clear: African land is for African peoples, especially food producers geared towards the supply of local and regional markets. Herein lies a solution to deforestation and hunger on the continent.

In January 2006 Klaus Toepfer, the head of the United Nations Environment Programme (UNEP), warned that rainfall patterns in East Africa were at risk from

climate change, deforestation and loss of forests, grasslands and other key ecosystems. He recommended that forests not only be maintained and conserved, "but that we invest in their restoration and expansion" (UNEP, 12 January 2006). This "restoration and expansion" is already underway in the 'food sovereignty' movement. The Green Belt Movement is an outstanding example. Everyone agrees that global action is required to combat global climate change. Africa's women-led movements 'from below' provide an alternative path out of the profit-centred, exclusionary, industrial cul-de-sac and towards a revitalization of the commons that serves the needs of all. ✂

**Leigh Brownhill** completed a Ph.D. at the University of Toronto in November 2006. She co-edited a special issue of *Canadian Woman Studies* (2002) and has published on popular struggles in Africa in the *Canadian Journal of African Studies*, the *Journal of Asian and African Studies* and *Feminist Economics*.

**Further Reading:**  
Bachram, Heidi, "Carbon Colonialism: The New Greenhouse Gases," *Capitalism and Socialism*, Vol. 15, No. 4, Dec. 2004, pp. 5-20.

Brownhill, Leigh, **Land, Food, Freedom: Struggles for the Gendered Commons in Kenya, 1870 to 2007**, Doctoral Thesis, Ontario Institute for Studies in Education, University of Toronto, 2006.

Brownhill, Leigh S. and Terisa E. Turner, "Feminism in the Mau Mau Resurgence," *Journal of Asian and African Studies*, Vol. 39, No. 2/3, March 2004, pp. 95-117.

Maathai, Wangari, **The Green Belt Movement: Sharing the Approach and the Experience**, New York: Lantern Books, 2004.

**Stern Review on the Economics of Climate Change**, September 2006, [www.hm-treasury.gov.uk/independent\\_reviews/stern\\_review\\_economics\\_climate\\_change/stern\\_review\\_report.cfm](http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm)

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# Energy Sovereignty and Climate Change

The October 2006 Abuja Declaration

Terisa E. Turner

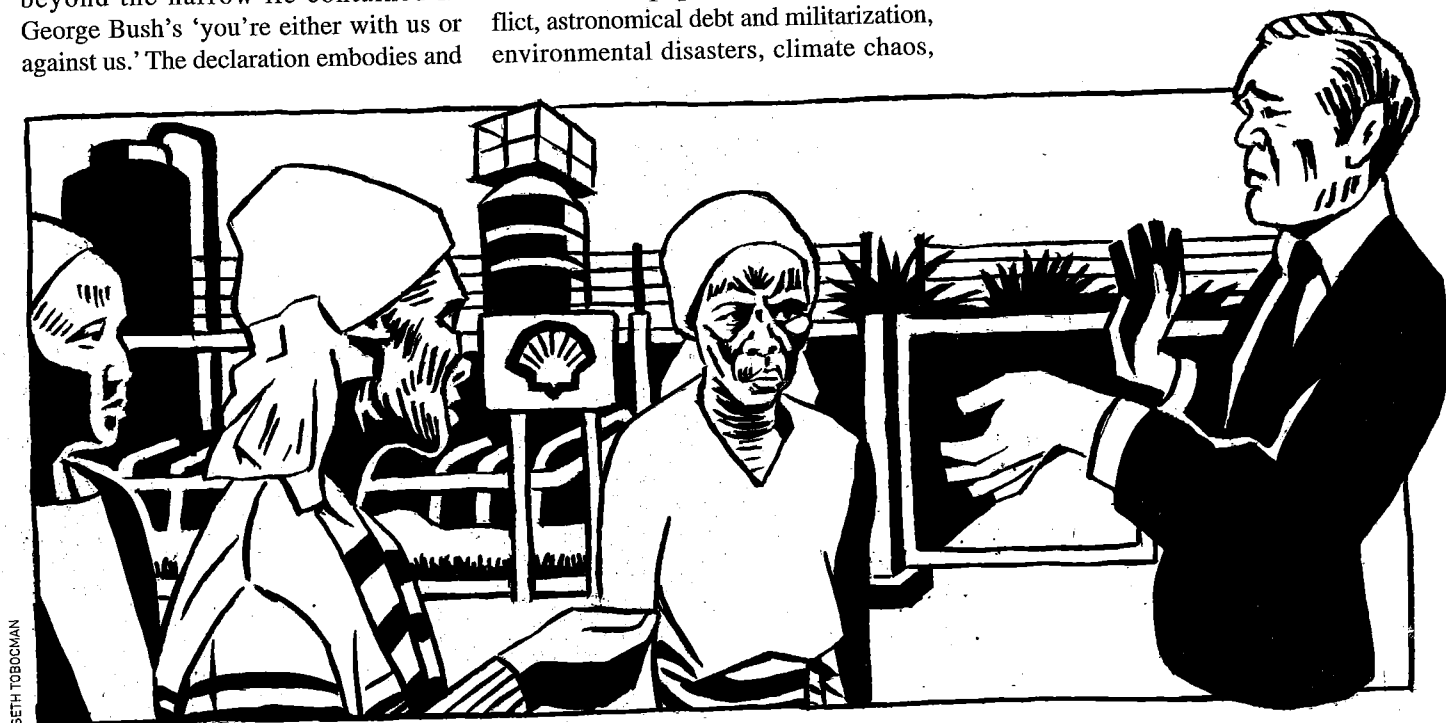
**T**he Abuja Declaration marks a new beginning for people's control over economies. It calls for democratic control over energy. It identifies the dangers inherent in oil and gas development. It targets Big Oil as the perpetrator of crimes at the centre of a global capitalist racket that is pulling the peoples of the earth into ecocide. Against ecocide and GDP growth-addiction it posits direct action by women amongst a broad range of social forces for democratic control instead of corporate transnational sovereignty. This direct action must also be transnational and, organized simultaneously on several terrains. In advocating international coordinated democratic action against Big Oil and for popular democracy, the Abuja Declaration goes beyond the narrow lie contained in George Bush's 'you're either with us or against us.' The declaration embodies and

launches into practice what Maude Barlow of the Council of Canadians has called a third global force, the force of democratic public opinion.

The huge leap represented by the Abuja Declaration's global condemnation of any new oil and gas exploitation can be appreciated when we remember Big Oil's simple but false equation of 'oil in the ground equals money in the bank.' Oil wealth was assumed to be the means for eradicating poverty, underdevelopment, debt and foreign neo-colonial usurpation of the democratic will and national sovereignty of nations both new and old. But by the new millennium even the IMF was speaking of the 'curse of oil.' With Big Oil's exploitation has come intensified income gaps, absolute immiseration, war and dictatorship, pollution and civil conflict, astronomical debt and militarization, environmental disasters, climate chaos,

and indeed, ecocide. Tens of billions of dollars in oil revenues have rendered states battlegrounds for corrupt power grabs.

None of this is inevitable. Beginning in the early 1980s the Reagan-Thatcher dogma of 'there is no alternative' helped enforce corporate rule through 'structural adjustment' privatization dictates. Since then, there emerged a new form of popular resistance to the social relations leading to oil being a curse. Women were at the forefront of these new social movements. This women's prominence followed from the terrible consequences of oil exploitation for rural (and many urban) women. Their survival and livelihoods depend on water, farmland and the environment more generally. A loud 'No!' came in 1984 from ten thousand Nigerian women who confronted the U.S. oil company Pan Ocean. The



women damned the curse of oil with their curse of nakedness, removing their clothes during a demonstration. In the twenty years to 2007 this refusal by women, indigenous peoples, small farmers, traders, the urban poor, environmentalists, some waged workers and their allies throughout the world has ripened and become more sophisticated. Lessons have been learned and links have been established.

The Abuja Declaration reflects this maturity. It demonstrates the fact that there is an alternative to corporate rule. It recognizes that only the demise of major petroleum corporations and the wider system of accumulation of which the weapon-dollar petrodollar alliance (Bichler and Nitzan) is a linch pin can stem this crisis. This is a tremendously refreshing break from the 'bait and switch' strategies that discredit virtually all United Nations, World Bank and IMF initiatives. Their bait is crocodile tears, of empty words about poverty, HIV-AIDS, climate change, natural disasters or whatever issue is in fashion at the moment. The switch is the call for more 'growth,' more corporate power, more private sector subsidies, in short, an expansion of the influence of the very perpetrators of the crises. Most shocking in this regard is Big Oil's demand that the World Trade Organization force oil-rich societies to 'open' their economies to transnational control in trade and investment in the 'services' related to oil and gas.

The Abuja Declaration rejects capitalist economic growth in favor of democratic local economic sovereignty. It goes further to say how we can put this rejection into effect. It draws lessons from the struggles of the past two decades and earlier — struggles in which thousands have given their lives. It identifies coordinated, direct action carried out simultaneously in strategic sites worldwide as the method for exerting popular power. This power, residing very much in peoples' (and notably women's) capacity to produce and to consume, is, the Abuja Declaration asserts, not only a means for disempowering transnational corporations, but also a means for replacing them with direct transactions between sovereign groups. The example of

## Abuja Declaration

Resolution of Friends of the Earth International Conference on Climate Change  
Abuja, Nigeria, Sept 28-29, 2006

### ANOTHER ENERGY FUTURE IS NECESSARY — ALTERNATIVES EXIST, STOP OIL AND GAS EXPLORATION NOW!



SETH TOBOCMAN

Member groups of Friends of the Earth International (FoEI) from 51 countries including Nigeria's Environmental Rights Action (ERA) and other national and international civil society groups, representatives of Niger Delta Communities and journalists gathered for the International Conference on Climate Change in Abuja from 28th-29th September 2006. The conference, with the theme: "Minimizing Climate Change Impact and Curbing Global Energy Chaos", is one of the activities of the Biennial General Meeting of the Friends of the Earth International.

#### OBSERVATIONS

Following presentations and robust discussions at the conference, participants observed that:

1. All struggles, whether social, economic or environmental are interlinked with political struggles. Therefore, there is the need to link the different messages from around the world and adopt broad strategies that clearly address the issues of Climate Change and Energy Sovereignty, since it is the flawed and exploitative international economic system that drives the climate change phenomenon.
2. There is the need to synchronize the various energy struggles around the world by adopting a global strategy for resisting environmental degradation, destruction of local livelihoods, and rights abuses associated with corporate controlled energy sourcing and consumption globally.
3. There exist attempts by corporations to promote other sources of energy primarily nuclear as an alternative. Nuclear expansion must be resisted; it has inherent and irreversible negative impacts.
4. Alternative energy production must not lead to further impoverishment of peoples.
5. The extraction of crude oil has led to unprecedented human rights abuse, environmental problems, fostering political and social conflicts in the Niger Delta and in other communities globally, which have been responded to by the militarization of community lands and sovereign states. In this militarized condition, women in



Venezuela's Bolivarian revolution with its direct deals of oil for doctors and oil for cows is cited as a model.

The Abuja Declaration takes one step further — a call for reparations. The super profits Big Oil is reaping from war-related energy price hikes must be taken back and used to clean up Big Oil's ecological mess that threatens life itself. Finally, the Abuja Declaration makes the crucial and in a sense, obvious point: no one other than the democratically organized people is capable of containing climate chaos. There is no solution to the impending ecocide caused by Big Oil but a popular movement to shut down the oil companies and replace them with people's power. ✘

**Terisa E Turner** of the University of Guelph in Canada, is co-director of the International Oil Working Group, a NGO registered with the Department of Public Information at the UN in New York.

#### Further Reading and Resources:

**The Bichler and Nitzan Archives**, [bnarchives.yorku.ca/](http://bnarchives.yorku.ca/)

**Climate Justice Now! The Durban Declaration on Carbon Trading**, 10 October 2004, [www.sinkswatch.org](http://www.sinkswatch.org).

Council of Canadians, [www.canadians.org](http://www.canadians.org)

**Message in Solidarity with Communities in the Niger Delta Region, Nigeria**. Submitted at a Public Forum Organised by Environmental Right Action in Collaboration with TWN-Africa at Oloibiri September 7th, 2006, [twnafrica.org/news\\_detail.asp?twid=929](http://twnafrica.org/news_detail.asp?twid=929)

**Oilwatch for Sovereignty: First energy workers encounter for sovereignty**, Caracas, Venezuela, 18-20 May 2005, [www.oilwatch.org/index.php?option=com\\_content&task=view&lang=en&id=19&Itemid=48](http://www.oilwatch.org/index.php?option=com_content&task=view&lang=en&id=19&Itemid=48)

particular have been victims.

