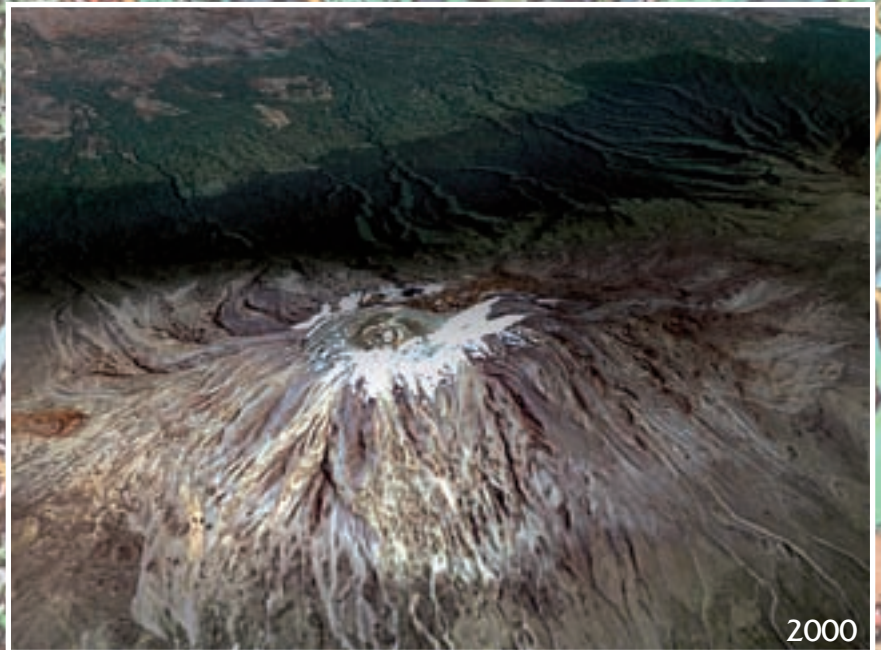
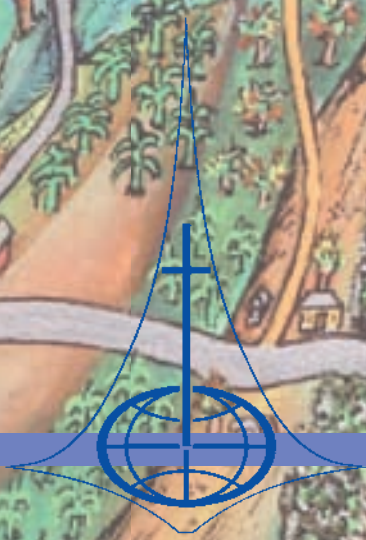


1993

Climate Change – Facing Our Vulnerability



2000



Contents

Foreword

Voices from the Regions

- 4.....Tanzanian Maasai Elder Recalls Ample Resources from Today's Threatened Forests
- 4.....Climate Change Challenges Bangladesh's Development Efforts
- 4.....Greenland: Call for Concerted Stewardship of the Planet and Life
- 5.....Brazil: "We All Live in the Same Tree"
- 5.....A Lost Childhood for Future Samoan Generations

LWF Survey

- 6.....Climate Change Evokes Old and New Questions of Faith
- 7.....Respondents to LWF Survey Emphasize Change in Human Attitude to Creation

Regional Perspectives

- 8.....Mount Kilimanjaro Villagers Say Water Sources, Animal Species Are Threatened
- 9.....Australian Church Reaches Out to Communities Affected by Prolonged Drought
- 10.....Environmental Refugees as Papua New Guinea Islands Disappear
- 10.....Czech Church Advocates Environmental Action Despite Political Stance
- 11.....Storm Damages Raised Climate Awareness in Sweden
- 12.....Unusual, Long Summer – A Sign of Climate Change in Southern Chile?
- 13.....ELCA Leads Community Action on Urgent Environmental Issues

Youth

- 14.....Evident Climatic Changes in Hungary Demand Urgent Action
- 14.....Nicaraguan Church Takes Small, Significant Steps in Combating Climate Change
- 15.....Cyclone-Prone Madagascar Adopts Measures to Cope with Erratic Weather Patterns
- 15.....From Talk to Action – Environmental Management in Germany's Hanover Church
- 15.....LWF Staff Identify Priority Areas for Action
- 16.....Indian Churches Promote "Greening of Faith"
- 16.....Canadian Lutherans Adopt a Stewardship of Creation Initiative
- 16.....Ethiopian Church Combines Disaster Relief with Resource Rehabilitation

Strategies

- 17.....How Can World Service Programs Become Part of the Solution?
- 17.....Cambodia's Rain-Dependent Farmers Construct New Water Gate
- 19.....Prize-Winning, Energy-Saving Stoves in Eritrea
- 19.....Climate Change Mitigation Amid Pervasive Poverty in Zimbabwe

Climate Change & Food Security

- 20.....An Ecumenical Perspective to Climate Change

**LWF Sunday 2008:
Climate Change – Vulnerability,
Lament and Promise I-IV**

The Lutheran World Federation

– A Communion of Churches
150, route de Ferney
P.O. Box 2100
CH-1211 Geneva 2,
Switzerland

Telephone +41/22-791 61 11
Fax +41/22-791 66 30
E-mail: info@lutheranworld.org
www.lutheranworld.org

Editor-in-Chief

Karin Achtelstetter
ka@lutheranworld.org

English Editor

Pauline Mumia
pmu@lutheranworld.org

German Editor

Dirk-Michael Gröttsch
dmg@lutheranworld.org

The editorial board also included

Musa Filibus, Rolita Machila, Peter Prove, Tore Samuelsson, Simone Sinn and Judith Straub.

Photo research

Helen Putzman
hpu@lutheranworld.org

Layout

Stéphane Gally
sga@lutheranworld.org

Circulation/Subscription

Colette Muanda
cmu@lutheranworld.org

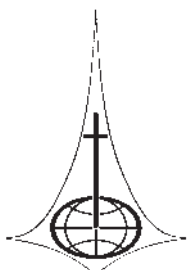
The Lutheran World Information (LWI) is the information service of the Lutheran World Federation (LWF).

Unless specifically noted, material presented does not represent positions or opinions of the LWF or of its various units. Where the dateline of an article contains the notation (LWI), the material may be freely reproduced with acknowledgement.

Cover picture:

The Landsat satellite captured these images of Mt Kilimanjaro on 17 February 1993 and 21 February 2000. © NASA/USGS

Cover & LWF Sunday background drawing of Mt Kilimanjaro: © kiliweb.com





Rev. Dr. Ishmael Noko © LWF/H. Putsman

The images of the disappearing snows of Mount Kilimanjaro give eloquent witness to the reality of climate change. So do the testimonies from all regions of the world collected in this special edition of *Lutheran World Information* on “Climate Change – Facing Our Vulnerability.”

The growing impacts of climate change confront us with our vulnerability as human beings whose lives depend on the health of God’s precious Creation. And the increasing evidence of human responsibility for climate change confronts us with our failure as stewards of this life-giving planet and its fragile environment. The warnings have been sounding for decades—in the disappearance of species, the advance of deserts, and the cries of Indigenous Peoples around the world. We cannot plead ignorance.

As a global communion of churches, we suffer with those affected in different parts of the world and are called to take concerted actions that

will be effective in mitigating the impacts of climate change—especially on the poorest and most vulnerable communities.

We are called to inspire change and to reconnect communities with cultural and traditional wisdom—particularly that of our indigenous sisters and brothers—regarding ways of relating to and living sustainably in the world that God has created. The nature and extent of the already visible and expected future consequences of climate change—including the worldwide food crisis—are too vast to be left only to the scientific and/or political arenas. They constitute an unprecedented ethical and spiritual challenge to all of humanity.

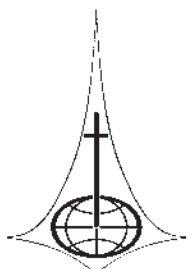
The threat posed by climate change certainly compels us, as churches, to revisit our biblical and theological understandings of Creation, and of who we are as part of Creation. But since all faith traditions recognize the sacredness of Creation, we are also challenged to

find ways of working with other faith communities to protect and preserve the earth and to assure a just and sustainable life for all.

At its Tenth Assembly in 2003, the Lutheran World Federation made the commitment to “work against climate change and the greenhouse effect, by acting to decrease the consumption of fossil fuel and use renewable energy resources.” Let us make this commitment a reality in our daily lives and ministries.

This publication is a call for reflection on our vulnerability, for lamentation on our failure of responsibility, and for renewing our promises of good stewardship—and acting upon them.

Rev. Dr. Ishmael Noko
General Secretary
The Lutheran World Federation



VOICES FROM THE REGIONS

Voices from the LWF regions speak of changing weather patterns, rising sea levels, melting ice, destruction of forests and coral reefs—all of which adversely affect the livelihoods of millions of people especially the poor, and push back development efforts. The stories in this section present a concerted call for urgent action to change or stop human activity and lifestyles that threaten the survival especially of the most vulnerable communities, and to care for the one, shared planet—Earth—and its Creator-given resources.

Tanzanian Maasai Elder Recalls Ample Resources from Today's Threatened Forests

My name is John Mollel, a Maasai elder residing in Olmotonyi village, some 20 km north of Arusha, Tanzania. At 83 years-old, I have seen a lot of changes to the weather and the environment. I remember in 1947 there were many rivers, tributaries and springs, abundant with water, most of which are now seasonal or have dried up completely.

From 1958 to 1970 rains were reliable, predictable and generally adequate for our crops and livestock. We got poles to construct our houses from nearby Olmotonyi forest and from the slopes of Mt Meru where I live.

But from 1972, the weather became abnormally warm and by



Mr John Mollel © ELCT

1978/79 crops had started drying up and some wild animals were dying. The rains became erratic and inad-

equately for cultivation. Our people gradually found themselves struggling to have enough food for survival.

To make ends meet, some started encroaching on the surrounding forests for firewood, lumbering, honey and charcoal burning, which led to forest fires and drying up of water sources.

