



Crisis and Commitment

Final Report, Lima Statement and Action Plan

The Anglican Communion Environmental Network Meeting
Lima, Peru, 4 to 10 August 2011





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Foreword

by Bishop George Browning, ACEN convener 2002–2011

John came preaching a baptism of repentance; Jesus came saying I have come that you might have life, life in all its fullness. Both messages come, of course, from the same song sheet.

This report will be read differently, in the light of our lived experiences. Those of us in the 'developed' world who on the whole live comfortably and are the main contributors to a looming crisis will read it differently to those of us in the 'developing world' who contribute least to the problem but yet who already carry a disadvantaged burden of its consequences

In the theological and political context in which we are all being called upon to respond to the challenge of the human footprint and its potential for escalating dire consequences for human and non-human life alike, we can appear to sound like doomsday seers without a constantly reinforced message that this is all about life, abundant life.

The message of Jesus and the Kingdom is about seeing with new eyes. Unfortunately the more comfortable we become, the less open we are to seeing things differently. John was called to convince the Jewish community to see differently in terms of their Messianic expectations.

The missiological context for the Church in the twenty-first century is not to change a previously held religious mindset, but to challenge a ubiquitously accepted economic mindset in which individual and community health is judged not in terms of well-being but of wealth. The relentless drive for exponential growth will prove undeliverable this century; the beginnings of its impossibility are already clear, in the meantime, its consequences for human and non-human life alike are becoming unbearable.

In the pages that follow you will read of various forms of environmental degradation on all continents of the globe: too much water, too little water, loss of bio-diversity, loss of agricultural land to desertification, and to non-productive forms of human activity; pollution of the air, pollution of the land, acidification of the sea, loss of ice and frozen landscapes at both poles, sickness in human life as food becomes scarce and diseases once thought to be confined to the tropics now spread north and south. Etcetera.

As Archbishop Rowan Williams has said, what we face is not so much an environmental crisis, as a crisis of the human vocation. Since the industrial revolution and more particularly since the Enlightenment we who live in the developed world have tended to understand ourselves through the ideal of individual thriving, competition, the encouragement to exploit that which has not previously been tapped. This spirit has received comfort, if not encouragement from Christianity, the dominant religio/

cultural force of the western world. However, as the western world has increasingly pursued the goal of individual thriving, but at the same time has distanced itself from the undergirding Christian values in which it was formed, greed has become a primary, and largely uncritiqued reality of human life.

The seeing with new eyes to which we are called is not new to us, its voice is in the scriptures; it is present in the creation story where our being *part of* creation rather than *apart from* creation is made abundantly clear. It is present in the teaching of Jesus who through the resurrection calls us into membership of a new community. The twenty-first century calls the whole global community to a level of collaboration, not competition, that we have never previously attained.

Because what is called for is at the heart of what it means to be Christian, then the Church as an institution, as well as individuals, must find the courage to move out of the private world of personal faith, gender and morality into which we have increasingly retreated since the Reformation and Enlightenment and reclaim a voice in the public world of human endeavour.

May the pages that follow provide a snapshot into the very diverse and complex world in which we Anglicans live and witness across every continent; may they call us to repentance where repentance is appropriate, but may that repentance express itself in a full-hearted commitment to the abundant life which is at the heart of the Gospel message and which is God's intention for the whole creation, which is so greatly loved.

Since the roots of our trouble are so largely religious, the remedy must also be essentially religious, whether we call it that or not.¹

¹Lynn White, 'The historical roots of our ecological crisis'. *Science* 155 (10 March 1967): 1203-1207.
www.uvm.edu/~gflomenh/ENV-NGO-PA395/articles/Lynn-White.pdf.

Introduction

by the Revd Ken Gray, ACEN Secretary

ACEN's meeting of representatives from the Provinces of the Anglican Communion was held at the Franciscan *Inmaculada Concepción* retreat centre in Chaclacayo to the east of Peru's capital city Lima.

Participants were sincerely grateful to the Bishop of Peru, the Rt Revd Bill Godfrey, who graciously hosted the meeting, and also to the Dean, staff and ordained and lay ministers of the Diocese of Peru who supported throughout.