#### RESOLUTIONS

Arising from the observations, participants resolved that:

Another energy future is necessary based upon:

- Abandoning the belief in export led growth in favour of servicing local (basic) needs;
- Restructuring the price and production of energy;
- A new approach to restructuring ownership of the energy regimes; and
- Abandoning the mistaken dichotomy between development and environment.



We therefore:

1. Endeavor to work with and support community struggles towards energy sovereignty and democratic control of natural resources that will be the basis for alternative fair and just trade regimes that link producers with consumers eliminating corporate led control of our energy systems. It is essential that women are fully involved in all negotiations over energy production and allocation of natural resources.
2. Call for fair trade and just direct deals between producers and consumers, built upon energy sovereignty and the transition to alternative energy that cut out the oil middlemen, oil companies and oil speculators. These direct deals in oil can involve barter (as in Venezuela with Cuba, Argentina, and Uruguay) thereby avoiding the use of the US Dollar.
3. Call on Governments across the world to declare a global moratorium on new oil and gas exploration and development until full eco-restoration and reparations is implemented in communities already impacted by extractive industries.
4. Call on Governments in both South and North to focus more on responsible energy consumption and the development of decentralized democratically controlled technology for easy utilization of clean energy like wind and solar energy.
5. Call on Governments of the South to develop gender responsive and clear policies toward attaining 'Energy Sovereignty'. Such policy should promote sustainable energy, local community control of energy along with the protection of the environment and local livelihoods from corporate and state abuse.
6. Recognize the alliance between the Nigerian and other governments and the oil multinationals in the form of Joint Venture Agreements that negate communities' interests. The terms of these JVA must be made public and repudiated. These JVA must be replaced with democratically controlled government and local community agreements.
7. The Niger Delta crisis should be resolved through dialogue and democratic/political interventions. Such interventions must include communal control of communal resources, protection of local political interests and strict enforcement of environmental standards and codes.
8. Neo-liberal trade agreements and economic policies that have the effect of stripping people of their entitlements to basic resources for a just and human existence and increase the impoverishment of peoples, must be terminated, finally
9. The super profits of the oil multinationals must be redirected towards clean-up, reparations, and the transition to safe energy alternatives under democratic control.

[www.eraaction.org/index.php?option=com\\_content&task=view&id=14&Itemid=12](http://www.eraaction.org/index.php?option=com_content&task=view&id=14&Itemid=12)

Meena Rahman, Chair, Friends of the Earth, International

Nnimmo Bassey, Executive Director, Environmental Rights Action/Friends of the Earth, Nigeria



## **I Am A Dangerous Woman**

I am a dangerous woman  
Carrying neither bombs nor babies  
Flowers or molotov cocktail  
I confound all your reason, theory, realism  
Because I will neither lie in your ditches  
Nor dig your ditches for you  
Nor join your armed struggle  
For bigger and better ditches.  
I will not walk with you nor walk for you,  
I won't live with you  
And I won't die for you  
But neither will I try to deny you  
Your right to live and die.  
I will not share one square foot of this earth  
with you  
While you're hell-bent on destruction  
But neither will I deny that we are of the same  
earth,  
Born of the same  
Mother I will not permit  
You to bind my life to yours  
But I will tell you that our lives  
Are bound together  
And I will demand  
That you live as though you understand  
This one salient fact.

I am a dangerous woman  
because I will tell you, sir,  
whether you are concerned or not,  
Masculinity has made of this world a living hell  
A furnace burning away at hope, love, faith, and  
justice,  
A furnace of My Lais, Hiroshimas, Dachaus.  
A furnace which burns the babies  
You tell us we must make  
Masculinity made Femininity  
Made the eyes of our women go dark and cold,

sent our sons — yes sir, our sons —  
To War  
Made our children go hungry  
Made our mothers whores  
Made our bombs, our bullets, our  
'Food for Peace',  
our definitive solutions and first strike policies  
Yes sir  
Masculinity broke women and men on its knee  
Took away our futures  
Made our hopes, fears, thoughts and good  
instincts  
'irrelevant to the larger struggle'.  
And made human survival beyond the year 2000.  
An open question.  
Yes sir  
And it has possessed you.

I am a dangerous woman  
because I will say all this  
lying neither to you nor with you  
Neither trusting nor despising you.  
I am dangerous because  
I won't give up, shut up, or put up with your ver-  
sion of reality  
You have conspired to sell my life quite cheaply  
And I am especially dangerous  
Because I will never forgive nor forget  
Or ever conspire  
To sell yours in return.

**Joan Cavanagh** is an archivist, activist, historian and freelance writer living in New Haven, Connecticut who wrote this poem when she was 21 years old. It has been reprinted many times since the original in 1972.

# WE Research

## Japanese Women's Roles in Climate Change Mitigation

An Industrialized Country's Perspective

Sabrina Regmi

The climate change debate led by agreements such as the Kyoto Protocol and United Nations Framework Convention on Climate Change (UNFCCC) concentrates more on the scientific and technological means to mitigate climate change. It is somehow heavily dominated by men and ignores or doesn't understand the domestic reality. Deforestation for wood to cook with, the over-use of appliances and heating which waste the electricity frequently produced by heavy green-house-gas (GHG) emitting processes, all contribute to global warming and climate change. It is important to address, support and value women's contribution to reducing global warming, provide education and encourage life style adjustments. Scientific and technological theories alone cannot ensure a sustainable environment.

The Japanese expression "mottainai" means "it is very wasteful when things are not utilized fully." Mottainai is often used for the 3R Initiative — reduce, reuse, and recycle. I conducted research in Japan where I interviewed and surveyed about 50 employed women. They belonged to different environmental, educational, and business organizations, and were located in Tokyo and Kanagawa. The purpose of my research was to understand women's roles in climate change mitigation from an industrialized country's perspective. While the women were employed they also performed their dual roles and duties at home as wives and mothers. The research found that the women respondents were using numerous strategies that helped reduce global warming and climate change impacts.

### Japanese Women's and Domestic Decision Making

A few years ago, Japanese men were still principally in-charge of buying technical equipment from cars to stereo equipment. Nowadays it is increasingly women who are making such purchasing decisions. In their day to day household responsibilities of providing food for the family, shopping and maintaining the dwelling, women become more familiar with products and services. This awareness allows them to place greater value on health, climate change and environment related factors.

The study shows that women's decision making power and status at home has improved. About 44% women answered

that they participate equally in decision making with their husbands while 54% women answered that they are the one making decisions regarding the consumption and management of domestic requirements including purchasing, investing and spending.

### Women's Awareness of and Responses to Global Warming

About 70% of women respondents were highly or very highly aware of global warming and climate change issues (Table 1). This high level of awareness has made women more conscious about developing and practicing environment friendly habits in their daily lives as well as travels. Although the great majority

TABLE 1. Level of Awareness of Climate Change

SN	Type of Responses	Response, #	%
1	Very high	12	24
2	High	23	46
3	Medium	10	20
4	Low	5	10

TABLE 2. Means of Transportation while Going to Near-by and Far-off Places

SN	Means of Transportation	Nearby		Far Away	
		Response	%	Response	%
1	Walk	44	88	-	-
2	Walk or ride bicycle	2	4	-	-
3	Ride a car/taxi (young women)	4	8	14	28
	Ride a car/taxi (elderly women)	-	-	-	-
4	Ride public means of transportation (elderly women)	-	-	25	50
	Ride public means of transportation (younger women)	-	-	11	22

(about 85%) of respondents' households possessed cars, most of the women (about 92%), both with and without access to cars, preferred to walk or ride a bicycle to go to nearby places (Table 2). The situation is reversed when the women had to travel longer distances. Then, most of them preferred to use some sort of motorized transportation. Younger women (28% of the sample) used cars or taxis while older women (50% of the sample), preferred to ride public means of transportation such as trains and buses.

### Efficient Use of Energy

Eighty four per cent of respondents are in the habit of turning off the electric appliances and lights when these are not in use both at home and at work (Table-3). About 46% use energy-efficient fluorescent lights to economize electricity. In Japan most heating is produced by both nuclear energy and burning of fossil fuels like gas and coal, which emit large amounts of GHGs. Over one third of the women are therefore minimizing the use of heating system, by using sweaters and blankets at home as much as possible. Moreover about 20% of them prefer to use fans during summer instead of air-conditioning. Women reuse bathwater for washing clothing and other hot water from cooking, for washing oily dishes and pans thus minimizing energy consumption at the household level.

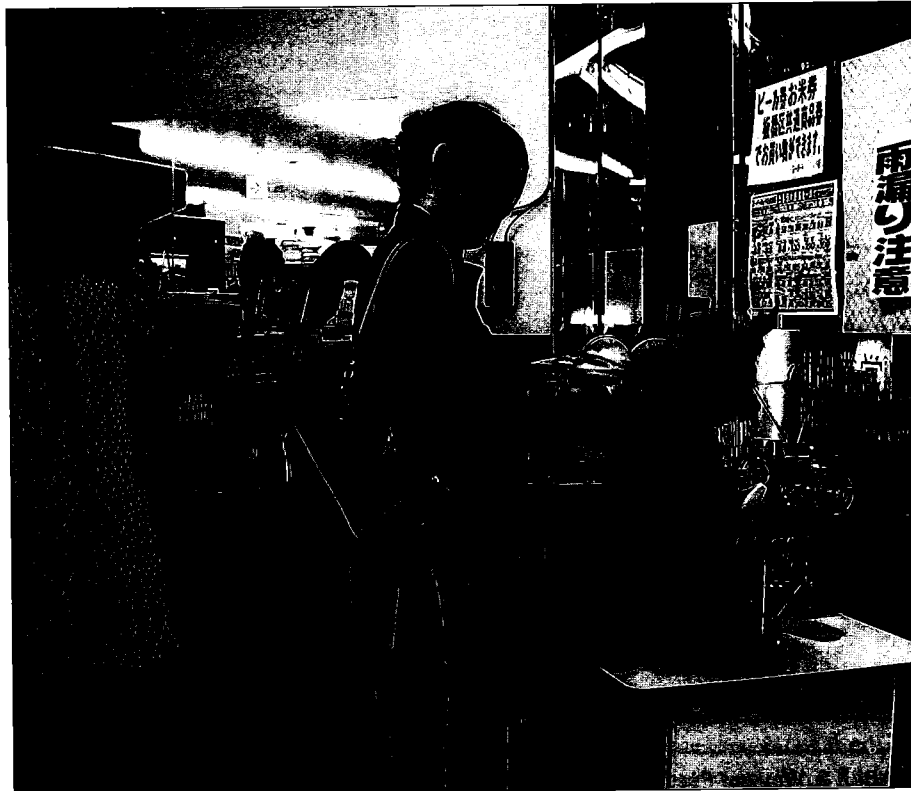
### Women Practice the 3 R's

The study found that women place great importance on waste reduction. Over one third (36%) shop for less packaged food slightly fewer (32%), buy fruits and vegetables which are not prepackaged while almost half (48%), reuse the plastic bags for storing leftovers and other household items. Others buy eco-friendly products such as eco-friendly cars, use the waste recycling program in the community, and take cloth or paper bags for shopping instead of using plastic bags (Table-4). Some shopping centers of Japan have an eco-point card system, giving shoppers incentive points for not using plastic bags. This is popular mostly among young women (60%). Some older women who



**TABLE 3. Ways of Preserving Energy at the Household Level**

SN	How energy is preserved	Response, #	%
1	Turn off electric appliances and lights when not using them	42	84
2	Use energy efficient fluorescent lights	23	46
3	Use sweaters/blankets in winter instead of heater	17	34
4	Use fan in summer instead of air conditioning	10	20
5	Wash dishes by hand instead of using dishwasher	19	38
6	Use already used bathwater for washing clothes and use water for multiple purposes such as boiling water for eggs as well as vegetables and then for washing oily dishes and pans	2	4
7	Use special table cap to switch off the standby electricity (This device is called energy saving electrical outlet. It is used for saving energy which is mostly consumed during the standby mode (ex TV, computers are often left at standby mode which consumes lots of energy and emits ghg).	1	2
8	Use no-iron clothing	3	6



take the extra steps, thought and time to store and reuse, recycle, compost, travel by foot or transit rather than car, shop and cook to waste as little as possible to protect the environment and reduce GHG emissions that pose a serious threat to human lives and future generations. Meanwhile the men still debate whether or not to accept the Kyoto protocol or if so, haggle about trading emission levels to appear in compliance with it while their GHG emissions keep rising. ☞

**Sabrina Regmi** is a student researcher from Nepal. She based this article on her 2005 research into "Gender and Climate Change Issues," which aimed to find out and understand the Japanese Women's adaptive strategies to climate change mitigation.