If we had good rains, this would result in good crops and harvests, thus there would be no need to harvest indiscriminately the forest products.

Maasai elder John Mollel was interviewed by Mr Ramadhan Kupaza, Tanzanian consultant on environment and development.

Climate Change Challenges Bangladesh's Development Efforts

As the seventh most populous nation in the world, Bangladesh is also a major casualty of imminent climate change. Its 150 million people include impoverished rural masses largely dependent on agriculture, inhabiting low-lying river deltas, where they are at great risk of rising sea levels and disasters.

Their historic resilience in the face of recurrent disasters including cyclones and flooding from heavy seasonal rainfall, and grinding deprivation would prove powerless against accelerating climate change. According to the Bangladeshi Ministry of Environment and Forests, the 0.45 cm rise in sea levels by 2050 predicted by most experts would inundate 15 percent of Bangladesh's surface area, displacing an estimated 30 million



Mr Kamaluddin Akbar © RDRS

people. An estimated 1 degree Celsius rise in temperature along with increasing climatic irregularity would devastate farming systems already straining to feed the country's population.

Rangpur Dinajpur Rural Service (RDRS), an associate program of the

Lutheran World Federation (LWF) Department for World Service and one of Bangladesh's longest-serving and largest non-governmental organizations (NGOs) has long been active in disaster preparedness and response, intensifying its efforts to promote practical adaptation and adjustment on the ground. RDRS works with neglected and deprived riverine communities at risk to diversify livelihoods and farming, promote ground raising and tree plantation, organize preparedness and risk management at community level, and cooperate with other actors.

By Kamaluddin Akbar, RDRS executive director.

More about RDRS at:

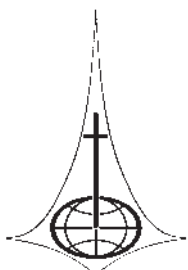
www.rdrsbangla.net

Greenland: Call for Concerted Stewardship of the Planet and Life

In recent years the world's weather has really been "playing us up"; practically every locality has been affected by climate

change in one way or another. Here in Greenland the inland ice is melting, and although we have had a cold harsh winter

this year, in 2007 spring fell in February, normally our coldest month, before the winter cold set in again.



More than anyone else, those of us who live in the Arctic region have known for thousands of years that nature follows its own path. A hunter's wife put it this way: "Up here in the northern most part of Greenland, where we live by hunting, we have noticed how climate changes are forcing us to change our lifestyle. When the ice gets really bad, our hunters have to turn to fishing. The very thick ice on which you could hunt for miles on dog sleds to catch the big animals is no more. The old culture of hunting on dog sleds—which didn't pollute!—is



Bishop Sofie Petersen
© LWF/D.-M. Grätzsch

Despite living in the city I too am experiencing these changes. It is alarming to observe that the ice and snow on the mountains, which never used to melt, have disappeared—in my time. We have been given one and the same planet. We must all, therefore, whatever our color or religion and without concern for our national borders and economic status, pray for and stand together for the stewardship of our planet and its life.

By Bishop Sofie Petersen, Diocese of Greenland, Evangelical Lutheran Church in Denmark.

at risk now. The diet, clothing and trading of our people is therefore also in danger."

Brazil: "We All Live in the Same Tree"

"There is no doubt that climate change has occurred in the past few years in our region of Xeruã river, deep inside the State of Amazonas. We have two seasons during the year—rainy and dry. We used to experience three months of drought from June to August. But nowadays, it sometimes rains during these months. In the past, we experienced some cold days during these months, today the cold days appear much earlier.

The heat from the sun has increased. In April this year, the river's water levels started decreasing, and now the first signs of beaches are evident. This has never happened before. Something also unexpected happened during the severe drought in 2005. Fire in early



Chief Saravi Maca Deni
© W. Sass

creatures which build their hives and nests respectively in the same trees. Wasps defend the *japiin's* eggs and chicks from toucans.

We all live in the same tree—the universe. Non-Indian people are the wasps for us, when they stand up for our rights. We are wasps for non-Indian people because we care for the forests ensuring that no one destroys it. We have to protect our forests."

Testimonial by Saravi Maca Deni, Indian chief of the Morada Nova community, Xeruã region, in Brazil's northwestern state of Amazonas.

Rev. Walter Sass, a pastor of the Evangelical Church of the Lutheran Confession in Brazil (IECLB) Amazon Synod interviewed Chief Saravi Deni.

September that was meant to clear land spread right into the virgin forest where it would normally stop.

The region is inhabited by the *japiin* birds and wasps, interdependent

A Lost Childhood for Future Samoan Generations

My name is Hotavia Gingerlei Porter, 25 years old, from American Samoa.

I still remember when "low tide" really meant "low tide." A little over a decade ago, I could walk on the reefs from village to village, to and from church, hopping alongside small puddles of water from the tides, without getting my feet wet. My cousins and I would go fishing in small craters on the reef where seasonal fish crowded, and simply scoop them up into our baskets or buckets, sometimes into our school bags. They were called *palaia* in Samoan. I emphasize the word **were** because coral bleaching today has destroyed 90 percent of American Samoan coral reefs.



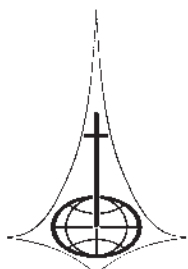
Ms Hotavia Gingerlei Porter
© LWF/C. Schubert

islands, it is life—what puts food on the table and pays the bills. With climate change, the income of people dependent on fishing has dropped dramatically. Those fortunate enough to afford food from the stores, have to pay dearly. I am convinced a lot of education is still needed, as the message is not getting across to most people. Climate change is not only about "islands sinking." It is about numerous effects including the violation of groundwater supplies, coastal erosion and agriculture, among others.

Ms Porter is an intern at the "Decade to Overcome Violence" (DOV) office of the Geneva-based World Council of Churches.

That is a part of my childhood that the next generation will never experience.

Fishing is an important part of the life of Pacific Islanders. For some



Attention needs to be given to biblical interpretation in relation to people's experiences with respect to climate change—not with a sense that God is punishing or abandoning God's people, but with a sense of God's abiding promise, which empowers people to act. For the LWF, this includes the development of resources for reframing theological understandings in light of what is occurring, and for teaching and preaching in local settings.

Climate Change Evokes Old and New Questions of Faith

Awareness about climate change provokes old yet new questions about the relationships between (a) human beings and the rest of creation; (b) God and nature; (c) divine and human responsibility; and (d) human communities globally. Much of what in the past were referred to as “acts of God” are now seen as caused at least partly by human activity—earthquakes and volcanic eruptions may be the only “natural” disasters for which this is not the case.

People in local communities are likely to draw upon a variety of spiritual resources—including local or indigenous wisdom and practices—for coping with or adapting to what is occurring under climate change. Biblical resources are likely to be prominent among these, but attention needs to be given to how we read and interpret the Bible in relation to what we are experiencing—not with a sense that God is punishing or abandoning us, but with a sense of God's abiding promise, which empowers us to act. However, it becomes difficult to continue to believe the promise that God made to Noah (Gen 8:21-22) if the land on which God's people have lived for generations is disappearing into the rising sea.

Indeed, urgent action is needed to put right what has gone wrong, including changes in individual practices and in policies of governments and businesses. But in doing so, people also need to go beyond the poles of either a fearful sense of apocalyptic doom that only waits for God's inevitable judgment on the one hand, and on the other, a moralistic sense of activism, driven by a sense of what we need to do in order to “save” the world. God has already saved the world, but the question remains: How



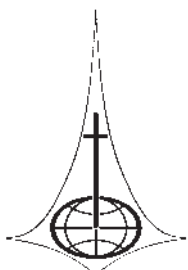
Aldin Seferovic drew “The Earth—The Way I See It” in 2004. Aged 13 at the time, he painted this during an art class at Hasan Kikic primary school, Sanski Most, Bosnia and Herzegovina, where LWF/DWS Balkans is working. © LWF/A. Seferovic

do we participate in the redemption of all creation to which Scripture testifies, and embody hope for the future rather than succumbing to despair?

These are among the theological matters that the LWF Department for Theology and Studies (DTS) will be pursuing with theologians, ethicists, biblical scholars and those engaged

with communities most vulnerable to climate change. The expectation is that resources for reframing theological understandings in light of what is occurring, and for teaching and preaching in local settings will be developed through this process.

By Karen Bloomquist, LWF/DTS director.



Respondents to LWF Survey Emphasize Change in Human Attitude to Creation

As a first stage to addressing some of the spiritual, religious and ethical dimensions of climate change, the Lutheran World Federation (LWF) Department for Theology and Studies (DTS) is carrying out a survey aimed at getting input from the LWF member churches in the different regions about their views and experiences with respect to this global concern.

The seven questions formulated targeted response at individual level, in communities, and the implications for one's faith and the future. The responses received are summarized below.

What is different today? In recent years, what general changes have you noticed in the climate in your area? How is this affecting the land, the plants, the air, the animals and the people? What is different from what your parents or grandparents experienced?

Response: What is especially different is that in the past people experienced more stable weather patterns, had enough to eat and lived healthier lives in relatively stable families, unlike today.

Who? Who or what especially is affected by these changes? Who especially bears the burden? Who or what is especially responsible for climate change?

Response: Able-bodied people have to migrate in search of livelihoods, putting pressure on families, which often break up. The burden is especially heavy on women, many of who become single parents having to make ends meet for their children. In addition, women and girl children have to walk long distances in search of daily bread for the families.

Why? How do people explain these changes? Why are they happening (the stories or folk wisdom as well as more scientific explanations)?

Response: Many feel it is a punishment from God due to human sin. God is angry. The earth is also angry because of the way in which human activity is affecting the rest of nature.

What has gone wrong? In the relationship between human beings and the rest of creation? In the relationship between people? In the relationship with God?