The context of Peru meant that participants in the ACEN meeting were able to engage locally with the reality of environmental destruction and severe pollution in areas of population – much of which has been caused by decades of mining undertaken by large corporations without due care and attention to the health, well-being and future of communities and to land use and water supply.

Participants also heard from Anglicans in other parts of South America who described extensive and continuing deforestation and who are engaged in supporting Indigenous communities in order that their lives, livelihoods and needs are taken into account.

Each provincial representative presented a report from their own context to the meeting. It quickly became clear from this reporting that climate change and environmental degradation are already displacing large numbers of people and are having critical effects on communities, agriculture, local economies and health. It is also clear that indiscriminate use of irreplaceable resources, such as water from deep aquifers, is taking little heed of the needs of generations to come.



ACEN met at the Franciscan *Inmaculada Concepción* retreat centre

Participants shared information about provincial and diocesan initiatives in many aspects of responding to a worsening environmental crisis. Many of these initiatives are described in this report and are offered as models for further Anglican engagement.

During the meeting ACEN drew up a Statement and Action Plan setting out the issues emerging from provincial reporting and discussion, and outlining ACEN's commitments in supporting the Anglican Communion's response to the Fifth Mark of Mission: 'To strive to safeguard the integrity of creation and sustain and renew the life of the earth'.

The Statement and Action Plan are in this report and are online, along with provincial reports and presentations at <http://acen.anglicancommunion.org>.



Participants began each day with Bible study

The Lima Statement

with Action Plan

The Anglican Communion Environmental Network meeting in Lima, Peru, 4 to 10 August 2011

Creation is in crisis. This is the conclusion of the Anglican Communion Environmental Network meeting in Lima, Peru, August 2011. Each participant from around the Communion reported accelerating impacts from human-induced climate change and environmental degradation in their regions. Many participants also reported extensive ignorance and, in some cases, unwillingness to take action.

We were appropriately reminded by our host, the Bishop of Peru, the Rt Revd Bill Godfrey, of the need to teach our people in terms they understand. We begin with the discovery in Jesus Christ of the Good News of the Kingdom which draws us together – moving us from a world that divides to a gospel that gathers.

Together we discerned an urgent calling to seek environmental justice and to encourage Anglicans everywhere to challenge and transform individuals and systems that spoil the earth, affect local communities adversely, and refuse to imagine a different kind of global community.

Among those systems most in need of transformation is an economic system that knows no alternative to continual growth. Rather than having an economy that serves the well-being of communities, our communities (human and other-than-human) serve the well-being of the economy.

In order to motivate Anglicans, both at the individual and at the structural level of the church, we have committed ourselves and commend to all Provinces of the Communion, the following Issues with associated actions.

Issues and ACEN Actions

Sabbath and Sustainability

As Anglican Christians we have inherited a story which speaks Good News to all creation. This narrative includes the moral imperative of Sabbath: the ability to rest and trust in God's provision for humanity within creation. In the language of Genesis Chapter 1, the seventh day of creation allows the preceding six days to function and prosper. In the present moment, the ability to set limits on economic growth and development will have positive and healing impacts on both ecosystems and communities.

ACEN Action: ACEN will produce a series of pamphlets for distribution throughout the Communion on the practice of Sabbath.

The Communion and Environmental Justice

A review of the 1998 Lambeth Conference resolutions on creation (I.8) and ecology (I.9)² clearly shows that the Anglican Communion has not adequately supported and resourced environmental justice.

ACEN Action: ACEN will seek the appointment of a funded coordinator in accordance with Lambeth Conference resolutions and the Fifth Mark of Mission.³ To this end ACEN will write to the Secretary General and the Anglican Alliance Director stressing the need and urgency of a funded position to support and coordinate ACEN and Alliance initiatives in relation to the environment.

COP17

We find the Message from African faith leaders gathered in Nairobi in June 2011 to the 17th Conference of the Parties (COP17) to the United Nations Framework Convention on Climate Change (UNFCCC) inspirational and challenging.⁴

² See Appendix 1, page 13.

³ 'To strive to safeguard the integrity of creation and sustain and renew the life of the earth'.

⁴ See Appendix 2, page 14.

ACEN Actions:

- ACEN commends the Message from African faith leaders to Provinces and all faith communities as a model for similar statements supporting a fair, binding and ambitious outcome from the COP17 meetings in Durban, South Africa, in November of 2011.
- Those assembled for ACEN's meeting in the Diocese of Peru officially appointed Mr Michael Schut and the Revd Tim Gray to represent the Network at COP17.