**Further Readings and Resources:**

[www.env.go.jp/en/wpaper/2004/fulltext.pdf](http://www.env.go.jp/en/wpaper/2004/fulltext.pdf)

[www.env.go.jp/en/wpaper/2005/fulltext.pdf](http://www.env.go.jp/en/wpaper/2005/fulltext.pdf)

**TABLE 4. Ways of Reducing Waste and Recycling**

SN	Waste Reduction and Recycling	Response, #	%
1	Use the waste recycling program in the community	30	60
2	Composting household waste for garden fertilizer	8	16
3	Reuse plastic bags or containers to store leftovers and household items	24	48
4	Shop for less packaged food	18	36
5	Buy fruits and vegetables which are not prepackaged	16	32
6	Using eco-point card system (bringing own cloth bag and not using new plastic bags in the supermarket, in return for incentive points)	30	60

were not aware of it before the survey, showed interest in using this system after they came to know about it.

**Women as role models**

As mothers, women can play an important role in teaching their children environmental ethics and influencing them to develop environmental conservation habits. A survey by the Japanese Ministry of Environment asked children

what inspired them to participate in environmental conservation. The majority answered they were told by their mothers to do so or they saw their mothers doing it. Hence women proved to be role models for climate protection and the 3R's.

My study showed clearly that caring for the environment falls largely on women's shoulders — all while being employed as well as responsible for the home and care of their families. Women

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# In the Field

## Women's Role in the Dance of Life

Addressing Climate Changes in US Pacific Islands

Cheryl Anderson

**T**he Pacific Islands are among the first places on Earth where we can see climate affecting the environment. The interaction of atmospheric and oceanographic conditions in the Pacific Ocean engenders variability of such extremes that this "Pacific dance" results in significant global impacts. Variability, especially the El Niño-Southern Oscillation (ENSO) warm events have triggered severe drought in numerous islands with additional impacts of erosion, landslides, and wildfires. Tropical storms, which may generate further east in the ENSO years, cause devastation to natural and built environments. During the El Niño and La Niña periods, severe variations in sea level may cause loss of groundwater or coastal flooding. The ways in which women deal with these extreme climate events indicate how women, and ultimately their communities, may adapt to longer term changes in climate.

### Women's Leadership in the Pacific Islands

Decisions to deal with climate issues and to build resilient communities rest with political leaders and decision makers. Therefore, identifying the leadership structure and roles of these islands enables understanding of the ways in which they can address changes in climate. Although women's roles are changing throughout the Pacific, this article, based on several climate risk management projects, observes women in the US Pacific Islands: American Samoa, the Northern Mariana Islands, the Federated States of Micronesia (includes Yap, Chuuk, Pohnpei, and Kosrae), Guam, Hawai'i, the Marshall Islands, and Palau.

The US Pacific Islands represent Polynesian and Micronesian cultures gen-

erally, with numerous societal distinctions in islands and villages. Matrilineal systems empowered women in many islands, yet even in patriarchal societies, clear gender roles accorded rights to women. The generalized division of responsibilities often occurred around resource management, with men involved in ocean-related activities and women associated with land-based activities. With limited land resources in small islands, control of these resources sig-

nifies power. Framed by the United States following World War II, the governance systems of the island jurisdictions led to erosion of these local rights by placing men in primary leadership roles in the islands.

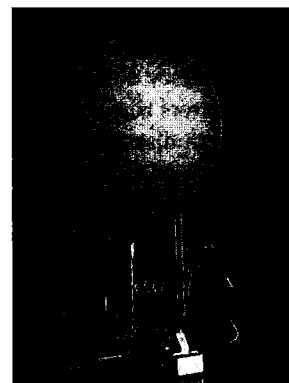
**The generalized division of responsibilities often occurred around resource management, with men involved in ocean-related activities and women associated with land-based activities.**

By 2006, women have made political gains in these islands even up to high-level positions. Men still dominate at least 75% of the highest leadership positions, and the systems cannot be characterized as equitable. Women, however, hold approximately 80% of the key leadership roles in informal risk management sectors. These include community, environmental and other non-profit social organizations that contribute to building resilient societies. The numbers of women in formal positions related to disaster risk management, environmental management, and weather and climate have increased in the last five years. These changes in women's positions within island communities have implica-

### Climate Variability and Women

As programs to address climate variability have emerged throughout the region, women have become more visible in both formal and informal sectors related to climate. Women's roles influence the ways in which community programs develop to deal with climate impacts.

Severe drought occurred throughout the



CHERYL L. ANDERSON

Gender equity improves in the Pohnpei Weather Service Office (funded by the US NOAA National Weather Service), as demonstrated by the team preparing the daily weather balloon for data gathering and processing in their office. Caroline Adams, the Climate Focal Point, also provides outreach and climate information to the local community.

# women's knowledge of environmental management in rural areas helped their communities survive.

Pacific during the 1991-92 ENSO warm event, primarily in rural atoll islands that depend on rainfall water catchments for their freshwater source. Water pump systems in low-lying atolls pulled in salty water as the freshwater lenses shifted. Since they understood island hydrology, women in the neighboring islands of Yap dug shallower wells to find freshwater. They further boiled the water to ensure safety in drinking it. In Palau, elderly women guided temporary taro replanting projects that enabled these food resources to withstand the drought. Women still preserve breadfruit, dry fish, and store other foods for emergencies. Similar stories from other islands describe how women's knowledge of environmental management in rural areas helped their communities survive.

Following the 1997-1998 ENSO, the impact assessment team of the Pacific ENSO Applications Center (PEAC) discovered similar stories. In addition, the island governments that had women participants on their ENSO Drought Task Forces had better public awareness campaigns that reached further into villages and remote areas. Members of the task forces consisted primarily of agency directors and division chiefs from sectors being impacted, including managers in disaster, water resources, agriculture, utilities, fisheries, and weather service. Unlike the severe ENSO event in 1982-1983, no one died during the 1997-1998 event, primarily because public awareness information encouraged people to treat their water resources. This reduced waterborne diseases in the Federal States of Micronesia during the drought.

During recent climate variability and change workshops in each of the US Pacific Islands jurisdictions, women participated in organization and discussions. For the first time, women held significant positions in formal climate risk sectors in all of the islands, some of which included: two meteorologists-in-charge at weather service offices (WSOs); WSO

climate focal points and other technical positions; coastal resource program managers; marine protected area coordinators; marine researchers; flood program coordinators; and, two national climate coordinators representing their governments in the international climate change forums. Coincidentally, women primarily coordinated and facilitated the workshops. Although women fill relatively few top level positions, they participate significantly in climate risk management.

## Implications of Women's Participation in Climate Variability and Change

Considering their roles in climate issues, women's participation extends beyond their occupational responsibilities to connections with their communities. Women ensure greater access to information and increase public awareness about climate change. In addition, women broaden the climate discussion to include concepts that are often overlooked in male-only conversations. As the dialogue becomes more inclusive of gender, other marginalized voices, such as those representing island cultural knowledge, have been incorporated into climate risk management programs. Adapting to severe and critical changes in the island climates requires innovative thinking and an inclusive process to reduce risks. Women's roles, directly or indirectly, have influenced the process in an approach that begins with dialogue about what people need to manage climate risks in their island communi-

ties. This new way of working empowers local communities to build resilience to challenges from climate extremes and to address issues that will help with adaptation. Increased gender equity in the islands appears to expand opportunities for reducing long-term risks. ❧

**Dr. Cheryl L. Anderson**, PhD, is the Director of the Hazards, Climate, and Environment Program, University of Hawai'i Social Science Research Institute. As part of the Pacific Regional Integrated Science and Assessment team and the Pacific ENSO Applications Center, she has conducted research and projects in climate and disaster risk management.

### Further Reading and Resources:

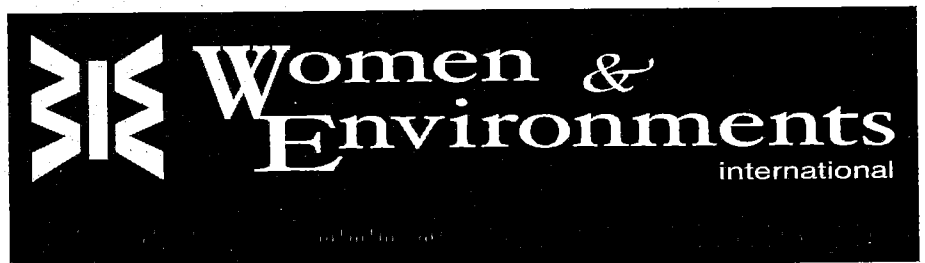
Anderson, Cheryl, "Gender Matters: Implications for Climate Variability and Climate Change and for Disasters in the Pacific Islands," *InterCoast Network Newsletter #41: Gender, Population, and the Environment: Finding Common Ground for Coastal Managers*, University of Rhode Island, Coastal Resources Center, 2002, pp. 24-25, [www.crc.uri.edu/download/2002\\_41\\_CRC\\_GenderPopulationEnvironment.pdf](http://www.crc.uri.edu/download/2002_41_CRC_GenderPopulationEnvironment.pdf)

**Pacific ENSO Applications Center (PEAC)**, [www.soest.hawaii.edu/MET/Enso/](http://www.soest.hawaii.edu/MET/Enso/)

**Pacific Regional Integrated Science and Assessment (RISA)**, [research.eastwestcenter.org/climate/risa/RISA-exec\\_summary.htm](http://research.eastwestcenter.org/climate/risa/RISA-exec_summary.htm)

Shea, E.L., G. Dolcemascolo, C.L. Anderson, et al, **Pacific Islands Regional Assessment of the Consequences of Climate Variability and Change (Pacific Assessment) Final Report**, Honolulu, East-West Center, 2002, [research.eastwestcenter.org/climate/assessment/](http://research.eastwestcenter.org/climate/assessment/)

TAO Project, NOAA **Pacific Marine Environmental Laboratory (PMEL)**, [www.pmel.noaa.gov/tao/proj\\_over/ensodefs.html](http://www.pmel.noaa.gov/tao/proj_over/ensodefs.html)



# Climate Justice and Nigerian Women's Gift to Humanity

Terisa E. Turner and Leigh Brownhill

In 1999, Nigerian women led a remarkable global initiative to halt Shell's massive, dangerous burning of natural gas. The coordinated, international action and its aftermath suggest tactics that, if adopted more generally today, promise to deliver success in the complex struggle to reverse climate change.

In Europe and elsewhere, Shell uses valuable 'associated' gas for electricity, petrochemicals or pressure maintenance in oil wells. In contrast, in Nigeria, to save money, sidestep expensive pressure maintenance in oil wells and to avoid investment in industries, Shell burns off most of the gas that comes out of the ground associated with oil. More gas is flared in Nigeria than anywhere else in the world. The flares contribute more greenhouse gases than all sources in all of sub-Saharan Africa combined.

Environmentalists have persistently tried to douse these 'flames of SHELL.' On November 10, 1995 Ken Saro-Wiwa and eight others were hanged by Nigeria's military dictatorship in what was described by a UK Queen's Counsel as "an act of state-sponsored murder." Those executed were part of the Movement for the Survival of the Ogoni People, that aimed to shut down the polluting operations of Shell. Each year after the hangings, environmentalists marked 'Ogoni Day' on 4 January and 10 November, the anniversary of the execution of the Ogoni Nine. These commemoration protests grew larger each year.

In 1999 Niger Delta women and their allies staged simultaneous protests in Nigeria and the UK. These actions featured shut-downs of Shell headquarters, on and after Ogoni Day, 4 January 1999. While business-suited environmentalists occupied Shell's London headquarters, women and men in the Niger Delta temporarily closed down gas flares.