Response: Human beings have abused their relationship with the rest of creation. They have a hostile relationship with the environment as well as with God. People start by destroying the environment, then one another, and in the process, they completely forget God. The earth has intrinsic power, and is calling for changes in human attitude and behavior.

God? How do you feel God is related to or involved in this? What questions would you pose to God? How is your faith in God affected? What spiritual resources do you draw upon?

Response: God is involved in all the complex developments that are choking the life of humanity and the rest of creation. The truth is that light does not mix with darkness. Human activity has not been pleasing before God and therefore, God has abandoned humankind. God is angered by our immoral actions in relation to the whole created world.



(Left) Rev. Rolita Machila and Rev. Dr. Karen Bloomquist © LWF/H. Putsman

Some relevant LWF resources:

The High Cost of Food: Familiar Refrains in a New Crisis, issue no. 19 in the LWF/DTS "Thinking It Over" series (May 2008)

Study Book for the LWF Tenth Assembly, *For the Healing of the World* (Geneva: LWF 2002), see especially the Bible studies for Day 1, 6 and 10, and the chapter on "Healing Creation"

Guiding Principles for Sustainable Development (Geneva: LWF, 2002)

Environmental Guidelines (Geneva: LWF Department for World Service, 1997)

LWI No. 9/2006 *Waters of Life*.

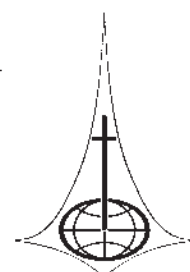
The future? How do you view the future, for your community, coming generations, and the earth as a whole? What do you fear or hope for? What spiritual resources do you draw upon?

Response: Overall changes in our global society are called for. Future generations are put at risk: will they be expected to make a living ex nihilo (out of nothing)? Some people feel a sense of hopelessness and despair—that nothing can be done—and instead wait for whatever will come out of this crisis.

Solutions? What needs to change in your society? What trade-offs are there? What is being done that can make a difference? What local solutions would you propose?

Response: Systems and policies, attitudes and lifestyles need to be critiqued and changed. Ecological debts need to be settled and more just policies must be put in place.

By Rolita Machila, a pastor of the Evangelical Lutheran Church in Zambia, currently an intern at LWF/DTS.



REGIONAL PERSPECTIVES

Whether it is through congregational initiatives or community-based response, the different LWF regions are engaged in raising awareness about climate change and its consequences, including networking at national and international levels to seek greater impact. The highlighted contributions on pp. 10, 15 and 16 represent some of the efforts by churches in the different parts of the world where the LWF is represented.

Mount Kilimanjaro Villagers Say Water Sources, Animal Species Are Threatened



An oil painting of Mt Kilimanjaro by Arusha-based (Tanzania) artist Benjamin Lulubuka. © ELCT

Masoka village lies four kilometers north of Tanzania’s northeastern town of Moshi in the Mount Kilimanjaro region. Many of the residents here, especially the elderly, speak of significant weather changes around the Kilimanjaro area over the past five decades.

Mzee (respectable title for elder) Joseph Mushi, 72, recalls there were no mosquitoes in his village 50 years ago, and is convinced that accelerated changes in weather patterns have somewhat contributed to the increase of malaria-carrying mosquitoes in the area. The snow on Africa’s tallest mountain has been melting over the years, he adds.

The malaria statistics are astonishing—Tanzania has a population of 38 million, all of whom live at the risk of contracting malaria for at least part of

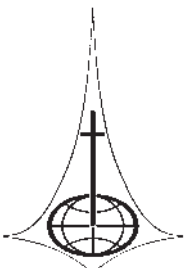
the year. Malaria is the leading cause of death in the East African country, and one Tanzanian, nearly always a child, dies of malaria every five minutes. (Source: *Ifakara Health Research and Development Center, Tanzania*)



Ramadhan Kupaza © ELCT

Masoka villagers also complain of increasing conflicts over the use of shared resources such as water, as the mountain springs have dried up. They attribute the drying banana plants and destruction of other crops to lack of water. The women are forced to walk long distances in search of clean drinking water.

Animal species adapted to the Kilimanjaro climate and vegetation types are equally threatened especially animals that cannot move to alternative habitats. While elephants that live around the mountain can move to nearby protected areas such as the Arusha National Park, such areas are too far for the indigenous Kilimanjaro mouse shrew, or the highland musk shrew restricted to the grassy



habitats of the mountain. (Source: *Small Animals of Mount Kilimanjaro*, The Field Museum, Tanzania) (www.fieldmuseum.org/tanzania)

Maasais who live across Tanzania and neighboring Kenya, call

the western summit of Kilimanjaro *Nga'je Nga'i*—the house of God—in honor of the Creator. Mzee Mushi and other Masoka residents are afraid the summit will no longer deserve its name if the threatening climate

patterns make it uninhabitable for its variety of indigenous plant and animal species.

By Ramadhan Kupaza, Tanzanian consultant on environment and development.

Australian Church Reaches Out to Communities Affected by Prolonged Drought

While some consider the prolonged drought in Australia to be part of a normal cycle, the government says “warming of the climate system is unequivocal.” (*Intergovernmental Panel on Climate Change, Climate Change in Australia – Technical Report 2007*) In addition to change already experienced, there are projections of increases in drought occurrence, fire-weather risk, and extreme weather conditions.

Data from the Australian Bureau of Statistics indicates that between 2001 and 2006, around 10 percent of Australia’s farming families either sold their farms or found work elsewhere, bringing to 30 percent the total land loss experienced by farmers in the past 20 years. Despite rainfall in some of the worst affected areas, this trend is likely to continue—some areas remain dry, and the low water storage in the major river system indicates it would be insufficient for irrigation over the next growing season, according to the Australian Bureau of Meteorology. For some farmers this will be the third year running.

Liturgical Resources

Climate change is a reality for the Lutheran Church of Australia (LCA), as individual members and congregations are affected by the bushfires and drought, which has led to a decline in rural populations and community services to outlying areas.

The LCA Web site provides links to liturgical resources for congregational use in times of drought. The church is also searching creative ways to provide pastoral care and presence in areas that no longer have the numbers to sustain a pastor. In Wudinna, South Australia, for example, the LCA and Uniting Church

in Australia congregations are jointly served by a Lutheran pastor.

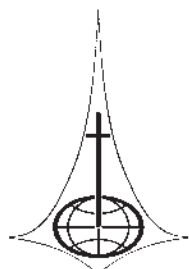
There are other small but significant ways in which individual LCA members and congregations have been quietly working toward sustainability for the past 30 to 40 years. In the late 1960s, two farmers in separate locations in the Cleve parish, South Australia were considered quite eccentric when they undertook major tree planting. Other Lutheran farmers and consultants have been community leaders in sustainable farming practices. The poetry of Rev. Aub Podlich has drawn many to con-

sider care for the environment as one way of praising its creator. The architect John Held, has been researching and promoting sustainable building designs for three decades. Biblical scholar Dr Norman Habel headed up the “Earth Bible” project and, alongside theological reflection on care for the earth, introduced liturgical celebration through the “Seasons of Creation” orders of service.

The LCA is a member of the National Council of Churches in Australia, climate change group, which is planning an ecumenical climate change summit, as well as a network



In Australia, Lutheran congregations are responding to climate change by establishing environmental care groups. © I. Christian



that would allow congregations to share their different activities.

High-school student Megan Payne helped establish the Earth Care Outreach (ECO) group at St Stephen's Lutheran Church in Adelaide. An energy audit of the church plant is in progress, articles on reducing one's environmental footprint have been regularly published, recycling bins are provided for cartridges and batteries, the congregation celebrates the "Seasons of Creation," and a couple of members are involved in the "Solar Churches" project.

At St Paul's Lutheran Church in Box Hill in Victoria, Peter Westhorpe

who has published a series of articles on climate change in the church newsletter remarked: "No one rushes up to say,



Ms Tanya Wittwer
© LCA

'I've read your article and now I'm using 30 percent less fuel.' And, after all, the secular press is full of information about global warming and the need for individual action. Nonetheless... like leaven in the dough, we few Christians surely have a calling to be thought leaders and activists on behalf of God's creation."

By Tanya Wittwer, a doctoral student in homiletics, currently holding the environment portfolio on the LCA's Commission on Social and Bioethical Questions.

For further information, please go to the LCA Web site at: www.lca.org.au

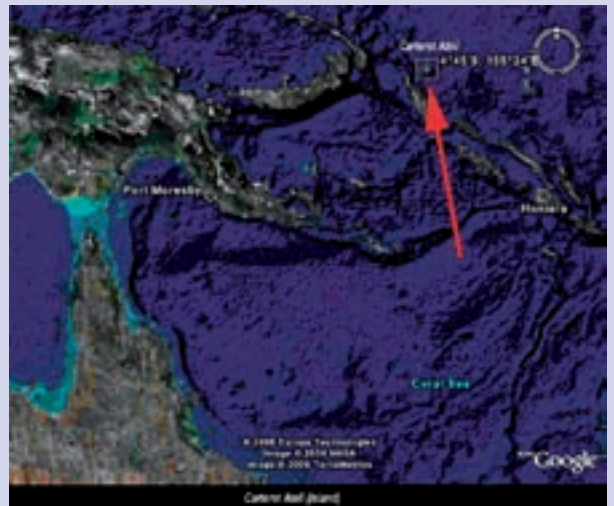
Environmental Refugees as Papua New Guinea Islands Disappear

The Carteret Islands off the coast of Papua New Guinea are disappearing as a result of climate change-related sea level rise, and are likely to be completely submerged by 2015. The estimated 1,900 people living on the six tiny horseshoe-shaped Carteret atolls are being moved by the authorities to Bougainville, a larger island 100 km (62 miles) away.

Two uninhabited Kiribati islands—Tebua Tarawa and Abanuea—disappeared underwater in 1999.