Deforestation

Systematic deforestation and environmental degradation are present in many of our Provinces. We heard reports from the Chaco region of Northern Argentina, Bolivia and Paraguay, and from Brazil. Such activity contributes to the dissolution and devaluing of communities, threatens livelihood at all levels, and destroys tribal lands and cultures.

ACEN Action: ACEN will assemble a multi-media information kit, initially focusing on South America, for dissemination throughout the Communion.

Mining

Mining and the environmental degradation it causes continue to impact both the physical environment and local communities in many of our Provinces. In Peru, participants met with miners and smelter workers who are employed by corporations that remain unwilling to operate in a wholly responsible manner. Over decades this industry has caused serious contamination to land, air, and water resulting in lead poisoning to children.

ACEN Action: ACEN will gather stories from throughout the Communion which highlight models of both sustainable and unsustainable mining practices.

Water

Global water resources continue to be depleted due to rising global temperatures, pollution, and unsustainable extraction from rivers and deep water aquifers. The mixture of salt and fresh water in countries such as Bangladesh adversely affects agriculture, the availability of potable drinking water and human health. The life and health of communities and ecosystems are threatened in other regions. Commodification of water restricts access for vulnerable communities and causes ecological harm in the name of profit.

ACEN Actions:

- ACEN will increase the visibility of existing publications making use of its own web site at <http://acen.anglicancommunion.org> and the Anglican Observer at the UN web site at www.anglicancommunion.org/ministry/un.
- ACEN will produce new resources on water access, quality, depletion and commodification.
- ACEN will regularly communicate with the World Council of Churches Ecumenical Water Network.

Oceans

The impact of global warming on the oceans, the world's most significant carbon sink, leads to both acidification and rising water levels, and continues unabated.

ACEN Action: ACEN will gather together a collection of stories, liturgies and other materials (including from the World Council of Churches) which describe the impact of climate change on the oceans and on coastal communities. Such a presentation could be timed to coincide with the annual World Water Day (22 March) or with a similar event.

Agriculture and Food

Access to nutritious, affordable, and locally grown food is directly threatened by global agribusiness.

ACEN Action: ACEN will explore the possibility of coordinating with the Anglican Indigenous Network regarding Indigenous sustainable farming methods.

Environmental Refugees

The imminent displacement of large numbers of people as a result of climate change, notably in Bangladesh and other regions at sea level, is of great concern. There is no plan in place to deal with such forced migration. It is essential to support adaptation and resettlement projects in vulnerable communities most affected by climate change both financially and in other ways.

ACEN Action: Dialogue with the Anglican Refugee and Migrant Network and the UN High Commission on Refugees about the status of environmental refugees.

Corporate and Consumer Responsibility

Fresh dialogue is necessary with corporations and consumers about ethical and sustainable practices in all Provinces.

ACEN Actions:

- Develop a campaign around sustainable corporate behaviour in consultation with identified business community leaders and theologians.
- Research the practice and monitoring of socially responsible investment practices.
- Gather and disseminate resources on the production and distribution of a wide range of products to enable consumers to make ecologically aware purchasing choices.

Integrated Mission

There is an integral relationship between environmental degradation and poverty, the dissolution of community and family life, and the disempowerment of women.

ACEN Actions:

- ACEN will review its mandate, its name and logo with a view to articulating the relationship of environmental justice with poverty; food security; Indigenous rights; health and women's empowerment, and working with other n/Networks.
- ACEN will link with the Anglican Alliance for Development, Relief and Advocacy with a view to pursuing a multi-level, holistic approach in mediation, mitigation and adaptation.

Theological Education

There is a pressing need for theologically and scientifically sound environmental curricula in seminaries in many provinces.

ACEN Action: ACEN will discover or develop, in relation to the needs of the Diocese of Peru, a teaching module on Faith and the Environment, illustrated with Anglican experience (eventually to be translated into French, Spanish, and Portuguese for a broader audience).

Liturgy

ACEN Action: ACEN will identify existing liturgies and, where necessary, adapt and edit as appropriate, readings, thanksgiving, penitential rites, intercession and other worship resources that relate to creation and the Fifth Mark of Mission.