In London, thirteen activists occupied

Shell headquarters. They barricaded themselves in the Managing Directors' offices and broadcasted to the outside world via digital cameras, lap-top computers and mobile phones. Six hours later, police smashed through the wall and arrested the activists. Shell declined to press charges. One participant stated that the London occupation aimed "to show real solidarity with people in the Niger Delta rebelling against Big Oil and its private security force (the Nigerian army). It has becoming increasingly easy for multi-national corporations to isolate struggles and resistance. The strength of linking together undermines MNCs ability to do this."

At the same time in the Niger Delta, activists launched 'Operation Climate Change,' to shut down oil flow stations and gas flares in the Delta. Three hundred organizations from dozens of countries endorsed a letter to Shell, Chevron-Exxon, Mobil, Elf, and Agip. It warned that the "World Is Watching" and called for an immediate suspension of Nigerian oil operations. Several oil flow stations were occupied and attempts were made to shut down the gas flares. The Shell-backed military administration responded with a state of emergency. More than two hundred people were killed and many women were raped by soldiers. Enraged by the rapes and murders, hundreds of women from Niger Delta Women for Justice took to the streets in Port Harcourt on 11 January 1999. They delivered a protest letter to the military administrator decrying the murders and the rape of women and land. The protesters dressed in black and carried placards, some of which read 'Justice for Ijaws and her neighbours' and 'The women are aggrieved, stop the killing.'

A witness reported that demonstrators "were confronted by three lorry loads of policemen who fired into the air and tear gassed the crowd of surging women." The

soldiers arrested at least 34 of the women, one of whom stated that soldiers had "stripped her naked and flogged her with *koboko* (cow hide whip)."

Five oil companies — Agip, Chevron, Mobil, Shell, Texaco — were seriously impacted by Operation Climate Change. In 1999, production of some 400,000 barrels of oil per day (bdp) — fully half of Shell's total Nigerian output — was temporarily interrupted by the initiative to stop gas flaring and expel the company from Nigeria. Shell suffered a 95 percent profit loss in the fourth (as compared to the third) quarter of 1998, a loss of US\$350 million. Output interruptions and financial losses were very much greater in 1999. Shell was forced to make a public concession in 1999; a promise that it would stop all gas flaring in Nigeria by 2007. As 2007 approached, there seemed to be little likelihood that Shell would keep this promise.

Indigenous activist Annie Brisibe explained that the success of the 1999 Operation followed from "organizing political awareness workshops for women through the Niger Delta Women for Justice movement. ...We focus on creating awareness about what a polluted environment can do to people. We point out the activities of transnational corporations — the gas flares caused by the oil industry, the improper waste management, the carbon dioxide and sulphur emissions — and make the connections between all of this and the frequent environmental problems in the Niger Delta."

In January 2006, Nigerian courts ordered Shell to stop the flaring of natural gas from specified oil wells in the western Warri zone of the Niger Delta. The oil giant refuses to comply and faces more legal challenges in a concerted, international campaign to prosecute Big Oil for damages caused by its actions that result in climate change. A second precedent of global import was

announced on 19 September 2006 in the Nigerian newspaper, *Punch*, where it was reported that the government intended to cancel Shell's license in the eastern Niger Delta block covering Ogoniland because Shell operations there had lapsed for more than ten years, due to the campaign of the Movement for the Survival of the Ogoni People. In a 23 September 2006 interview, Dr. Owens Wiwa stated that "It was Ogoni women who were most instrumental in preventing Shell from operating in Ogoniland over the past decade. Government's revocation of Shell's operating license is a tremendous victory and it is due largely to the commitment of ordinary village women, mostly organized through the Federation of Ogoni Women's Associations." Across the Delta, some 600,000 barrels a day, or about a quarter of Nigeria's total production, was shut down throughout 2006. This entails a massive cut in greenhouse gas emissions.

Environmentalists described Operation Climate Change as a "gift to humanity" because it sought to cut carbon emissions that threaten humanity as a whole. Actors in this international political drama publicized the connections between the destruction of the Africans' economy and the destruction of the global ecosystem by Shell's persistent practice of flaring gas.

In the aftermath of the "gift to humanity" campaign three dimensions are critical: first, militancy deepened around the demand for democratic 'resource control' in the Niger Delta; second, significant success was achieved in expelling oil companies from the Niger Delta; and third, women and allied men experienced violent counter-

insurgency at the hands of the Nigerian state and Big Oil. This third dimension of the aftermath exposed the empirical power relations between women who try to interdict perpetrators of ecocide and those men, in and allied with the oil industry, who profit from expanded oil production with its escalating deadly emissions.

The Nigerian women's "gift to humanity" is a double gift. First, it provoked a leap in global consciousness about the dire common fate of all humanity if specific polluters amongst the world's tiny clique of some 450 billionaires are allowed to run rampant outside democratic control. Second, it accelerated an international groundswell of coordinated mobilization against corporate rule. A recent highpoint in this mobilization was the 29 September 2006 Abuja Declaration's call for energy sovereignty to "stop oil and gas exploration and production now" that emanated from a 51 nation conference in Abuja, Nigeria on 'Minimizing Climate Change Impact and Curbing Global Energy Chaos' co-organized by Friends of the Earth International.

As the urgency of the global warming crisis is increasingly recognized by the public, there is every reason to believe that peaceful direct action for popular control over petroleum will expand. We can expect that women's initiatives and the coordination of global direct action will continue to be key features of the agenda to reverse climate change. ☸

**Terisa E. Turner** of the University of Guelph in Canada, is co-director of the International Oil Working Group, a non-governmental organiza-

tion registered with the Department of Public Information at the United Nations Secretariat in New York.

**Leigh Brownhill** completed a Ph.D. thesis at the University of Toronto in 2006 entitled **Land, Food, Freedom: Struggles for the Gendered Commons in Kenya, 1870-2007**. She is a co-founder of First Woman: The East and Southern African Women's Oral History and Indigenous Knowledge Network. First Woman has been recording the life stories of elderly Mau Mau women in Kenya.

#### Further Reading and Resources:

Ekine, Sokari, **Blood Sorrow and Oil: Testimonies of Violence from Women of the Niger Delta**, Oxford, UK: Centre for Democracy and Development, 2001.

ERA/Friends of the Earth, **Gas Flaring in Nigeria: A Human Rights, Environmental and Economic Monstrosity**, A report by the Climate Justice Programme and Environmental Rights Action/Friends of the Earth Nigeria, June 2005, [www.foei.org](http://www.foei.org); [www.climatelaw.org/gas.flaring/report/exec.summary.htm](http://www.climatelaw.org/gas.flaring/report/exec.summary.htm).

Hunt, J. Timothy, **The Politics of Bones: Dr. Owens Wiwa and the Struggle for Nigeria's Oil**, Toronto: McClelland and Stewart, 2005.

Okonta, Ike and Oronto Douglas, **Where Vultures Feast: Shell, Human Rights, and Oil**, New York Verso, 2003.

Turner, Terisa E. and Leigh S. Brownhill, **The New Twenty-First Century Land and Oil Wars: African Women Confront Corporate Rule**, New York: International Oil Working Group and First Woman: East and Southern African Women's Oral History and Indigenous Knowledge Network, 2005, also available at [www.iowg.org](http://www.iowg.org).

The International Oil Working Group supports the Abuja Declaration for energy sovereignty and the cessation of oil and gas exploration. [www.iowg.org](http://www.iowg.org)





# Chant Down Climate Change

Pam Mei Wai Graybeal

**D**o you sing along to music? Have you ever listened to a song so many times that you knew every word? Even if it has been years since you heard that song, you would probably recall most of the lyrics once the music began. Lyrics we hear repeatedly, like stories and other narratives, actively shape how we learn and remember new things. This gives lyrics an enormous power. With this power, songs about climate change as well as social and personal transformation take the complex subject out of the frequently alienating realms of science and law to help us integrate important information into our daily lives.

If you believe, as I do, in the power of stories to shape our realities, then the 'Rasta' or Rastafari concept of "word-sound-power" that stresses the power of the spoken word might be familiar to you. "Word-sound-power" is expressed amongst Rastafari in their "dreadtalk." In dreadtalk, parts of words are changed to reinforce meaning. For example, the "o" sound in "oppression," sounds like "up." Rasta instead use the word "downpression," which is more reflective of the meaning of the term.

The term "Babylon" is also frequently employed in dreadtalk. "Babylon" has many meanings, but often refers to oppressive racist and capitalist systems. It can be used to refer to multi-national corporations, international financial institutions, police, Western civilization, the military or a combination of all of these. Rasta does not promote violence, but reggae has common revolutionary themes of "chanting down" or "burning" Babylon.

To different extents, reggae music can represent Rastafari, which is variously defined as a philosophy, a religious movement, or "a particular way of being conscious of one's identity, lifestyle, and vision of the good" (Johnson-Hill, p.8). Reggae often employs word-sound-power particu-

larly effectively by combining memorable beats with message-laden lyrics. Broadly encompassing ska, rocksteady, roots, dub, and dancehall styles, reggae appeals to a wide and heterogeneous audience on a global scale, making it an influential conveyor of cultural messages.

Many reggae songs directly espouse particular lifestyles and morals characterized by a stand against "downpression." References to the "boiling sea" and "melting rocks" reflect the common theme of Babylon "burning," a particularly relevant metaphor for the warming of the globe and increases in drought, desertification and fires. Because of the connectedness of humans and nature in Rasta, lyrics often stress that there is no escape from earthly consequences.

*Downpressor man, where you gonna run to?  
If you run to the sea, the sea will be boiling  
If you run to the rocks, the rocks will be melting  
And if you make your bed in hell, I will be there*

— Peter Tosh; Sinead O'Connor,  
"Downpressor Man"

In the song "Globe All Warming," reggae artist Niyorah, from the US Virgin Islands, uses the threat of climate change to promote "livity," or healthy living, especially through a local organic diet. "Livity" can be expressed in everyday lifestyle decisions, especially related to consumption. Local food choices can, for example, reduce greenhouse gas emis-

**reggae artist Niyorah... uses the threat of climate change to promote "livity," or healthy living, especially through a local organic diet.**



"If you run to the sea, the sea will be boiling. If you run to the rocks the rocks will be melting."

PAM GRAYBEAL

## Local food choices... reduce greenhouse gas emissions and use of fossil fuels.

sions and use of fossil fuels. Industrial food production is reliant upon petroleum products used in fertilizers, fuels for long-distance distribution, CO2 emissions from deforestation for grazing, as well as methane emissions from livestock.

Reggae, with its popular appeal, has a particular power to connect issues of climate change, extreme weather and industrial society, including oil-intensive farming.

*Global warming — the cry is out  
The earth is getting hotter without a doubt  
Glaciers are melting in the north and south  
Our lives are about to change  
There is only one way to survive this  
You gotta purify your body — get rid of toxins...*

*Check the kind of food you eat and the type of drinks you consume.*

— Niyorah, "Globe All Warming"\*

While promoting self-sufficiency, we must acknowledge that survival hinges on more than the ability of people to change their lifestyles and eating habits. A larger transformation of the structural forces of capitalism is required to protect humanity (particularly people of color, women, the poor, young, and old) from severe and unpredictable weather events, rising sea levels, pests, infectious diseases and other unforeseen consequences of climate change. Niyorah warns that in the midst of natural disasters, "trucks will not be able to get supplies to you. It's so obvious my people you must grow your own food. Don't depend upon the system — you'll end up getting screwed." One is reminded of the disaster scenarios in the aftermath

of Hurricane Katrina. Meanwhile, women all over the world commonly shoulder most of the formal and informal care work that will be especially affected.

*Many more will have to suffer-plenty more a go dead...*

*People must experience a radical shift...  
Love your neighbor as yourself and love the natural livin'...*

*From a long time we want them for stop the pollution*

*Now them a scramble for solution  
Our climate has been through too much alteration*

*With government misinformation*

*The greenhouse gases like HFC  
And the greenhouse gases like PFC  
Are so highly generated in variety  
Brought about by this industrial society  
— Niyorah, "Globe All Warming"\**

Many reggae songs incorporate concepts of radical change and connectedness among humans and between humans and nature. If Babylon is synonymous with industrialization, capitalism, and conspicuous consumption, then we can draw further on the vast number of reggae songs that predict that "Babylon will burn." Such lyrics provide metaphors for the radical shift in power structures that is required to stop the scourge of climate change.