"When I was a small boy, this island was big. As I grew older, the island got smaller. Now the island has broken and it is now in two pieces. Now the sea is eating the island away. You can see the fallen coconut trunks. The sea is eating away the island very quickly." (Carteret Islands Inhabitant)

On 25 November 2003, the Papua New Guinean (PNG) government authorized the total evacuation of the islands—10 families at a time—in an exercise foreseen for completion in 2007, but access to funding caused numerous delays. In October 2007 the PNG government announced it would provide two million kina (USD 736,000) to begin the relocation to Bougainville. The organized evacuation and relocation is now expected to be finalized in 2008. (*Wikipedia*)



Also in Asia, researchers at India's Jadavpur University in Kolkata reported in 2006 the disappearance of the inhabited Lohachara Island in the Sundarbans where the Ganges and Brahmaputra rivers empty into the Bay of Bengal.

Czech Church Advocates Environmental Action Despite Political Stance

Environmental responsibility is a relatively recent focus in the Evangelical Church of Czech Brethren (ECCB), and might appear from an environmentalist's point of view rather weak. But it is taking shape and gradually becoming part of Christian lifestyle.

Around two years ago, the ECCB established a "Committee for Environmental Issues" with the aim to help church members accept environmental responsibility. The committee supports the increased use of thermal insulation in church buildings (but lacks capacity to implement) and the use of environmental friendly modes of transportation, among other initiatives.

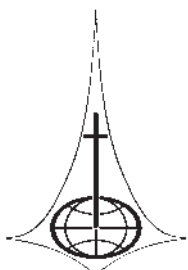
But the ECCB's advocacy also faces political challenges. Czech President Vaclav Klaus has publicly declared his opposi-

tion to arguments that human activity contributes to climatic changes. He says the best human behavior in the current situation is not to change anything. In his book titled, *Blue Planet in Green Shackles—What Is Endangered: Climate or Freedom?* (2008) President Klaus criticizes the alleged panic over global warming, arguing, environmentalism, instead, poses a threat to basic human freedoms.

In view of the political background in the country, the ECCB has chosen emphasis on common environmental responsibility.

The 110,000-member Czech church joined the Lutheran World Federation in 2004.

By Dr Jiří Nečas, chairperson, ECCB environmental committee.



Storm Damages Raised Climate Awareness in Sweden

In January 2005, a storm named “Gudrun” traversed southern Sweden, resulting in deaths, power failure, breakdown in telephone connections, and the uprooting of thousands of trees. While forest owners watched their livelihood decimated, destruction to the forests also affected negatively the water quality and the quantity of noxious insects.

It took 40 days to restore electricity and telephone lines to the 341,000 affected households. Although it had been unusually warm for the season, when the winter cold set in, some people had to be evacuated from their ice-cold homes. Many parish houses became meeting places where people could get a hot meal and possibility to take a shower, with Church of Sweden clergy and deacons providing crucial counselling to those affected.

Two years later a storm called ‘Per’ struck near the same area with similar effects but with less intensity.

Both disasters had helped to profile again in a Swedish context the effects of climate change as an ethical

and moral challenge, not least for the churches. In some parishes, environmental engagement goes back to the 1970s, when, for example, Church of Sweden youth worked against the use of disposable items.

Sustainability

The Swedish Lutheran church highlights sustainability as one of the three guiding principles in its recently-approved strategy for international cooperation. “To a large extent, the issues of climate and sustainability will permeate our collaboration with partners in the South,” said Mr Anders Ölund, policy adviser for environmental issues.

Ölund sees a direct link for example, between emergency aid in the drought-stricken parts of Africa in the 1970s and 1980s and today’s rural development. “While changes in climate have probably increased drought occurrence, we supported soil conservation, rainwater dams and tree planting for a better envi-

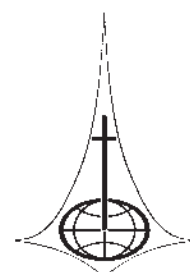
ronment and sustainable agriculture,” he said. Climate change was not on the agenda at the time, but measures taken to improve the environment, moderate the greenhouse effect and reduce vulnerability are all related to climate change, he stressed.

There have been other initiatives such as the distribution of so-called environment diplomas among Church of Sweden parishes, which started in the 1990s, as well as involvement in regional and international conferences dealing with issues related to climate change.

From 28 to 29 November 2008, Church of Sweden Archbishop Anders Wejryd will host an Interfaith Climate Summit in Uppsala, to which a group of internationally-recognized opinion makers from different faiths, cultures and continents have been invited. The summit seeks to influence government negotiations for a global agreement to respond to climate change after 2012, the target date for some nations to reduce climate-change inducing emissions under



Ms Ulrica Messing (with white scarf) then Minister for Communications and Regional Policy in Sweden, visits landowners in Ramsås after the Gudrun storm. © T. Oneborg/Scanpix



the first phase of the Kyoto Protocol. Participants will sign a manifesto to be presented to the December 2008 United Nations Framework Convention on Climate Change (UNFCCC) in Poland, and the 2009 UNFCCC meeting in Copenhagen, Denmark, and to other organizations including the Lutheran World Federation.

Archbishop Wejryd summed up the aim of the forthcoming summit: "The Summit will convey hope and belief in the future but also set minimum standards and expectations for global co-operation and solidarity.

There is still time to change the trend. But we have to do something soon."

A contribution by:



*Ms Sonja Gunnarsson
© J. Elfström/IKON*

Interfaith Climate Summit in Uppsala, Sweden, 28-29 November 2008

Agenda includes among others:

- Interfaith ceremony at Uppsala Cathedral
- Signing of the manifesto

For media accreditation information:

Thomas Ekelund, Press Secretary
Church of Sweden

Tel. +46(0)18-169693

or +46(0)730-233271

thomas.ekelund@svenskakyrkan.se

More information on the summit at:

www.svenskakyrkan.se

Unusual, Long Summer – A Sign of Climate Change in Southern Chile?

Our region on the banks of the Lanquihue Lake in southern Chile enjoys a moderate, moist climate with temperatures of up to 25 degrees. The last summer (from December 2007 to March 2008) was unusual. Temperatures often reached 28 degrees and the season lasted until May. Nor-

The considerably warmer temperatures this summer led to a better fruit harvest, but at the same time plants and fruits were infected with diseases that would normally be controlled at lower temperatures. It did not rain, thus the wheat was harvested without difficulty, but the

Also, the ice on the mountain peaks melted, increasing the rivers' water levels. But then the heat lowered the level so much at the end of the summer that even waterfalls like the Saltos (falls) de Petrohué were reduced to a mere trickle.

The upcoming summer at the end of 2008 is promising better prospects for agricultural production, but also problems in other areas. Will we soon be in a position to produce larger quantities of food and perhaps even plant new varieties? Will we have problems with continuing to grow traditional crops?

Still we face another challenge as we depend on energy generation both for industry and the general needs of the population. Initiatives currently oppose the building of hydroelectric power stations, yet we cannot ignore the fact that hydro is one of the readily available energy resources in this region. Hydro power would have to be boosted, in order to avoid using up non-renewable resources. The overall



*The 2008 summer heat considerably reduced the volume of the Petrohué Waterfalls, southern Chile.
© C. Neibirt*

mally, tourism activities concentrate on three to four weeks in February, but this year many people could spend more days at the beach and on holiday, and the tourism industry thus generated unexpected income.

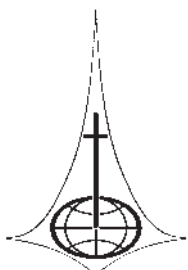
Does this summer herald an improvement in the weather or should it be linked with the change of climate that is sweeping over our planet?

water shortages resulted in poor quality and hay-making was reduced.

The dry period had other unexpected consequences. Due to forest fires during the summer months, the resultant huge clouds of smoke combined with morning ground mist created very poor visibility on the roads, often leading to a complete standstill of traffic.



*Rev. Carlos Neibirt
© G. Quesada*



costs would also have to be considered especially taking into account that wood is used for heating purposes.

The last few weeks have seen torrential rains in Central Chile, with rivers bursting their banks and bridges collapsing. Highways have had to be blocked off, and there was large-scale disruption.

ELCA Leads Community Action on Urgent Environmental Issues

In 1993, the Evangelical Lutheran Church in America (ELCA) Church-wide Assembly adopted a social statement, "Caring for Creation: Vision, Hope and Justice" that summons ELCA Lutherans to act, as individuals, as a worship community, and as a public church, to address the most urgent environmental issues facing our planet—including climate change.

The early recognition of this global urgent problem has led the church to advocate laws and policies to address global warming, and in particular its impact on people living in poverty. As the United States Senate drafted a global warming bill in 2007, the ELCA and others in the faith community successfully argued that a portion of the carbon auctions' proceeds under the bill be used for a fund to help least developed countries adapt to the impacts of global warming. Some of the auction revenues would also help people with low incomes in the United States deal with higher energy costs. Although the bill is not expected to pass both houses of Congress, there are prospects for national legislation on climate change in the next few years.

In recent years, many states have developed their own laws and policies to reduce greenhouse gas emissions and several ELCA state public policy offices have been actively engaged in these efforts. In Minnesota, the state office has helped to pass bills addressing global warming emissions, transportation and energy efficiency. In Maryland, the state director worked with a broad coalition of groups to urge legislature on a bill that would have substantially reduced greenhouse gas emissions in that state.

Increased public recognition of the urgent problem of global

The Lutheran Church in Chile (Iglesia Luterana en Chile – ILCH) has not yet initiated a program on the question of climate change, but we encourage the congregations in our region to realize our responsibility in caring for God's creation. We have launched a process of awareness-raising, appealing to individuals and the

whole community to take responsibility for our planet—it is the only one we have.

Co-writers Liliana and Rev. Carlos Neibirt live in Frutillar, a small town between the cities of Puerto Montt and Osorno in southern Chile. Neibirt is pastor of the ILCH Lake congregation in Frutillar.



A "Global Warming Day of Action" event at the Minnesota State Capitol in St Paul, Minnesota, USA. © Flickr/T. Webster

warming has led individual ELCA members and many of the different expressions of the church to examine their own practices, plans and policies in an effort to reduce their "footprint" on God's earth.