Solidarity and Support

ACEN Action: ACEN will develop support mechanisms for those engaged in environmental advocacy, including nurturing relationships and prayer.

Conflict

The potential for civil strife arising from stress associated with the spoiling of and competition for resources is real and present in many places.

We, the undersigned, believe that within these Issues and Actions, we are committed to a moral imperative and a Godly calling.

Provincial Representatives

Bishop George Browning, Anglican Church of Australia, ACEN Convener

The Revd Ken Gray, Anglican Church of Canada, ACEN Secretary

Mr Timothy Biswas, Church of Bangladesh

The Revd Tim Gray, Anglican Church of Southern Africa

Mrs Judith Masumba, Anglican Church of Tanzania

Mrs Anne Mayagoitia, Anglican Church of Mexico

Professor Dr David Morales, Igreja Episcopal Anglicana do Brasil

The Rt Revd Apimeleki Qiliho, Anglican Church in Aotearoa, New Zealand and Polynesia

Mr Michael Schut, The Episcopal Church

Bishop Jean Paul Solo, Church of the Province of the Indian Ocean

Bishop Tom Wilmot, Anglican Church of Australia

The Revd Canon Jeff Golliher PhD, Program Officer for the Environment, Anglican United Nations Office (AUNO)

Observers

Mr Nagulan Nesiah, Program Officer for International Development, Episcopal Relief and Development

The Bishop of Peru, the Rt Revd Bill Godfrey, host

The Dean of Peru, the Very Revd John H Park

Appendix 1: Lambeth Conference Motions, 1998

Lambeth Conference 1998 Resolution I.8: Creation

This Conference:

- a. reaffirms the Biblical vision of Creation according to which:
 - I. creation is a web of inter-dependent relationships bound together in the Covenant which God, the Holy Trinity has established with the whole earth and every living being;
 - II. the divine Spirit is sacramentally present in Creation, which is therefore to be treated with reverence, respect, and gratitude;
 - III. human beings are both co-partners with the rest of Creation and living bridges between heaven and earth, with responsibility to make personal and corporate sacrifices for the common good of all Creation;
 - IV. the redemptive purpose of God in Jesus Christ extends to the whole of Creation.
- b. recognises:
 - I. that unless human beings take responsibility for caring for the earth, the consequences will be catastrophic because of:
 - overpopulation
 - unsustainable levels of consumption by the rich
 - poor quality and shortage of water
 - air pollution
 - eroded and impoverished soil
 - forest destruction
 - plant and animal extinction;
 - II. that the loss of natural habitats is a direct cause of genocide amongst millions of Indigenous peoples and is causing the extinction of thousands of plant and animal species. Unbridled capitalism, selfishness and greed cannot continue to be allowed to pollute, exploit and destroy what remains of the earth's Indigenous habitats;
 - III. that the future of human beings and all life on earth hangs in balance as a consequence of the present unjust economic structures, the injustice existing between the rich and the poor, the continuing exploitation of the natural environment and the threat of nuclear self-destruction;
 - IV. that the servant-hood to God's creation is becoming the most important responsibility facing humankind and that we should work together with people of all faiths in the implementation of our responsibilities;
 - V. that we as Christians have a God given mandate to care for, look after and protect God's creation.
- c. prays in the Spirit of Jesus Christ:
 - I. for widespread conversion and spiritual renewal in order that human beings will be restored to a relationship of harmony with the rest of Creation and that this relationship may be informed by the principles of justice and the integrity of every living being, so that self centred greed is overcome; and
 - II. for the recovery of the Sabbath principle, as part of the redemption of time and the restoration of the divinely intended rhythms of life.

Lambeth Conference 1998 Resolution I.9: Ecology

This Conference:

- a. calls upon all ecumenical partners and other faith communities, governments and transnational companies:
 - I. to work for sustainable society in a sustainable world;

- II. to recognise the dignity and rights of all people and the sanctity of all life, especially the rights of future generations;
 - III. to ensure the responsible use and re-cycling of natural resources;
 - IV. to bring about economic reforms which will establish a just and fair trading system both for people and for the environment.
- b. calls upon the United Nations to incorporate the right of future generations to a sustainable future in the Universal Declaration of Human Rights.
- c. asks the Joint Standing Committee of the Anglican Consultative Council and the Primates to consider the appointment of a co-ordinator of an international ecological network within the Anglican Communion, who would:
- I. work in co-operation with other ecumenical and interfaith agencies;
 - II. be funded through and responsible to the Anglican Consultative Council;
 - III. support those engaged in grass-roots environmental initiatives;
 - IV. gather and disseminate data and information on environmental issues so that the Church can play an informed role in lobbying for ecological justice in both the public and private sectors; and
 - V. contribute to the development of environmental educational programmes for use in the training of Christian leaders.