Climate change messages are progressively being integrated into every aspect of our daily experiences. Reggae music's word-sound-power is significant in dis-

seminating and popularizing deep-rooted critiques of the industrial source of climate change. With its word-sound-power and its global popularity, climate-focused reggae music provides new understandings, positive solutions and creative opportunities to further discuss global warming, in ways that are meaningful and accessible. "Overstand?" ❧

\*Written lyrics were not available, so those supplied here are derived from my own transcription and may contain a few minor errors or omissions. Thanks are due to Lionheart Sounds in Berkeley for directing me to "Globe All Warming."

**Pam Graybeal** is a Ph.D candidate in the Society and Environment program at the University of California, Berkeley. She is interested in the connections between various forms of media, climate change and environmental justice. She is the daughter of an immigrant, and is of Chinese, White, and Native American descent. [nature.berkeley.edu/~pamg/](http://nature.berkeley.edu/~pamg/)

### Further Reading and Resources:

Dolin, Kasey Qynn, "Words, Sounds, and Power in Jamaican Rastafari," **Middle Atlantic Council of Latin American Studies Latin American Essays**, 2001.

Johnson-Hill, Jack A., **I-Sight the World of Rastafari: An Interpretive Sociological Account of Rastafarian Ethics**, Metuchen, NJ., Scarecrow Press, Inc., 1995.

Lake, Objagele, **Rastafari Women: Subordination in the Midst of Liberation Theology**, Carolina Academic Press, Durham NC, 1998.

Black, Stephanie, **Life and Debt**, (film), [www.lifeanddebt.org/](http://www.lifeanddebt.org/).

Turner, Terisa E., "Rastafari and the New Society: Caribbean and East African Feminist Roots of A Popular Movement to Reclaim the Earthly Commons," in T. E. Turner (ed.), **Arise Ye Mighty People: Gender, Class and Race in Popular Struggles**, Trenton, New Jersey: Africa World Press, 1994, pp. 9-56.

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# The Grassy Narrows Blockade at Slant Lake

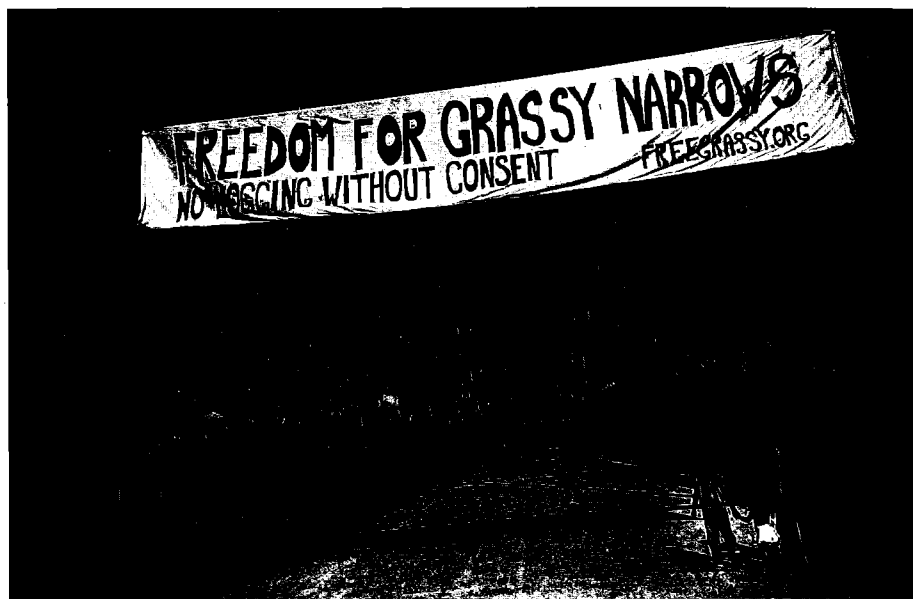
Kim Fry

**L**ike many struggles around the globe to stop climate change, women are on the frontlines of the movement to protect Ontario's Boreal forest, it is an important movement that links environmental destruction with human rights.

Stretching from Alaska clear across Canada to the Atlantic Ocean, the Boreal is an astonishing wilderness of forest, rivers, wetlands and lakes. It holds more freshwater than anywhere else on the planet, and plays an essential role in cleaning the air that we breathe and in fighting climate change. For hundreds of years over 500 First Nations communities have called the Boreal home. It is also habitat to rare species of wolves, bears, and woodland caribou, as well as half of North America's songbirds. The Boreal's soils and forests, considered the largest terrestrial carbon storehouse in the world, make it a vital regulator of global climate.

The Canadian Boreal contains 25% of the earth's remaining intact forest and most of the pristine unallocated Boreal is in Ontario. Ontario is also where much of the resistance to the destruction of Boreal forests has been occurring. The resistance has been led by First Nations communities who are seeing their ancestral lands, hunting grounds, trap lines and wild rice harvests destroyed by intensive clearcutting. The forests where traditional medicines were gathered are quickly being eaten up by the logging industry. This industry's escalating destruction has led to what has become the longest First Nations blockade in Canadian history: the Grassy Narrows blockade at Slant Lake.

Grassy Narrows First Nation, the people of Asubpeeschoseewagong live 100 km north of Kenora, Ontario (close to the Manitoba border) and have a long history of environmental catastrophes affecting



English River Rd. blockade. The overnight action was held to stop trucks filled with trees from leaving the Whiskey Jack forest north of Kenora, ON.

**It holds more freshwater than anywhere else on the planet, and plays an essential role in cleaning the air that we breathe and in fighting climate change.**

their community. After being uprooted in the 1960's by the department of Indian Affairs, the community was informed in the 1970's that their water and fish were contaminated by several tonnes of inorganic mercury from a pulp and paper mill in Dryden.

Recently, Grassy Narrows First Nation has been taking on Abitibi Consolidated, a large logging company based out of Montreal which supplies newsprint to prestigious papers like the New York Times and the Washington Post. The Ontario government approved Abitibi's twenty-year management plan that would see the logging of the remaining old growth Boreal in traditional

Grassy territory. After launching a legal case against the Ontario government and building solidarity in Southern Ontario, many community members recognized that nothing was being done to stop the destruction of their forests. On December 2nd 2002, the women and youth of Grassy established a blockade on a logging road in their territory, and sparked what is now the longest standing and highest profile indigenous logging blockade in Canadian history.

One of the inspiring aspects of the blockade has been how much the Mothers and Grandmothers of the community have driven the direct action. To a large extent the blockade has been maintained by chil-

dren and clan mothers, and most of the spokespeople for the blockade are women. When, in 2005 it seemed as though no one was paying attention to Grassy anymore, a youth internship and gathering were organized with help from ForestEthics & the Rainforest Action Network, two U.S. based ENGOS. A shutdown of the Trans-Canada Highway and blockade of one of the newer logging roads into Grassy territory resulted in dozens of arrests and a brutal raid on the protester's camp, but the actions have helped to remind people that the crisis in Ontario's Boreal Forest has not disappeared and rapid industrialization is still occurring.

The Women of Grassy have also been traveling across Southern Ontario on the "Grandmothers Tour" where they have been calling on the provincial government to revoke Abitibi's logging license and calling on the federal government to honour their treaties. Toronto is a long way from Grassy Narrows and the Boreal Forest, but their story and their struggle is an inspiring and important reminder that the struggle against climate change is happening in all corners of the globe. ✎

**Kim Fry** has been working in the environmental movement for 15 years and is currently the Boreal campaign organizer in Toronto. Kim spent several weeks this past summer exploring the beauty of the Boreal and supporting the Grassy blockade at Slant Lake.

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# Managing Climate Change At Home

Identifying Coping Strategies Within Rural Agricultural Households in Kenya

Anna Dion

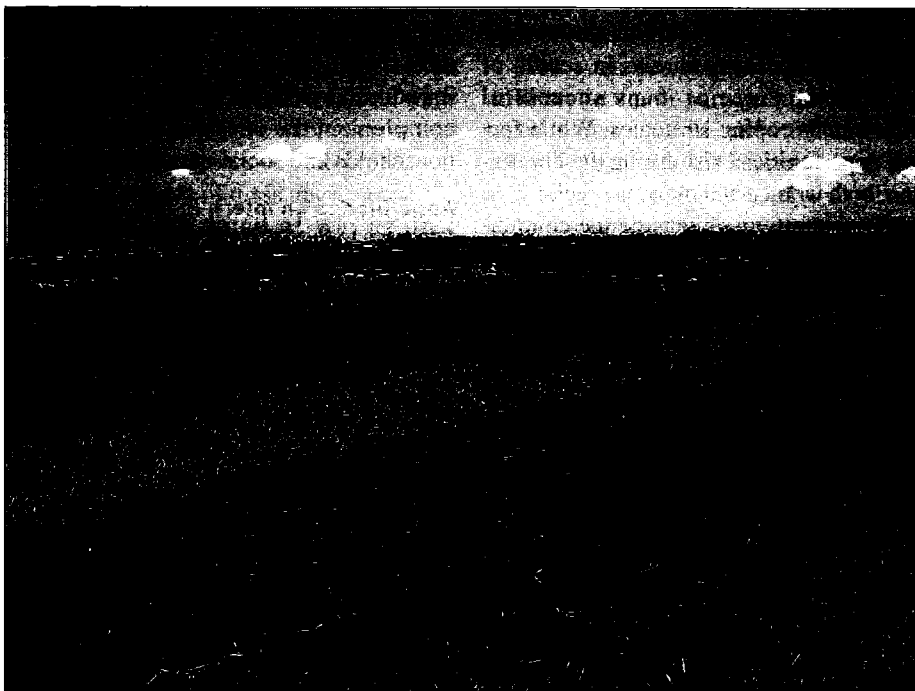
**A**s Alvina Kimande begins her trek to the canal for water, she notices a group of dragonflies diving towards the land. Seeing one of the many trusted signs that the rains are on their way, she smiles. Despite what the meteorologists report on the radio, the signs that Alvina has relied on since she began farming as a child rarely lie: the rains will come within two weeks. As the dragonflies gather food to ensure their survival through the coming rains, their behaviour also signals to Alvina that she must prepare her fields to ensure her own family's survival.

As one of several farming households in Kenya's Mwea Rice Irrigation Scheme, Alvina's family relies primarily on rice for income, and small plots of maize, beans and vegetables for home consumption. Alvina weeds and plants the rice crops, while her husband plows, floods and fertilizes the rice fields. Alvina is also responsible for securing food crops, caring for livestock, and ensuring clean water and firewood for her household. While the coming rains certainly help in growing food, Alvina must also shelter her family from the increased risk of malaria that follows the rains.

Households, children included, often spend significant amounts of time tending to their fields. Their houses often neighbour the paddies. This convenience, however, also increases their exposure to malaria-carrying mosquitoes. At dusk and throughout the evening when families are gathered in their homes, they are most susceptible to contracting malaria from night-feeding mosquitoes.

While malaria epidemics were first reported in East Africa in the 1920s, epidemics have become more frequent and severe since the 1980s. Many factors contribute to shifts in malaria transmission, including increases in population

... researchers also suggest that changes in malaria distribution may be associated with climate change



View of the expansive Mwea Irrigation Scheme landscape.

density, changes in land use and drug resistance. Some researchers also suggest that changes in malaria distribution may be associated with climate change. Members of Alvina's community, however, are making important efforts to control the disease by removing garbage and standing water around their homes, thereby reducing the number of mosquito breeding sites. Since the distribution of free insecticide-treated bednets and education campaigns in 2004, community members have reported a dramatic reduction in malaria cases. However, mosquitoes, like people, will often adapt to

changing circumstances. With an increase in the use of insecticide-impregnated bednets, some recent studies suggest that mosquitoes have begun feeding earlier in the evening as an adaptive response to the preventative measures adopted by the local communities.

While the swarms of diving dragonflies in Mwea may tell Alvina when to expect the rains, they are unable to warn her of the potential weather changes in the coming years. The Government of Kenya predicts that by 2030, Kenya will experience increased temperatures due to the doubling of atmospheric carbon dioxide

ANNA DION

levels, resulting in a decline in rainfall across the country. Already, farmers in Mwea have noticed that over the past 10-15 years, the rains tend to be less predictable and often arrive later in the year. Increasing unusual and irregular weather affects most dramatically those least able to recover and tests their ability to adapt.