Many ELCA congregations are forming "green teams" to encourage the congregation and individual members to adopt greener practices, including efforts to reduce energy use in church buildings.



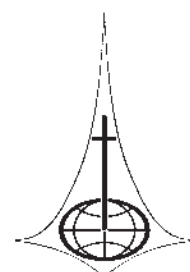
*Ms Mary Minette
© ELCA*

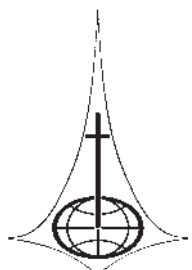
ELCA seminaries are also acting to reduce their carbon footprint through a "Green Seminary" initiative, spearheaded by the Lutheran School of Theology at Chicago (LSTC) and its "Web of Creation" resource center which provides resources for seminaries and congregations working to go "green."

A number of ELCA synods are working to become "green" synods, urging congregations to consider ways that they can better care for God's creation in areas such as energy use, recycling, and resource use. For example, the 150 churches of the ELCA's Southeast Iowa Synod recently joined a statewide interfaith effort to address global warming in their congregations and as individuals.

By Mary Minette, Director of Environmental Education and Advocacy, ELCA Washington Office, Church in Society unit, Washington, DC.

More information at:
www.elca.org/advocacy





Young people in some of the LWF member churches share their opinions about the impact of climate change in their own regions and churches. They seek active contribution in initiatives addressing this subject.

Evident Climatic Changes in Hungary Demand Urgent Action

My name is Marietta Pál. I am 24 years-old and I am studying at the Budapest Business School. I live in Albertirsa, a small city 50 km from Budapest.

Hungary, a low-lying country located in the Carpathian Basin, has experienced dramatic changes over the years, some of which are not because of climate changes, but as a result of human activity. We see changes even on our small family farm in Albertirsa. Like in the rest of Europe, the spring comes earlier, the summers are becoming dryer, and the winters are milder each year.

As a result of increased human activity in the landscape around the Carpathian basin over the years, the region's flora and fauna is changing. Could the basin be turning into a desert? We **can** feel the effect of global warming.

I recently watched the British Broadcasting Corporation documentary *Earth*, about the lives of three wild animals, which makes reference to drying rain forests amid changing weather patterns. It is a wonderful but shocking film, with a strong message: we neither realize what we possess nor appreciate and accept nature as it is; we have heard about certain facts, but we cannot see through them. Today we might not feel



Ms Marietta Pál
© Private

the effect of our activities as it may take some time, but what if it is too late?

The Evangelical Lutheran Church in Hungary is addressing environmental degradation and climate change in summer camps and other programs throughout the year. At national level, there are several ongoing governmental strategies and programs aimed at the reduction of specific energy consumption.

There must be a reason for the changed seasons, natural disasters and so on. Could the catastrophes we see be signs that we are using up our remaining resources?

We must take the necessary action right away, because we can do something. Small steps can produce big results.

Marietta Pál is also a volunteer youth worker at Albertirsa parish, Evangelical Lutheran Church in Hungary.

Nicaraguan Church Takes Small, Significant Steps in Combating Climate Change

I am a young person who has found a unique place in the Nicaraguan Lutheran Church of Faith and Hope. I can live and share my faith in community. Most of the activities in our church are about HIV and AIDS prevention, as that is one of the greatest problems for young people in our country. We were the first church in Nicaragua to take up the topic of HIV and AIDS. Yet we are also concerned with other topics, e.g. gender issues, violence, self-confidence, human rights etc.

In the last few years climate change has becoming increasingly important subject in Nicaragua. We have already felt the impact of climate change in the country through the El Niño phenomenon, which brings drought and crop loss particularly in the northern regions. The church cannot ignore these issues. Instead,

it must make it clear to people about our contribution to climate change in various ways through irresponsible behavior. Our church's work focuses on three important issues: awareness-raising and behavior change; practical action such as replenishing the tree population in our forests; and

networking with civil society groups involved in advocacy work.

From the start our church youth group was keen to put youth-related topics on the agenda. For five years now, our church has organized a camping event which brings together young people from many congregations. One of the topics discussed at the camp this year was climate change. A whole day was devoted to the issues of global warming and climate change, so that young people from the northern and southern part of the country could meaningfully engage in the topic. The goal was to raise awareness about our collective contribution to combating climate change, even in small ways.

The author, Hellen Rios (21), studies psychology and is a member of a youth group of the Nicaraguan Lutheran Church of Faith and Hope.



Ms Hellen Rios
© Private

Cyclone-Prone Madagascar Adopts Measures to Cope with Erratic Weather Patterns

Climate change is one of the greatest challenges today, attributed mainly to human carelessness such as deforestation, and harmful gas emissions from factories and cars, among others.

Madagascar, Africa's biggest island off the south east, normally experiences tropical cyclones resulting in torrential rains and heavy flooding, which affect thousands of people nearly each year.

The country has two major seasons: the dry and wet season, which

in the past fitted well with the agricultural cycles. But the erratic weather patterns are no longer favorable for

Madagascar's farmers, subsequently affecting the agricultural-dependent economy.

The government's response includes an appeal to people to plant more trees. It has also set some strict regulations aimed at curbing carbon dioxide (CO₂) emissions from cars.

By Thomas Ramilijaona, a member of the Malagasy Lutheran Church in Madagascar, where he also teaches Sunday school. Ramilijaona, 21, is currently studying English at a college in the capital, Antananarivo.



Mr Thomas Ramilijaona
© Private

From Talk to Action – Environmental Management in Germany's Hanover Church

The Evangelical Lutheran Church of Hanover is calling on its congregations and institutions to reduce their carbon dioxide (CO₂) emissions from heating and energy by 25 percent between 2005 and 2015 (by saving energy, increasing energy efficiency and using renewable energy).

The "Green Cock" (the logo shows a cock crowing, but also indicates "green tap") is an environmental management system developed last year especially for congregations. Through its Environmental Protection Unit, the Hanover church is currently advising 45 congregations on how to initiate the environmental scheme.

Interested congregation members form environmental teams to carry out environmental assessments. The focus is on electrical energy, heating, water, buildings, material procurement and waste disposal.

The review process creates a basis for the congregation's environmental program. It includes the goals, operations

and workflows necessary for a continuous improvement of environmental protection, and how to put the program into practice.

After implementing the scheme, every congregation can apply for certification under the European Union (EU) Eco-Management and Audit Scheme (EMAS), a voluntary EU instrument, which acknowledges organizations that improve their environmental performance on a continuous basis. It is based on a 2001 regulation.

The Evangelical Lutheran Church of Hannover has approximately 3 million members and was one of the founding members of the Lutheran World Federation in 1947 in Lund, Sweden.

The author, Mr Michael Bruns-Kempf, is responsible for the Environmental Protection Unit within the building services of the Hanover church.

LWF Staff Identify Priority Areas for Action

When the then newly discovered destructive power of nuclear energy became apparent, the famous US German-born physicist Albert Einstein (1879–1955) said, "The release of atomic energy has not created a new problem. It has merely made more urgent the necessity of solving an existing one."

The argument regarding climate change today is similar. It is indisputable that the adverse effects of climate being experienced in many parts of the world are to a great extent human-made. But the problem is as old as humanity: How do we use the resources in God's good creation? Are we wasting them while harming nature and our fellow human beings?

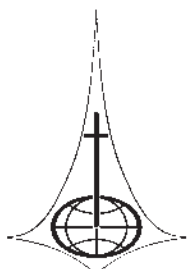
For about a year now, the secretariat of the Lutheran World Federation (LWF) has been dealing with these questions in a

more focused way under the topic "Climate Change." During a session at the October/November 2007 LWF Staff Week of Meetings, secretariat and field staff representatives identified three priority focus areas—dealing with theological questions; advocacy for a better global framework; and how the LWF secretariat can promote more sustainable consumption patterns.

Although a clear way forward has not been decided, proposals include starting a professional environmental management system commensurate with the secretariat's size, and coordinating with similar initiatives by other organizations based at the Ecumenical Center in Geneva, Switzerland.

By Rev. Roger Schmidt, Secretary for LWF Youth, LWF Department for Mission and Development.

More LWI News at
www.lutheranworld.org/News/Welcome.EN.html



Indian Churches Promote “Greening of Faith”

In recent years, India has been experiencing droughts and floods, with projections that these will increase, in a country mainly dependent on agriculture and farming for its 1.1 billion people, millions of whom live in extreme poverty. A case that stands out was the high suicidal rates among Indian farmers experiencing repeated droughts between 2006 and 2007.

The United Evangelical Lutheran Church in India (UELCI) continues to encourage its member churches to be proactive participants in the cause to save the planet. Through the ecumenical National Council of Churches in India, the UELCI is part of a broader call to all its member churches to initiate so-called “green” parish programs, plastic-free church

campuses and biological farming. The challenge however, is how to foster greater collaboration and unity at congregation level. The UELCI church council is urging its members to promote an effective “greening of faith” at congregational level, and to take steps to encourage and support sustainable farming.

The UELCI brings together 11 churches, 10 of which belong to the Lutheran World Federation. They have a combined total of nearly 2 million Lutherans.

A contribution by Mr Timothy Melvyn, UELCI information and communication officer, and the LWF area desk for Asia at the Department for Mission and Development.

Canadian Lutherans Adopt a Stewardship of Creation Initiative

As a church *In Mission for Others*, the Evangelical Lutheran Church in Canada (ELCIC) recognizes that the “others” to care for must include all of God’s creation. At the 2007 National Convention, the ELCIC affirmed its commitment to this call by adopting the Stewardship of Creation Initiative, which brings together stewardship and environmental issues.

“Many of us in North America are keenly aware that we use many, many more resources than the average human being living on this planet,” says ELCIC National Bishop Susan C. Johnson. “Taking immediate steps to reduce our individual environmental footprint is a matter of fairness, stewardship and justice. Some of our consumption is an attempt to distract ourselves from deeper spiritual hungers. Choosing a simpler

lifestyle will not only be good for our planet, but good for our souls.”