Appendix 2:

Climate Justice for Sustainable Peace in Africa – The Nairobi Statement (2011)

A message from African faith leaders to the 17th Conference of the Parties (COP17) to the United Nations Framework Convention on Climate Change (UNFCCC), from 29 November – 9 December 2011 in Durban, South Africa.

You must treat the earth well. It was not given to you by your parents. It is loaned to you by your children.
Kikuyu proverb

Introduction

Africa is a continent of the faithful. We gathered as African faith leaders at UNEP in Nairobi, Kenya on 7 and 8 June 2011, to discuss climate change and how it will be addressed at COP17.

Scientific reports indicate that climate change may well be the greatest threat that humanity has ever faced, with, on current targets, probable increased global warming of 2.5°C to 4°C by 2100 – widely agreed to be disastrous. Yet progress in international negotiations has not matched the scale of the crisis. There appears to be a deadlock between competing political and economic interests from various power blocs. We believe that to break this deadlock, new perspectives are required.

Firstly, economic and political processes have to be based on ecological principles, and not vice versa. There can be no infinite economic or population growth on a finite planet.

Secondly, there is a profound need for a renewed moral vision for the future of humanity and indeed of all life. We debase human beings by seeing them only as economic instruments, and debase the sanctity of life by commodifying it.

We must realise that well-being cannot be equated with material wealth. The quality of life is not dependent on the quantity of material things or growth measured by GDP. Instead, our standard of living depends on our standard of loving and sharing. We cannot sustain a world dominated by profit-seeking, rampant consumerism and gross inequalities, and an atmosphere of competition where the powerful take advantage of the weak without

caring for the well-being of every form of life. Development cannot be sustained if the affluent project themselves as examples to be copied by everyone else, and if the poor model their lifestyles on such examples.

These insights draw from the rich moral and spiritual traditions on our continent and elsewhere in the world. Despite the historical violence and disorganisation that Africa has suffered and inflicted on itself, these insights have been transmitted to us by our ancestors who believed in the harmony of vital forces, between human beings and the rest of creation.

In our African spiritual heritage and our diverse faith traditions, trees, flowers, water, soil and animals have always been essential companions of human beings, without which life and being are inconceivable. We express this in different ways through our understanding of the world as God's own beloved creation, and our sense of place and vocation within it.

Our ways of thinking and feeling deeply influence the world around us. As we find compassion, peace and harmony within ourselves, we will begin to treat the Earth with respect, resist disorder and live in peace with each other, including embracing a binding climate treaty. We pray that compassion will guide these negotiations.

Our commitments as faith leaders

Our African people and nations have to overcome the temptation of seeing ourselves as victims, who have no role and responsibility to play in reversing the current situation – we are part of the solution.

As African faith leaders, our responsibilities will be to:

- Set a good example for our faith communities by examining our personal needs and reducing unsustainable consumption.
- Lead local communities to understand the threat of climate change and the need to build economies and societies based on a revitalised moral vision.
- Draw on our spiritual resources to foster crucial ecological virtues such as wisdom, justice, courage and temperance, and to confront vices such as greed in our own midst.
- Acknowledge that climate change has greatly affected already vulnerable people (such as women, children, the elderly, the poor and the disabled), that it worsens existing inequalities and that this places an obligation on faith groups to stand in solidarity with the victims of climate change disasters, showing care, compassion and love.
- Plant Indigenous trees and promote ecological restoration.

Our message to all world leaders

As citizens, we are asked to put our trust in representatives at COP17 to decide upon our common future. We have no doubt that the Durban COP must decide on a treaty – and second commitment period for the Kyoto Protocol – that is fair, ambitious and legally binding, to ensure the survival of coming generations.