In Mwea, as in most small-agriculture communities, weather establishes the rhythms of life, and adapting to a changing climate is a survival strategy that has been refined over many years. Farmers have learnt to store some of their yields and seeds to plant when conditions improve. Families, and most frequently women, may skip meals or travel long distances to nearby forests in search of wild foods, some of many successful community coping strategies. While few job opportunities exist during the dry season, both women and men may seek casual labour opportunities outside the community. However, many coping strategies also have their costs. For example, with increased mobility, migrant workers face

a greater risk of contracting sexually transmitted diseases, and once they return home, they share that increased risk with their regular sexual partners.

Because women rely on a healthy environment to fulfill many of their responsibilities, climate change may have important implications for their livelihoods. It is precisely because of the importance of the environment to rural women's daily tasks that they have developed effective adaptation strategies in the face of a changing climate. Greater importance must be given to understanding the coping strategies already in place within rural agricultural communities. It is critical that those interested in supporting rural livelihoods recognize the challenges introduced by climate change and work to complement the strengths that affected households and social networks. ❧

**Anna Dion** is an intern in the Ecosystem Approach to Human Health Program Initiative at the International Development Research Centre (IDRC) in Ottawa, Canada. She recently completed her research examining how cli-

mate change affects the management of malaria in the Central Province in Kenya.

#### Further Reading and Resources

Kabutha, C. and C. Mutero, "From Government to Farmer-Managed Smallholder Rice Schemes: The Unresolved Case of the Mwea Irrigation Scheme," in Blank, H., C. Mutero and H. Murray-Rust (eds), **The Changing Face of Irrigation in Kenya**, International Water Management Institute, Sri Lanka, 2002.

African Centre for Technology Studies, **Climate Change and Development in Kenya**, Nairobi, Kenya, 2005.

Pepall, Jennifer, **Malaria and Agriculture in Kenya**, [www.idrc.ca/en/ev-34033-201-1-DO\\_TOPIC.html](http://www.idrc.ca/en/ev-34033-201-1-DO_TOPIC.html).

Kabutha, C., C. Mutero, V. Kimani, G. Gitau, L. Kabuage, L. Muthami, and J. Githure, **Application of an ecosystem approach to human health in Mwea, Kenya: participatory methodologies for understanding local people's needs and perceptions**, International Centre of Insect Physiology and Ecology, Nairobi, Kenya, 2002.

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# Address to 30th Anniversary of Women and Environments International Magazine on May 18, 2006

Shahrzad Mojab, Director, Women & Gender Studies Institute, University of Toronto

Dear Colleagues, Friends and Guests,

A warm welcome to you all. I have greetings for you from all my colleagues at the Women and Gender Studies Institute.

I am grateful to the organizers for including me in this fantastic celebration. Behind every event, as you all know very well, there are dedicated souls. This event is no exception: those in the editorial board of the magazine and all the volunteers.

In a recent conference that I organized on the theme of women, war and learning, I talked about how the accumulation of years of knowledge, experience, and observation of the details of women's lives deeply unsettles me emotionally and intellectually when I think about the fact that I am, once more, a citizen of a country that is at war. We are a nation at war. The Canadian government, acting on our behalf, has deployed Canadian men and women military personnel to fight in Afghanistan, our parliament extended their stay for two more years, and we are participating actively in the occupation of Iraq. With the withdrawal of support for the Palestinian Authority, we are prolonging the occupation of Palestine, too.

We live in a war-torn world, where the nation-states of the West and their belligerent Eastern counterparts run this massive machinery of war to the extent that it is not simple for us as citizens to easily detect the encompassing and overpowering processes of militarization of our lives. Put differently, the machinery of war is steadily and gradually blurring human interactions and relations; it has created intellectual confusion. In particular, since September 2001, the ideology of war has animated dangerous divisiveness among

us. Amartya Sen writes on this point in his new book entitled *Identity and Violence: The Illusion of Destiny*, "The world is made much more incendiary by the advocacy and popularity of single-dimensional categorization of human beings, which combines haziness of vision with increased scope for the exploitation of that haze by the champions of violence."

In the context of these unceasing wars, there is a new round of war against women. Femicide and gendercide are on the rise. Every year, no less than two million women are drawn into the capitalist market of sex work. Human rights groups, UN-based agencies, other NGOs fact-finding missions, all document and speak to the growing violence against women: economic violence, political violence, cultural violence, ethnic and racial violence, religious violence, and ecocide. In other words, patriarchal-religious-imperialist war is embattled on the bodies of women.

During the last two decades, feminists have made a great contribution to our understanding of the gendered nature of war. We know that contemporary wars are not only class wars, but also they are genderized, racialized, and colonial projects. We know that nationalism, capitalism, and imperialism are patriarchal institutions which thrive on war.

I noted that we have made much progress in feminist understandings of war. We have created a credible body of knowledge that seriously questions the institution of war.

There is, however, a serious gap between our knowledge of wars and anti-war practice. In other words, the critical body of knowledge that we have created has not been translated into action against

the machinery of war. Feminist knowledge of war, which is distinct from patriarchal knowledge of war, has not yet informed public policy, international law, public opinion, and even peace movements.

War continues to devastate the lives of millions in small part because we have failed to make critical, anti-capitalist, anti-colonial feminism the ruling idea in any society. In a word, we need not only to learn about wars but, equally important, to make this learning central to our daily lives. Critical learning does not automatically trickle down to fragmented citizens.

It is in this context that I hope we can ponder on the following ideas as we are trying to envision a future direction for many more decades to come for the *Women and Environments* magazine:

I think that in recent decades less attention has been paid to the symbiotic relations between ecocide and industrial capitalism. The articulation of experience, cases, and policy debate has been in a way that as if we do not live in a socio-economic system called capitalism. It is as if poverty, militarism, and the spending of one trillion dollars on military expenses annually has nothing to do with capitalism; as if gender, race, history of occupation and colonialism has been delinked from capitalism. Before the rise of industrial capitalism, human beings did not have the ability to destroy the planet. Production and consumption are geared to capitalism's dynamics of profit making. Production is not meant to satisfy human needs. It is meant to make investment and reinvestment possible. As long as this system is in place no amount of women's participation in the economy can reverse the trend.

So much waste is produced in the

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world's megacities that no one can dispose them safely. We are now told that we should be grateful for NGOs and civil societies who employ tens of thousands of women, men and children who live off these waste economies of Cairo, Calcutta, and Mexico city. Mike Davis in his work on planet of slums calls them 'surplus humanity.' I implicate both capitalism and patriarchy in the evolving tragedy of ecocide. The capitalist economy is causing the pollution of air, water, soil, threatening the very climate that

sustains human existence and how this threatens especially women, their reproductive health, persistent economic vulnerability and extra care giving burdens.

To end, as you can see there is a need for a broad range of dialogues to take place across regions. What we need to ask ourselves is what kind of stories, analysis and practice do we need to consider to be able to sharpen the rough edges of our theoretical and methodological inquiry and to be able to connect with the world differently. ✂

## POEM by Lee Gould

### No Deals

I trapped another mouse  
in the plastic bird seed pail with the slit top.

Found it hobbling around the bottom,  
dragging the trap, its still-bright eyes looking up at me

with, perhaps, wonder. I smashed it  
with the ax. Its head collapsed like nothing:

not cotton, not paper, its back leg circled frantically,  
a little blood flowed into its rough coat.

It doesn't count when it's this easy,  
the way eating over the sink doesn't count.

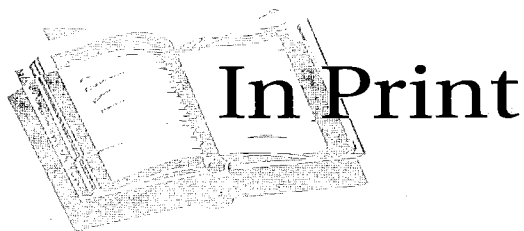
How much pain in a broken paw  
when the leg is only a couple hairs thick?

It's not him or her or me, nor is it about  
disease or even being over-run with them.

I know what's mine: intruders vs. property rights  
and the thing that turns me into a giant.

Lee Gould lives crankily in Stockport, New York where her uneasy relationship with the world spurs her poetry.





## In Print

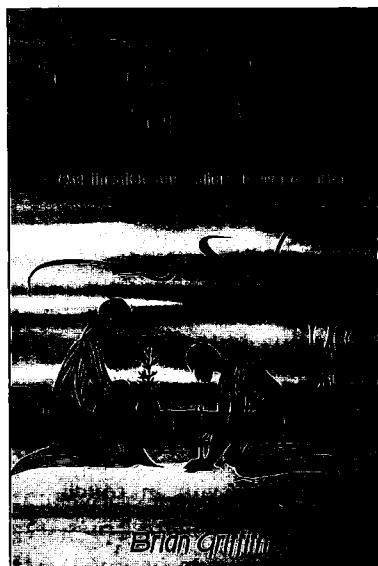
All books reviewed below are available or can be ordered at the Toronto Women's Bookstore, advertised in this issue.

### The Gardens of Their Dreams — Desertification and Culture in World History

Brian Griffith, 2001, Fernwood Publishing, Zed Books, Halifax, NS, Canada,

Pp 368, Price CAD \$ 29.95

Review by Reggie Modlich



A four times "aha," book! It answered three puzzles in my mind. How and why did societies where women's roles were more equal to men's disappear? What's the basis for the concept of nation? Why do people believe in god/gods the way they do? What role does the natural environment play in all of this? Maybe **The Gardens of Their Dreams** will also help other feminists in their search for answers.

In very clear and straightforward language, but sometimes overwhelming detail, Griffith shows the interrelationship between a society's relation to its natural environment, its religion, and its social structure. The author covers most of the globe. Only Australia and the Americas are not examined. Yet, there is no reason to believe they do not follow parallel patterns.

What happened to the societies where women's roles were equal to, if not higher than, those of men? Griffith shows that such societies existed in all areas he researched. They were the aboriginal human settlements that succeeded in establishing a sustainable way of life in most adversary and sensitive environments, in India, China, Europe, and pre-Saharan Africa. The communities were extremely vulnerable to, aware of, and therefore greatly

respectful of, nature. Co-operation, sharing, and mutual assistance was critical for survival. Women embodied the concept of the all-important fertility and therefore gained a high status. Then, as now, humans turned the unknown, un-understood and more powerful into the supernatural, divine or spiritual. At that time, animals, trees, and the elements tended to take on spiritual and divine dimensions.

If communities failed to survive in an environment, either because of over exploitation or climate changes — often caused by over exploitation, — they had to pack up and search for greener pastures, mostly already inhabited by others. In this process new values were needed such as fighting, control, power. Women and children became more of a hindrance than help in such situations. Griffith calls the religions which such aggressor peoples adopted "dominator religions." The greater the turmoil these migrations caused, the lower the status of women. Such migrations created chain reactions throughout the continents and throughout human history. Depending on the environment and the society, every migration evolved into a fascinating variable combining assimilation, subjugation, religion and economics. Amazing parallels are described in the social structures and religions of these different eras and lands.

What's the basis for nationhood, then? Reading **The Gardens of their Dreams** gives the sense that all of

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humanity is in a constant state of Diaspora and perpetual social flux. The traditional notion of nation with one identity, one history, one language, nationhood is at most a fleeting moment on a tiny speck of earth while generally a politically opportune rallying tool without basis in history. Griffith concludes by demolishing the ideas of fascism of the past century interestingly, without explicitly invalidating the concept of nation.

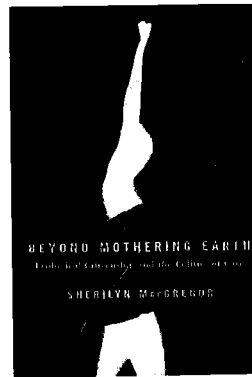
How about God/gods and religion? Griffith's historical descriptions and comparisons show clearly how humans create their God/gods and religions in their own image, reflecting their relations to each other, the natural environment, and their level of scientific knowledge. Yet again, Griffith lets history speak for itself, without stating this conclusion.

Griffith does end the **Gardens of Their Dreams** with a note of hope. He tells two stories, both relating to the natural environment. One story illustrates the resilience of the natural environment if left to its own evolutionary energies. The other story tells about a group of Kenyan village women re-greening the desert, plant by plant. The women just do it — without governmental, UN, or other expert "guidance." Maybe it is just as well that throughout the book Griffith lets his research data speak for themselves without drawing ideological conclusions about religion, feminism or nationalism. Readers can draw their own conclusions. I did.