Congregations, individuals as well as national and synodical offices are being encouraged to assess their impact on the environment and their carbon footprints. A *Greening Congregation Accreditation Program* has been established to encourage congregations to live out the ELCIC’s calling to be stewards of creation and recognize congregations that show leadership in this area.

By Ms Trina Gallop, ELCIC communications manager.

Further information on the ELCIC Stewardship of Creation Initiative is available online at: www.elcic.ca

Ethiopian Church Combines Disaster Relief with Resource Rehabilitation

In Ethiopia, where more than 80 percent of the population depends on subsistence agriculture, the household sector accounts for about 93 percent of the biomass fuel consumption, with ample signs of fuel wood shortages in both urban and rural areas.

Population growth (2.2 percent) is a major challenge for the country’s 77 million people, many of whom live in poverty and vulnerability to climate changes. The poor often destroy their own environment for survival, and are thus unable to look beyond immediate needs.

Intervention by the Ethiopian Evangelical Church Mekane Yesus (EECMY) in collaboration with the Lutheran World Federation and other partners, has mainly focused on slowing down land degradation and desertification. Through its Development and Social Service Commission, the EECMY has over the years addressed food insecurity in a sustainable way, combining disaster relief input with the rehabilitation of affected populations and natural resources.

Afforestation integrates the establishment of tree nurseries and seedlings, and planting environmental friendly indigenous

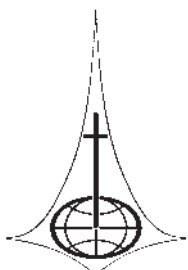
tree species alongside fast growing species for construction, fuel wood and commercial use, such as the eucalyptus to address the people’s immediate needs.

The church’s Appropriate Technology Program, started in 1986, encourages communities to use biogas, solar heaters, improved energy-saving stoves and mud bricks (for house construction) among other basic technologies, which have indirect positive impact on forest resources.

Through its micro hydro power program, the EECMY has installed around 40 turbines and mini hydropower mills to generate electricity, and is broadening the partnership base to include the private sector.

For the Ethiopian church, there is no doubt human activity has significantly contributed to changing climate patterns, thus the need to mainstream this focus in all of its rural development projects.

By Mr Deed Jaldessa, coordinator, EECMY Development and Social Service Commission, Addis Ababa, Ethiopia.



While climate change adaptation, mitigation and disaster preparedness have been top agenda items at many conferences, roundtables and consultations of the LWF Department for World Service (DWS), adaptation for the most vulnerable people and their increased participatory contribution in disaster preparedness remain a major challenge. An overview is provided on DWS focus on sustainability and environmental issues in its programs over several decades. Some of its community-based strategies are also presented.

How Can World Service Programs Become Part of the Solution?

The consequences and impact of climate change are not an entirely new focus area for the Lutheran World Federation (LWF) Department for World Service (DWS) and its stakeholder communities, working together to secure sustainable livelihoods and care for the environment. For decades, many if not all DWS programs have integrated components to address sustainability and environmental issues as part of the ecumenical action for justice, peace and integrity of creation.

While climate change adaptation, mitigation and disaster preparedness have been top agenda items at many LWF/DWS conferences and consultations, adaptation for the most vulnerable people and their increased participatory contribution in disaster preparedness remain a major challenge. The questions must be critically asked, whether DWS programs and the way they operate could be part of the problem through, for example, greenhouse gas emissions; and how some of their activities could contribute to climate change

mitigation, thus becoming part of the solution.

Re-labeling?

As climate change gains prominence on the international agenda, there is temptation in development cooperation and emergency aid, to re-label or re-package some of DWS' ongoing environmental projects as climate change projects. This may be justified as there is indeed positive contribution to the mitigation and adaptation aspects. Still, it would not be enough to simply continue what is being done without reconsidering more

radically how World Service work would integrate climate change at strategic planning phase. Engaging other actors in a mutual learning processes would be crucial in trying to understand what climate change really means for vulnerable societies and hence for DWS intervention.

However, it is poignantly clear that climate change is not merely a "timely" development policy topic. It is a major international cooperation challenge for both disaster relief and development aid. The problem must be addressed in both word and deed not only by DWS but also by the entire LWF and its member churches.

DWS is LWF's humanitarian and development agency with field programs in 36 countries in Africa, Asia, Latin and Central America and Europe. Its work with marginalized and disadvantaged communities involves cooperation within global networks that include ecumenical, governmental and non-governmental partners.

By Eberhard Hitzler, director, LWF Department for World Service.



*Rev. Eberhard Hitzler
© LWF/H. Putsman*

Cambodia's Rain-Dependent Farmers Construct New Water Gate

Irregular and decreasing rainfall each year creates major challenges for Cambodia's rain-dependent farmers. Residents of drought-prone Kraingskea Thbong village in the central province of Kampong Chhnang decided to improve their capacity to cope with the situation. After consultations with their development and disaster committees and the village head, they requested the Lutheran World Federation (LWF) Department for World Service (DWS) country program to help them construct a new water gate

"Drought occurs [here] almost every year. The farmers depend solely

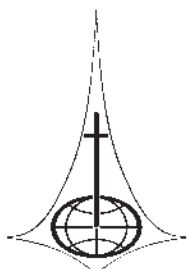
on rain for their rice plantations," said village development committee leader Hem Sam Oeun. The farmers never have enough water for their rice paddies as there is no irrigation system, he stressed.

Located two kilometers from the village, down the mountainside, the water gate is being constructed on the broken end of the dam built in the 1970s, but destroyed by illegal fishermen after the Khmer Rouge period. The gate—16 meters long, 5m high and 4m wide—will catch water that flows from the upper stream and mountains and deviate it through a

small hand-dug canal to irrigate the farmers' rice paddies.

"This first water gate is a great achievement for [us]. We are no longer afraid that our rice will die due to lack of water. We are very delighted and grateful to those who help our village," said village chief Phay Lida. "The purpose of building this water gate is to improve the livelihoods of the poor people in the village," he added.

Construction which started in late February this year is nearly complete. Seventy-six families helped construct the gate, which, upon completion will directly benefit 230





A chain of community bands at work, as Kraingskea Thbong villagers carry baskets of stones to fill in the water gate base. © LWF/DWS Cambodia/L. Ratna

families in Kraingskea Thbong and 800 families indirectly in the neighboring villages.

The total cost of the project was 20,617,200 riels (USD 5,150) out of which the community contributed USD 2,800, some USD 1,870 came

from the disaster preparedness program of the European Commission's Humanitarian Aid department (DIPECHO) while the LWF gave USD 480. The villagers also provided labor, most of the building materials and construction tools.

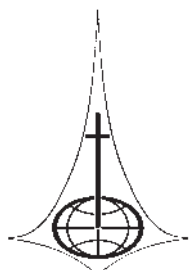
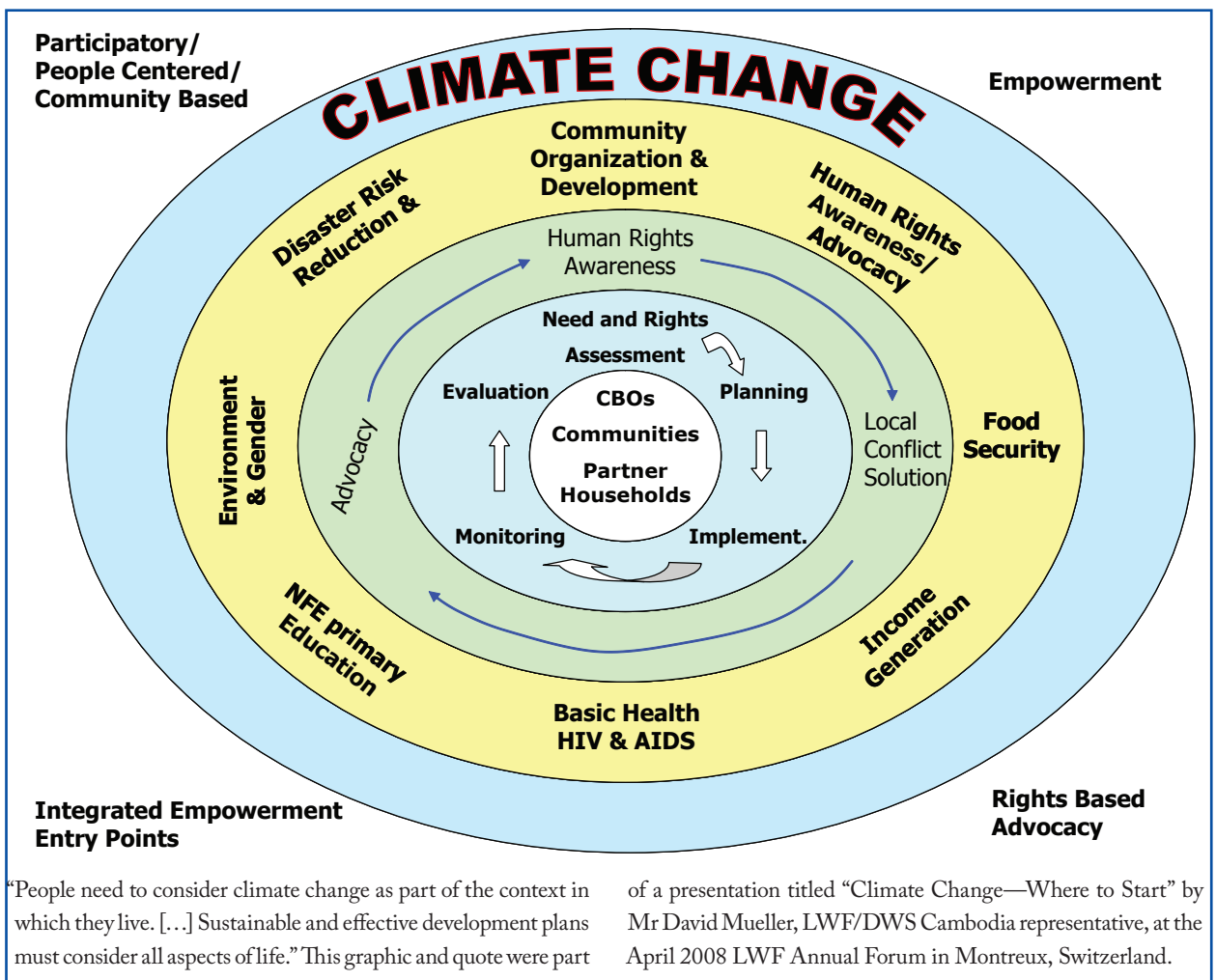
Oeun said the disaster-prone village is likely to experience more droughts because of the increasing changes in weather patterns in Cambodia. "That's why we agreed to build this water gate and hope to reduce future disaster risks."

Asked why drought is recurrent in his village, he replied, "I don't know much about this. It may result from deforestation."

By Leak Ratna, communications coordinator, LWF/DWS Cambodia.



Mr Leak Ratna
© LWF/DWS Cambodia



Prize-Winning, Energy-Saving Stoves in Eritrea

With a population of nearly 5 million people mainly dependent on agriculture, and an annual per capita income of USD 190, Eritrea is one of the world's poorest countries.

Wood is the main source of fuel for cooking and heating, but also the most environmentally detrimental energy source. Electricity, kerosene and cooking gas are either unavailable or unaffordable.

Since 1985, the Lutheran World Federation (LWF) Department for World Service (DWS) country program in Eritrea has been implementing various projects that have significantly improved the livelihoods of thousands of people there.

Over the past few years, DWS Eritrea introduced more than 800 improved energy saving stoves among the rural and semi-urban poor over. The stove users say it is efficient and has positive impact for the community and environment because it has reduced:

- Workload and burden of firewood collection on women (making more time available for women to invest in other productive and income-generating ventures) by at least two hours per day.

- Fuel wood consumption by 50 percent due to its increased efficiency. As a result there has been a substantial reduction in tree cutting.
- Emissions of greenhouse gases by 0.6 tons of CO₂ per household per year, and

The contribution of this fuel-efficient and locally-designed stove has gained international recognition and was one of the 2003 winners of the London (United Kingdom)-based *Asbden Awards for Sustainable Energy*.

To ensure sustainability, help reduce costs and provide income-generating opportunities, local artisans are



The energy-saving stove is designed to allow free flow of air through a cylindrical fire-holder, whose sides are built with curved ceramic hollow bricks insulated with ash or sand to minimize heat loss. The valve door and chimney minimize smoke emission into the kitchen. © LWF/DWS Eritrea/A. Fisseha

- Addressed a critical health issue by reducing the occurrence of respiratory diseases due to smoke from other types of cooking stoves.

trained to construct their own stoves. The total cost per unit is USD 25, of which the community contributes USD 8 while DWS Eritrea gives USD 17. Each stove has a life span of at least 10 years.

The project represents only a part of DWS activities in Eritrea, which include addressing carbon emission reductions through other interventions such as solar energy, agro-forestry and re-afforestation.

A contribution by LWF/DWS Eritrea representative Jan Schutte, and Ms Alemtsehay Fisseha, emergency and public relations officer.



Ms Alemtsehay Fisseha
© LWF/DWS Eritrea



Mr Jan Schutte
© LWF/DWS Eritrea

Climate Change Mitigation Amid Pervasive Poverty in Zimbabwe

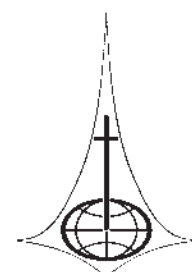
Lutheran Development Service (LDS), the associate program of the LWF Department for World Service in Zimbabwe, operates in a country currently experiencing an extremely difficult political and economic situation, in which poverty is aggravated by declining food security and health delivery.

Addressing climate change is also about dealing with unpredictable weather patterns; below or above normal rainfall leading to flooding; increased droughts and longer fire seasons;

underground water shortages; and increased epidemics among human beings and livestock.

LDS mitigation initiatives include energy savings (household: energy saving stoves); conservation farming (to reduce dependence on rain-fed crops); crop shifting (from long to short-season maize, sorghum, millet); and disaster preparedness.

A contribution by Ms Sibongile Baker, director, LDS Zimbabwe.



CLIMATE CHANGE & FOOD SECURITY

Churches addressing climate change have especially highlighted the urgent need to shift toward a new paradigm where the operative principles are ethics, justice, equity, solidarity, human development and environmental conservation. Effective response to this global crisis calls for a holistic approach.

An Ecumenical Perspective to Climate Change

A few years ago climate change was a topic confined to a few circles in the scientific community, but its audience today has broadened to include the media and general public, especially after the release of the Intergovernmental Panel on Climate Change (IPCC) 2007 Report.

While it is encouraging that more people are becoming aware of the consequences of climate change, discussion on this complex issue often may focus for instance on the different theories regarding global warming but ignore the fact that millions of people are already suffering and dying because of climate change. As a representative from the Pacific region put it in a World Council of Churches (WCC) meeting on climate change mid-May, “For us, climate change is a matter of life and death.”

Global Food Crisis

The topic’s urgency and seriousness begs the question: How should we address issues that are linked to climate change such as global warming, agrofuels, the global food crisis, and rising sea levels among others?

While we acknowledge from an ecumenical perspective that climate change has environmental, economic, political, social and cultural dimensions, we also need to stress that climate change is a matter of justice and equity. This means, for instance that when addressing mitigation and adaptation policies, we especially focus on the most vulnerable communities.

Climate change is a global issue and will affect all people, but the poorest countries and most vulnerable communities suffer the most damaging setbacks, despite their minimal



During the April 2008 food riots in Haiti: A street vendor walks past a damaged gas station in the capital Port-au-Prince. © Reuters/ E. Munoz

contribution to the problem. As the 2007/2008 United Nations Development Programme Human Development Report put it, “in today’s world, it is the poor who are bearing the brunt of climate change.”

Churches addressing climate change have especially highlighted the urgent need to shift toward a new paradigm where the operative principles are ethics, justice, equity, solidarity, human development and environmental conservation. In theological terms, this paradigm shift can be described as “*metanoia*”—conversion, change of mind and behavior. Indeed this conversion is needed everywhere, in the North and South, as much as in the East and West.

If we try to address, for example, the global food crisis, whereby prices of maize, wheat and rice have risen tremendously in the last few months, we need to consider at the same time, climate change consequences (e.g. variation in rainfall patterns which has led to severe droughts and

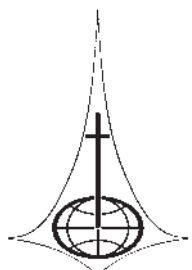
flooding); changing food habits in developing countries like China and India; conversion of huge agricultural land from food farming into agrofuels production farms because of the increasing cost of energy production; and last but not least financial speculation. Effective response to this global crisis calls for a holistic approach.

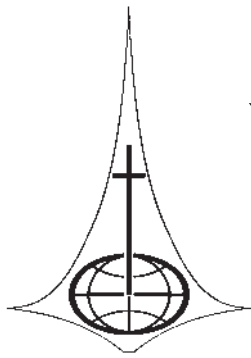
By Guillermo Kerber Mas, WCC program executive for Human Rights and Climate Change.

More about WCC projects on climate change and water at: www.oikoumene.org



*Dr Guillermo Kerber Mas
© WCC/P. Williams*





Climate Change – Vulnerability, Lament and Promise

LWF Sunday 2008

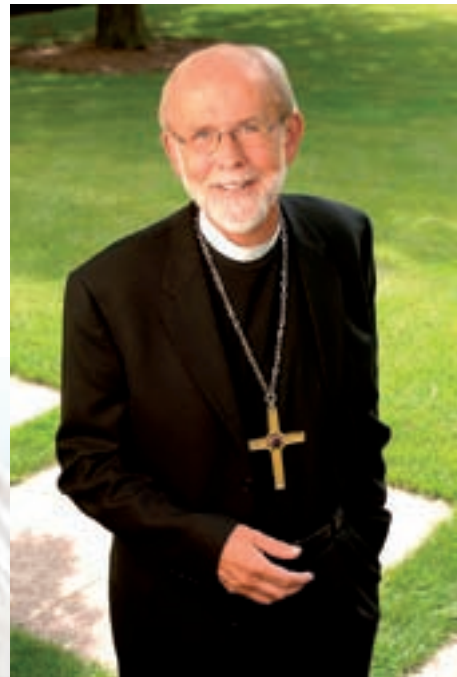
June 2008

Dear sisters and brothers in Christ,

God created a world of beauty and abundance for us to live in and declared it “very good” (Genesis 1:31). In return the earth and its inhabitants praise God in the very goodness of their existence. Today that life is shadowed by threats to the environment—air and water pollution, deforestation and wetland destruction, soil erosion and desertification.

Yet, God’s promise of new life in Jesus Christ also holds promise for God’s creation. Jesus Christ embodies God’s love and care for the world. Through the cross of Jesus, God reconciles heaven and earth and holds them together in Christ. God’s Holy Spirit, “the giver of life,” renews the face of the earth.

This year, as you gather for worship on LWF Sunday, I invite you to join Lutherans from the 140 member churches of the Lutheran World Federation in renewed repentance, commitment, and hope. As we sing and pray, hear the Word and proclaim it in our lives, let us live to the praise of God’s glory and for the life of God’s creation.



Presiding Bishop Mark S. Hanson
© ELCA

Bishop Mark S. Hanson
LWF President

Praise, Lament and Promise

"Bangladesh has observed some changes in the climate pattern over the last few decades. Disruption of the ecosystem is taking place, mostly affecting cropping patterns and agricultural production. The livelihoods of the poor, wage laborers, marginal farmers and other socio-economic groups are becoming vulnerable to adverse effects of climate change."