## Beyond Mothering Earth — Ecological Citizenship and the Politics of Care

Sherilyn MacGregor  
 UBC Press, pp 286,  
 CAD 22.00

Reviewed by Reggie Modlich



**Beyond Mothering Earth** provides a feminist analysis of existing ecofeminist and environmentalist theories relating to caring in and for the earth; it also offers a positive direction for the future. The North shares far greater responsibility both for causing and potentially mitigating looming climate changes. Being a white, middle-class feminist from the North, concerned with the state of our environment, **Beyond**

**Mothering Earth** touches many deeply felt experiences and quandaries that have been gnawing at the back of my mind for years. Another major plus — MacGregor's book wrote her book in a style that non-academics can understand it.

Most significantly, MacGregor focuses on caring —

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from domestic chores to mothering. For most women, it's a huge, complex, and conflicting component of our lives. Theorists often overlook the complexity, magnitude, value, and, most of all, the legitimacy and necessity of caring work. Some ecofeminist theorists go as far as ascribing women's traditional care giving role to the maternalistic nature of women. This is a treacherous concept that plays into the most reactionary and fundamentalist interests, absolving men and, for that matter, the public sphere from sharing responsibility for care giving.

Environmentalists too frequently acquiesce to the increasingly loud neo-liberal choir assigning responsibility for protecting or "caring for" the environment to individuals and their lifestyles, i.e. women in their homes. While creating awareness and acting to protect the environment at the individual household level has value, I did feel **Beyond Mothering Earth** could have pointed more strongly to the limitations of saving the environment at the level of the private household. Complicity of governments at all levels with corporate interests is an important part of the environmental context in capitalist economies. Although not the book's focus, this factor could have been stressed more forcefully.

MacGregor presents her research by giving voice to actual women. In this way **Beyond Mothering Earth**, reverberates strongly in all of us women readers. The author confirms that limits and contradictions in the realities, identities, and experiences have come to co-exist in the lives of most women. While real in the life of the individual woman, MacGregor feels that "it is questionable whether 'lived experiences' will provide sufficient insight into macro-political problems or global ecological developments like climate change, (p130)." Theorists need to come to terms with the contradictions, relativity, and limitations of lived experiences and also transcend the bondage of age-old patriarchal dualistic thought to arrive at dynamic and valid theories.

It always puzzles me that there is not more rage — rage at the inequity, the lack of understanding, the attempts to sanctify in theory this oppression of women's multiple roles; at neo-liberals' and even environmentalists' to further burden, guilt-trip, and privatize care giving, and in this way, cloak the power imbalance between North and South, the super powerful and the powerless. Of course, this reality plays itself out far more drastically, brutally and mostly as a matter of survival for women of the South, a reality often misconstrued by ecofeminist theoreticians who tend to ignore women of the North, because their activism is an option rather than a desperate act of survival. It is the frustration of a mother sitting helplessly in the crowded hospital emergency room while her asthmatic child is gasping for air that makes her realize improving air quality takes more than obediently filling the "blue box." And only when she starts speaking up, she realizes and experiences governmental complicity with corporate interests, bureaucrats, and councilors rolling their eyes,

humiliating and stonewalling her. That is when an activist mother turns into a political analyst and realizes the devaluation of her role and status.

MacGregor proposes a "Project of Feminist Ecological Citizenship" as a most significant response to this sanctified, privatized, and growing burden on women and taking it in a public direction. She admits to the limits of current forms of citizenship, be it the intermittent vote, or the bureaucratized and institutional social service and welfare systems, but she points to the public domain as the only hope for human kind. MacGregor is careful not to define her concept, leaving it open, inviting new concepts for participation as well as service delivery. Only in this way will caring work be legitimized, valued, and shared regardless of gender. "...a cosmopolitan approach to ecological citizenship, with its emphasis on universal rights, responsibilities, and risks, is more in line with a feminist desire for a politicized and generalized ethics of care than eco-communitarian or individualist approaches to green virtue (p225-6)." The project implicitly reinforces the validity of the concept of "public interest" so downplayed and neglected today.

**Beyond Mothering Earth** addresses the fundamental and global aspects of women's care giving role. Climate change seriously threatens the individualized approach to care giving. I highly recommend it's reading to all feminist environmentalists, who are concerned about climate change.

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—DON WEITZ, social justice activist, freelance writer and producer at CKLN

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—NANCY RICHLER, author of *Your Mouth is Lovely*



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# WEI Resources

## Selected Print Resources on Women, Gender and Climate Change

Prabha Khosla

Aguilar, Lorena. (no date) Climate Change and Disaster Mitigation: Gender Makes the Difference. IUCN The World Conservation Union.  
<http://app.iucn.org/congress/women/Climate.pdf>

Canadian International Development Agency (CIDA). (no date) Gender Equality and Climate Change: Why consider Gender Equality when taking action on Climate Change?  
[http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUIimages/Climate%20change3/\\$file/Gender-2.pdf](http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUIimages/Climate%20change3/$file/Gender-2.pdf)

Climate Alliance of European Cities. (2005) Toolkit: "Climate for Change — Gender Equality and Climate Change Policy"  
The toolkit includes; data — facts — arguments about gender equality and climate change policy, tools for promoting women in executive positions, a gender checklist to get a first impression and a poster and a flyer. The toolkit is available as hard copy in German, English, or Italian. In Swedish and Finnish tools and checklist can be downloaded as pdf-file from the Website <http://www.climateforchange.net/> (without layout). You can order the toolkit for free at Climate Alliance, email: [europe\(at\)klimabuendnis.org](mailto:europe(at)klimabuendnis.org)

Denton, Fatma. (2004) 'Gender and Climate Change: Giving the "Latecomer" a Head Start.' IDS Bulletin. Vol. 35. No. 3.  
[http://www.siyanda.org/newadditions/2006-05-01-2275-Gender\\_and\\_Climate\\_Change\\_Giv.htm](http://www.siyanda.org/newadditions/2006-05-01-2275-Gender_and_Climate_Change_Giv.htm)

Denton, Fatma and Jyoti Parikh. (no date) Gender — a Forgotten Element.  
<http://www.cru.uea.ac.uk/tiempo/floor0/recent/issue47/t47a6.htm>

Duddly, Janice. (No date) Is Climate Change a Gender Issue?  
<http://www.awid.org/go.php?stid=862>

genanet / LIFE e.V. and WECF. (2006) Fighting Climate Change. Input from women to government: a study on climate change and gender.  
<http://www.wecf.org/>

Gurung, J. D., Mwanundu, S., Lubbock, A., Hartl, M. and Firmian, I. (2006) Gender and Desertification: Expanding Roles for Women to Restore Drylands. International Fund for Agricultural Development (IFAD)  
[http://www.ifad.org/pub/gender/desert/gender\\_desert.pdf](http://www.ifad.org/pub/gender/desert/gender_desert.pdf)

Hartmann, Betsy. (2006) 'Gender, Militarism and Climate Change.' ZNet Commentary, April 10, 2006. WRM Bulletin Issue 107 — June 2006  
<http://www.wrm.org.uy/index.html>

Hemmati, M. (2005) Gender and Climate Change in the North: Issues, Entry Points and Strategies for the Post-2012 Process. genanet — Focal Point Gender Justice and Sustainability.  
[http://www.genanet.de/fileadmin/downloads/themen/Themen\\_en/Gender\\_Post-Kyoto\\_en\\_abstract.pdf](http://www.genanet.de/fileadmin/downloads/themen/Themen_en/Gender_Post-Kyoto_en_abstract.pdf)

Lambrou, Y. and Piana, G. (2006) Gender: The Missing Component of the Response to Climate Change. Food and Agriculture Organisation of the United States (FAO).  
[http://www.fao.org/sd/dim\\_pe1/docs/pe1\\_051001d1\\_en.pdf](http://www.fao.org/sd/dim_pe1/docs/pe1_051001d1_en.pdf)

Lambrou, Yianna and Regina Laub. (2004) Gender Perspectives on the Conventions on Biodiversity, Climate Change and Desertification. Gender and Development Service, FAO Gender and Population Division.  
[http://www.fao.org/sd/dim\\_pe1/pe1\\_041002\\_en.htm](http://www.fao.org/sd/dim_pe1/pe1_041002_en.htm)

Masika, Rachel. (ed.) (2002) Gender, Development and Climate Change. Oxfam Focus on Gender, Oxfam, UK. To purchase go to:  
[http://publications.oxfam.org.uk/oxfam/display.asp?K=183487764646368&sf\\_01](http://publications.oxfam.org.uk/oxfam/display.asp?K=183487764646368&sf_01)

Röhr, Ulrike. (2006) Gender Relations in International Climate Change Negotiations.  
[http://www.genanet.de/fileadmin/downloads/themen/Themen\\_en/Gender\\_climate\\_policy\\_en\\_updated.pdf](http://www.genanet.de/fileadmin/downloads/themen/Themen_en/Gender_climate_policy_en_updated.pdf)

Röhr, Ulrike. (No date) Gender and Climate Change — A Forgotten Issue? Tiempo Climate Newswatch  
<http://www.tiempocyberclimate.org/newswatch/comment050711.htm>

Women's Major Group Discussion Paper for CSD — 14 May 2006 Engendering the Energy and Climate Change Agenda  
<http://www.wedo.org/library.aspx?ResourceID=89>

Women's group statement on gender and climate change presented at the UNFCCC in Montreal (Nov-Dec 2005) Global Warning: Women Matter!  
[http://www.genanet.de/fileadmin/downloads/themen/Gender\\_CC\\_COP11\\_statement\\_short\\_7dec.pdf](http://www.genanet.de/fileadmin/downloads/themen/Gender_CC_COP11_statement_short_7dec.pdf)

## Web Pages

Gender and Climate Change  
<http://www.gencc.interconnection.org/About.html>

Gender and Disaster Network  
[www.gdonline.org](http://www.gdonline.org)

Genanet  
<http://www.genanet.de/klimaschutz.html?&L=1>

Gender in UNFCCC  
<http://www.genanet.de/unfccc.html?&L=1>

## POEM by Kimberly Davis

### Fever

"Never forget you are my children"  
- Louise Gluck, *The Wild Iris*  
("Early Darkness")

There are words for this:  
Bacillus, the rod shaped bacteria,  
virus, phage from the Greek  
meaning one who devours.

At night colonies encrust the valleys  
and pearl the bays.

So you meant to be inhospitable?

There is no thought,  
only a natural response  
to a disturbance of the membranes-

obstruction of the marshes  
congestion of carbon in the air.

And so the temperature will rise . . .

Just for a time  
to dislodge  
the unwanted visitors

showing us

showing you?

what we are.

Never forget, you are my children.

I brought you here to be my eyes.  
Why can you not see this?

You wish us to imagine  
we are not your chosen ones.

I would choose you if I could  
but that way lies suicide-do you wish to  
destroy  
every living thing?

And so we must suffer.

You will always suffer;  
it is your way.

Yet, in return

In return you give us nothing.

I give you  
the hurricane's cold eye.

Kimberly Davis' poetry and fiction have appeared in *Nimrod International Journal*, *Literal Latte*, *The Iowa Review* and elsewhere. She teaches creative writing at the Cambridge Center in Cambridge, Massachusetts.

## AGRICULTURE, RURAL WOMEN, URBAN AGRICULTURE

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Joseph, Janelle; "Transgressing Boundaries and Crossing Borders — As Capoeiristas Brasilieras (Female Brazilian Practitioners of an Afro-Brazilian Martial Art)," research article; 68/9, Fall/Winter 2005/6, 31-33

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Jaeckel, Monika and Marieke van Geldermalsen; "Not the Chicken, Not the Egg, But the Nest! — Marginal Groups to Provide Social Network for New Dutch Neighbourhoods," article; 62/3, Spring/Summer 2004, 28

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Kapadia, Aziza and Catherine Robertson; "Local Women Confronting Fears to Improve Neighbourhood Safety in the UK," in the field article; 70/1, Spring/Summer 2006, 53-55

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# Announcements

## WUF 3, — A Women's Perspective

Reggie Modlich

Still no childcare! And this was World Urban Forum 3, (WUF 3), 2006, in Vancouver, Canada! May be it is a reflection of the current Canadian government's anti-child care policies. Only the World Urban Forum in 1996 in Istanbul provided childcare, and only because the German Mother Centres organized and ran it. WUF 3 certainly was not the gender-mainstreamed event envisaged by the Canadian Delegates' Caucus at the 2004 Barcelona WUF. There was the usual hierarchy of sessions, plenary, dialogue, special lectures, round-tables down to networking events — the lower in the hierarchy, the more competing concurrent sessions. As in the past, women oriented sessions were mostly concentrated at the networking level. Well, here is the challenge for WUF 4 to be held in 2008, in Nanjing, China.