Mr Kamaluddin Akbar,
RDRS Bangladesh

"Climate change or environmental crisis is a sign of cultural failures. It is a failure to submit human power to grace, and humanity to work toward the habitation of the places in which we live on terms that respect both human limits and the rest of nature. This stretches from being an environmental crisis to being an immoral and unethical injustice practiced on the land."

Rev. Alfred Chana,
Evangelical Lutheran
Church in Zambia

In the beginning God created the heavens and the earth.

And God saw that it was good.

In the beginning was the Word.

All things came into being through him.

In the beginning God breathed into our nostrils the breath of life.

And we became living beings.

Words from Psalm 104
and responses from our times

Bless the Lord, O my soul. O Lord my God, you are very great. You stretch out the heavens like a tent, you set the beams of your chambers on the waters, you make the clouds your chariot, you ride on the wings of the wind, you make the winds your messengers, fire and flame your ministers.

God, in times of climate change the waters, clouds and winds have become frightening to us. We have lost our sense of direction, we have lost the attentiveness to listen to your message.

Come, God, send your message anew to us.

You set the earth on its foundations, so that it shall never be shaken. You cover it with the deep as with a garment; the waters stood above the mountains. At your rebuke they flee; at the sound of your thunder they take to flight. You set a boundary that they may not pass, so that they might not again cover the earth.

God, floods, thunderstorms and earthquakes have shaken the earth. We lament the lives of women, men and children who have died. The destruction and disorder make us tremble.

Come, God, set the earth anew on its foundations.

You make springs gush forth in the valleys; they flow between the hills, giving drink to every wild animal; the wild asses quench their thirst. By the streams the birds of the air have their habitation; they sing among the branches. From your lofty abode you water the mountains; the earth is satisfied with the fruit of your work.

God, the integrity of creation is endangered. Clean water has become a commodity, the land is exploited, and the air is polluted. In the noise of big cities, the singing of the birds is silenced.

Come, God, let your earth see and taste the fruit of your work anew.

You cause the grass to grow for the cattle, and plants for people to use, to bring forth food from the earth, and wine to gladden the human heart, oil to make the face shine, and bread to strengthen the human heart.

God, we confess that we have turned away from your life-giving energy. We use what we can get as if it was simply at our disposal. We assume: "Let us eat and drink for tomorrow we die." (Isa 22:13; 1 Cor 15:32). We do not know what it means to be human.

Come, God, renew our hearts with true gladness and strength, let our face shine.

These all look to you to give them their food in due season; when you give to them, they gather it up; when you open your hand, they are filled with good things. When you hide your face, they are dismayed; when you take away their breath, they die and return to their dust. When you send forth your spirit, they are created; and you renew the face of the ground. Bless the Lord, O my soul. Praise the Lord!

Some Biblical Perspectives

“As we come to a clearer understanding of the ways we contribute to the ecological crisis and discover our resistances to change, the various understandings of the gospel in the New Testament will empower us to address our human sinfulness. If we seek to overcome our environmental problems out of guilt or fear or anxiety about ourselves, we will probably only make matters worse. Rather, transformation needs to come from the good news of God’s redemption and liberation. We need to be fed by the grace and compassion and joy of God for the choices and changes that may be required of us in the future as we face the environmental crises.”

*David Rhoads*¹

Genesis 1 / Job 38f.

“We need to challenge the popular belief that God’s primary reason for creating the earth was to provide humans with a home and a resource. Rather, earth exists as something good, in and of itself. In the first chapter of Genesis, before God created humans, God discovered that the world was good and declared it so. God took Job on a journey through the various realms of the cosmos and challenged him to grasp the wonders of creation operating quite independently of human interests and beyond human ken.”

*Norman Habel and Cynthia Moe-Lobeda*²

Jeremiah 5:22-28

“In this passage Jeremiah links ecological disaster and exile with unfaithfulness to the laws and worship of Yahweh. When the Hebrews worshipped Yahweh they worshipped the spiritual source of created and moral order. They honored this order when they followed the moral guidelines in their revealed law for care of the land, respect for their fellow citizens and compassion and justice for the poor. When they abandoned

the worship of Yahweh, they began to worship the objects of material power which they had made from created things, and so idolized the creature instead of the creator. [...] As inequality and oppression grew in their society so domination and destruction came to characterize the human relation to the land and other species.”

*Michael S. Northcott*³

Colossians 1:15-20

“These verses sing out their triumphant and alluring music between two huge and steady poles—‘Christ,’ and ‘all things.’ [...] For it is here declared that the sweep of God’s restorative action in Christ is no smaller than the six-times repeated *Ta panta*. Redemption is the name for this will, this action, and this concrete Man who is God with us and God for us—and all things are permeable to his cosmic redemption because all things subsist in him. He comes to all things not as a stranger, for he is the first-born of all creation, and in him all things were created.”

*Joseph A. Sittler*⁴

Revelation 21:1-6

“Revelation 21 fulfills people’s longings for a dwelling with God not with a so-called ‘rapture’ or snatching of Christians up into the air, as some modern-day apocalypticists claim, but rather with God’s decent down to earth. God will take up residence and ‘dwell’ (Greek: *skene, skenoo*) with people. This Greek word for ‘dwelling,’ repeated twice as both noun and verb, is the same word as in the Gospel of John (‘The Word became flesh and dwelt among us,’ Jn 1:14).”

*Barbara Rossing*⁵

³ *A Moral Climate. The Ethics of Global Warming* (Maryknoll, New York: Orbis Books, 2007), p. 13.

⁴ “Called to Unity”, in *The Ecumenical Review* 14/2 (1962), p. 177.

⁵ *For the Healing of the World. Assembly Study Book*, LWF Tenth Assembly, Winnipeg, 2003, p. 123.

¹ David Rhoads, “Reading the New Testament in the Environmental Age” on: www.webofcreation.org

² *For the Healing of the World. Assembly Study Book*, LWF Tenth Assembly, Winnipeg, 2003, pp. 234–235.

“Climate change is not just about addressing environmental degradation; it is also about fighting poverty and providing for human security. [...] The paradox of climate change—that those who contributed least to the problem are suffering most—means that adaptation funding should be seen as compensation rather than aid.”

Bishop Dr Wolfgang Huber, Germany; Archbishop Rowan Williams, United Kingdom; and Archbishop Anders Wejryd, Sweden

“Over the last few years, hurricanes and rainfall have increased in Nicaragua, making people especially in the rural areas more vulnerable. Agricultural production is also directly affected, thereby threatening basic food security. Women of the Nicaraguan Lutheran Church of Faith and Hope (Iglesia Luterana de Nicaragua ‘Fe y Esperanza’—ILFE) have begun to reflect seriously on the connection between climate change, disasters and food security.”

Ms Zelmira Gamboa, ILFE gender desk

Intercessions

God of life and love,

Out of your love you created the world, out of your love you continue creating. Every creature is a sign of your love, every being a symbol of your grace. Yet the shadow of darkness and death makes your creation groan.

We pray for those who experience the brokenness of creation, the disruption of life-giving relations. Connect us again to your creative, loving power that we may live out of your love, that we may turn from false paths and walk in your ways.

God of justice and peace,

You came into this world to bring peace on earth and just relationships among all peoples. Yet injustice cries to the heavens, violence destroys the earth. Climate change starkly displays the inequities: Those who destroy least, are suffering most.

We pray for those who are most vulnerable. Extreme droughts and heavy floods endanger the crops of subsistence farmers. Cyclones and earthquakes suddenly bring whole regions into a state of emergency. Enable us to act as one human family sharing the responsibility to provide food and shelter for all. Call us out of our self-centered worries and queries and grant us this sense of belonging together, one human communion in justice and peace.

God of creativity and care,

The coming of your spirit at Pentecost brings into being a creative, caring Christian communion.

We pray for creativity and care so that we constructively deal with the effects of climate change. Grant us good ideas to find new solutions for ecological problems, help us to make courageous efforts to abandon life-destroying practices. Enable us

to understand what it means to be human. Accompany women, men and children who care for their families so there might be enough food, shelter and care for everyone.

God of hope and healing,

The parables that Jesus told of your kingdom enable us to see your purpose for this earth, the integrity of creation and humanity in your will.

We pray for all who feel helpless and paralyzed in the face of the complex reality of climate change. Give us a clear mind and a faithful heart to see what we need to do, and to know when to trust your promise that you will not abandon your beloved creation but give hope and healing. We pray for all generations and the generations to come.

Your kingdom come, your will be done on earth as in heaven.

Great Thanksgiving

It is indeed right and salutary that we should at all times and in all places offer thanks and praise to you, holy God, source of healing and life. You brought wholeness into creation through the caress of your hands and the breath of your mouth. In this intimate moment of creation we join the song of fish and birds, trees and flowers, humans and angels:

We sing the "Holy, Holy, Holy"

Holy God, holy imaginative God, you set your tree of life in the center,

enlivening the barrenness, breathing spirit across the dust. You created wholeness. Holy God, holy compassionate God, you saw our brokenness and planted once again in the center the tree of life, the cross from which Christ rose to save and heal us. You reclaimed wholeness. Holy Christ, holy healing Christ.

[Words of Institution]

Holy God, holy generous God, we remember Christ's life and death, his resurrection and ascension which renew the face of the earth. We give back to you what you have given us in creation,

bread and wine, wheat and grapes. We wait for Christ to come in glory.

Holy God, holy Spirit God, shape us together in this earth of ..., in the soil and rivers, in the sunshine and wind, in animal and human faces. Send your Spirit that we may share your bounty with the whole creation. Help us cry out with one voice for re-creation.

To you, O God, Father, Son and Holy Spirit be all honor and glory, now and forever!

Adapted from:

Koinonia. Services and Prayers (Geneva: LWF, 2004), pp. 158ff



Published and distributed by:
The Lutheran World Federation
150, route de Ferney
P.O. Box 2100
CH-1211 Geneva 2, Switzerland
Tel. +41/22-791 61 11
Fax +41/22-791 66 30
E-mail: info@lutheranworld.org
www.lutheranworld.org