Yet, women did make some gains at this year's Vancouver WUF 3. While many presentations still were oblivious to gender there was a noticeable effort towards more gender-balanced panels. This time two major roundtables focused on gender. The Women's Roundtable entitled "Empowering the Millennium Development Goals: Grassroots Women Meet the Challenge — Women's Lives, Women's Decisions," showcased the amazing efforts of women in providing housing, health, nutrition and many other projects. The Huairou Commission, a New York based coalition of women's activist and NGO's around the world had organized the session. Huairou also held daily women's caucuses — this time WUF provided them with a room with windows! The Roundtable on "Gendering Land Tools" focused on the crucial need for women to have access to land, property and security of tenure, if they and their dependents are to improve their quality of life. Anna Tibaijuka,



UN-HABITAT

Executive Director of UN-Habitat, chaired the session. The large number of speakers reflected the complexity of the issue's legal, economic and cultural dimensions, yet several success stories did inspire the audience.

A Dialogue Session on "Urban Safety & Security: Taking Responsibility" astounded the audience when the Police Chief of Maharashtra, India, told of his success in lowering crime in slums of Mumbai and Poona to levels well below that in middle class neighbourhoods. "During the floods, last year, we had no crime in Mumbai's slums," he added. Breaking the mistrust between police and slum dwellers was his biggest task. To that end, he established communication, and a process of mutual

accountability and partnerships between the two sides — no mean feat! "Women were given the greatest role; they were most responsible and most responsive," he recounted. Sadly, however, he concluded that when he wanted to mainstream this experience into common practice, the political powers that be, completely stonewalled him.

Women in Cities International together with the UN-Habitat Safer Cities Program organized a Networking Event were truly inspiring. Most Networking Events consisted mostly of "talking heads" with at best questions and comments at the end. This session, "Sustainable Community — Government Partnerships on Gendered Violence Prevention" was truly participatory from beginning to end. A number of interesting, yet brief speakers from South Africa, Uganda, Chile and Canada were skillfully interwoven in the process where every woman could identify herself, give input, and helped develop a comprehensive mural of positive and negative experiences and ideas. To boot, this workshop was fun. It takes so much more thought, preparation, and courage to run such a workshop. Congratulations, Women in Cities International!

Neither orchestrating nor attending such a mammoth five day international event for around 10,000 registrants from over 150 countries is a picnic, considering the politics and logistics. In addition, there were all the spin-off events. As at previous WUF's, a five day GrassRoots International Academy, lead up to WUF 3. Grass roots activist women exchanged experiences, evaluated strategies and empowered themselves to present and implement their issues more effectively. The Peace Forum took place at the same time as did a large number of cultural and entertainment events. The Vancouver Convention Centre located at the Waterfront was an exceptionally beautiful venue. Translink, the Greater Vancouver Transportation Authority provided all registrants with a free Transit Pass for the duration of the Forum.

A potentially most significant development for women was shared at a small, unscheduled meeting at WUF 3. While the need has long been felt, a dedicated and astute group of women leaders were calling for a "new gender architecture for the UN," a new, autonomous, high level, and well-resourced women's agency. So many strong UN resolutions in support of women's rights have been adopted, yet they collect dust and are ignored by the very governments who signed them — including Canada. Women, therefore, need an agency with implementing, research and policy-making powers. The agency would be accountable to a regionally diverse panel of women's advocates from South and North who would be part of its governing body. It would likely need a budget of approximately 1 Billion, 5% of the UN's total budget. The Agency's mandate would encompass all women's issues from the environments to human settlements, from macro-economics to technology.

While the need is clear and strong, so is the resistance to the proposal. Only three of the twelve UN Reform Panel members came to hear prominent Canadian Stephen Lewis, UN Secretary-General, Kofi Annan's special Envoy on HIV/AIDS in Africa, as he presented the proposal to them, in Geneva on July 2, 2006:

**"Every stitch of evidence we have, right across the entire spectrum of gender inequality suggests the urgent need for a multilateral agency. The great dreams of the international conferences in Vienna, Cairo and Beijing have never come to pass. It matters not the issue: whether it's levels of sexual violence, or HIV/AIDS, or maternal mortality, or armed conflict, or economic empowerment, or parliamentary representation, women are in terrible trouble. And things are getting no better."**

Lewis went to lengths that nothing less and nothing else would work. The influential daily, the Toronto Star is backing Lewis, "whatever the outcome of Lewis' efforts, the UN has a moral duty to push women's issues far higher up the agenda."

The challenge is timely as Kofi Annan, in February of 2006, formed a high-level panel to study the UN system-wide coherence in the areas of Development, Humanitarian Assistance and the Environment. Women across the world have successfully lobbied their governments to demand that this panel, of twelve men and only three women, recognize and adopt the demand for a UN Women's Agency. It is now up to the UN General Assembly to adopt the panel's recommendation. For more information go to [www.twca.ca](http://www.twca.ca), or [www.awid.org/go.php?pg=un\\_reform#fnl](http://www.awid.org/go.php?pg=un_reform#fnl), or [www.fafia-afai.org](http://www.fafia-afai.org).

WEI Magazine too benefited from the more women friendly WUF 3. We were able to share some space of the Huairou Commission booth to put up our display. It drew



many visitors, even though it was at the very end of a long corridor and lamented a tired

Reggie Modlich, "I never walked so much in my life." Special grants from WUF 3 Canada and IDRC allowed us to produce a specially extensive issue celebrating both UN Habitat's and WEI Magazine's 30th Anniversary. The issue's theme was "Women and Urban Sustainability." With the grants we were able to double the press run, take the issue to Vancouver and make it available free of charge to all interested conference participants. Approximately 2000 issue were distributed. Diana Lee-Smith's article "Women and UN-Habitat, a struggle of three decades," was abstracted in the June 2006, (Vol. 12, No. 2, p. 14) issue of "Habitat Debate," UN-Habitat's monthly publication. The recognition and warm reception of the magazine were a most gratifying, inspiring and crowning reward for 30 years of hard work of a women's collective.

**Reggie Modlich**, a retired urban planner, was a founding member of Women Plan Toronto and later, of Toronto Women's Call to Action as well as a board member of WEI Magazine for many years.

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## Gender and Work Database — Attention Researchers

The Canadian component of the Gender and Work Database has been completed and is now available for teaching and research use. For further information, go to: [www.genderwork.ca](http://www.genderwork.ca)



UNIVERSITY of TORONTO

### **M.A Program in Women and Gender Studies**

The Women and Gender Studies Institute at the University of Toronto is mounting a new twelve-month M.A. program in Women and Gender Studies starting in 2007-2008. The dynamic and diverse faculty of the Institute are committed to critical scholarship that examines women, gender and feminism as forged reciprocally with formations such as race, nation, diaspora, class and sexuality. The analytical foundation of this program lies in the critical investigation of historical and transnational processes of political economy, colonialism and postcolonialism.

Further information can be obtained from  
Women and Gender Studies Institute, University of Toronto  
40 Willcocks Street  
Toronto, Ontario M5S 1C6  
Tel. 416-978-3668 Fax 416-946-5561  
Email: [grad.womenstudies@utoronto.ca](mailto:grad.womenstudies@utoronto.ca) Website: [www.utoronto.ca/wgsi](http://www.utoronto.ca/wgsi)

### **Upcoming Events**

#### **Graduate Collaborative Program in Women's Studies Workshop**

12 noon-2 pm, Mar. 2, 2007, Feminist Publishing in the Academy — WGSi Lounge, New College

#### **Biopolitics and Technoscience Series: How are science and technology remaking life itself?**

This series begins with the premise that "biopolitics" — as formulated by Foucault and loosely defined as practices for the governing and production of life — is a productive starting point to theorize the multiple and conflicting ways in which science, technology and governance have transformed life itself in forms as varied as sex, face, genomes, biodiversity, national populations, and labour.

Living-being has been a longstanding preoccupation of feminist politics and scholarship and as a nexus of concern brings together questions of gender with colonialism, racialization, militarism, and circuits of capital accumulation.

In the spring, the series will host public lectures by five visiting scholars.

"Experimentality: Humanitarian Populations and Shifts in Biomedical Epistemology. Examples from AIDS and other Epidemics in Africa" — **Vinh-Kim Nguyen**, Feb 1

"Daddy does Cybernetics: Diary of a Mental Patient" — **Jackie Orr**, Feb 8

"African Bodies and Nuclear Things: Scenes from the Transnational Production of Uranium" — **Gabrielle Hecht**, Mar 15

Series Organisers: Michelle Murphy: [michelle.murphy@utoronto.ca](mailto:michelle.murphy@utoronto.ca) and Brian Beaton: [brian.beaton@utoronto.ca](mailto:brian.beaton@utoronto.ca)

# Calendar

## 2007 World Social Forum

The 2007 Forum brings the world to Africa. Activists, social movements, networks, coalitions and other progressive forces from Asia-Pacific, Latin America, the Caribbean, North America, Europe and all corners of the African continent converge in Nairobi, Kenya. The forum begins on the 20th of January and wraps up on the 25th of January 2007. It provides five days of cultural resistance and celebration, panels, workshops, symposia, processions, film nights and much more. For more information go to <http://wsf2007.org/>. For info on traveling to Kenya go to: [www.globalexchange.org/tours/804.html](http://www.globalexchange.org/tours/804.html)

## UN Commission on Sustainable Development (CSD)

The 15th session of the CSD will be held between April 30 and May 11, 2007, at UN Headquarters in New York. During this session the Commission will continue its focus on the following areas: Energy for Sustainable Development, Industrial Development, Air pollution/ Atmosphere, and Climate Change. For further information go to: [www.un.org/esa/sustdev/csd/policy.htm](http://www.un.org/esa/sustdev/csd/policy.htm)

## Women's Studies Conference University of Wisconsin, Madison, USA

31st annual Women's Studies Conference, will take place April 20-21, 2007 and focus on Intersectionalities in Women's Studies: Research, Teaching, and Activism. For further information go to: [www.uwsa.edu/acss/wsc/events/confer/annualconf.htm](http://www.uwsa.edu/acss/wsc/events/confer/annualconf.htm)

## Maternal Health and Well Being

Focus will be on physical, psychological, emotional, social, economic, sexual, political, mental, and spiritual issues; October 19-21, 2007. Abstracts are due March 1, 2007. The event is sponsored by ARM (Association for Research on Mothering), York University, Toronto, Canada. For further information; [aoreilly@yorku.ca](mailto:aoreilly@yorku.ca); [www.yorku.ca/crm](http://www.yorku.ca/crm)

## Women's Human Rights: Building a Peaceful World in an Era of Globalization — A Course

An International Human Rights Education Institute presented by the Centre for Women's Studies in Education at the Ontario Institute for Studies in Education, University of Toronto, Canada. Director: Alda Facio. With Peggy Antrobus, Angela Miles and Monica Muñoz-Vargas; May 22 to June 29, 2007

Part One: May 22-June 8, 2007: Women's Human Rights Education in the Age of the Market: Challenges and Visions

Part Two: June 11-29, 2007: Women's Human Rights Education: Instruments and Activism

For further information, go to:

[www.oise.utoronto.ca/cwse/humanrights\\_07.htm](http://www.oise.utoronto.ca/cwse/humanrights_07.htm)

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## 43rd International Planning Congress

The theme is Urban Dialogues, Co-productive ways to relate visioning and strategic urban projects. Antwerp, Belgium September 19-23, 2007. For further information go to: [www.isocarp.org](http://www.isocarp.org) or email [isocarp@isocarp.org](mailto:isocarp@isocarp.org)

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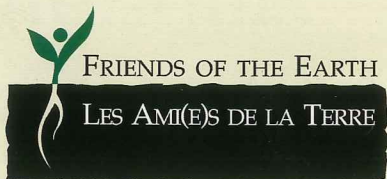
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