We therefore call on you to:

- Commit to the principle of intergenerational equity, the rights of our children for generations to come, and to the rights of Mother Earth as outlined in the Cochabamba declaration.
- Refute the myth that action to cut emissions is too expensive, when it is far cheaper than the long-term costs of inaction.
- Acknowledge that investments in sustainability are a better guarantor of peace than military spending.
- Abandon Gross Domestic Product (GDP) as an indicator of prosperity in favour of indicators that include human wellbeing, equality and the external environmental costs of human economies.
- Set clear final targets for phasing out the use of all fossil fuels, and deep interim reductions in carbon emissions that support the target of no more than one degree of global warming.
- Ensure that there is sufficient climate finance for adaptation in Africa, additional to existing development aid and that it is governed inclusively and equitably under the United Nations.

- Channel sufficient and predictable climate finance and technology from the historic polluting nations, in recognition of their ecological debt, to enable Africa to leapfrog into an age of clean energy technology.
- Close the gap between wealthy countries' pledges to cut warming emissions and what science and equity require.
- Assign for wealthy countries emission quotas that are consistent with the full measure of their historical responsibility.

Our message to Africa's political leaders

We further urge African political leaders, as many of you are members of our faith communities, to take these particular measures:

- To regain a united voice and abandon expedient allegiances with blocs that are scrambling to appropriate Africa's natural resources.
- Recognise in all policy statements that our long-term social and economic interests require the stability of our biophysical environment today.
- Prioritise measures and adopt policies to resolve environmental degradation in our nations.
- Acknowledge and pre-empt the violence at all levels that climate change and environmental degradation is already fuelling on the continent.
- Adopt and enact land policies that ensure equity and justice for all.
- Resist the approval of transactions with exploitative corporations that would cause serious environmental damage.
- Promote Indigenous tree planting and protection of existing forests, lakes and rivers.
- Build much greater capacity within long-standing teams of climate negotiators.
- Greatly improve communications within and between African governments, and consultation with civil society, including faith communities, on issues of climate change.

Conclusion

Every human generation is faced by particular challenges and opportunities. If we do not secure a stable climate for the sake of future generations, we will be held accountable by them and judged by history.

On this very critical issue of climate change, we must not fail. Every lost moment increases an irreversible threat to life on Earth.

8 June 2011: This communiqué was compiled jointly by 130 faith leaders representing Muslim, Christian, Hindu, African traditional, Bahá'í, Brahma Kumari and Buddhist communities from 30 countries across Africa.

Context

Local Perspectives set the Context for Bible Studies

Morning Bible studies from the Book of Isaiah and Matthew's Gospel prepared the ground for each day of ACEN's meeting. Participants used the *lectio divina* method and each Bible study was prefaced by a member of the Diocese of Peru giving a personal account of local mission and ministry in the country's cities, suburbs, shanty towns ('young towns') and villages.

Vicario General Julio Montoya: Preamble to Isaiah 35

As a student Julio Montoya had heard a Peruvian philosopher say that Peru was like a beggar sitting on a pile of gold. When he became an Anglican priest, however, he discovered that Peru was something different. In the south of Lima, in an area known as 'the Sand', he has worked among people struggling simply to survive and cope with shortage of the basic things of life. Early in his ministry, he and his wife Norma began to extend humanitarian assistance as part of their work – not just in terms of material things but also responding to illiteracy, tuberculosis, and other needs and health issues.

Fr Julio was the only local person with a car – a VW Beetle. People knew that in an emergency they could go to the Anglican pastor – knocking on the door no matter what time of day. Sometimes he would rush a woman about to give birth to hospital in the middle of Lima.

On one occasion during the time of guerrilla insurgency, with a hastily made plywood coffin tied to the roof of his VW



Vicario General Julio Montoya



Fr Jaime Siancas

Beetle, Julio accompanied a woman to collect her son from the mortuary.

Julio described a parish programme that involved giving groups of people a duck with ducklings and encouraging the cultivation of vegetables. The vegetables were watered with reserved washing water since there was no water 'on tap' and water purchased from trucks was expensive. He also described how he and his wife brought up an abandoned baby as one of the family, nursing him through polio.

Julio asked for prayers for his family and for himself. Over the years he has seen many children without food, with parasites, dengue fever and other health problems.

Water is always an issue, especially in summer. He hoped that water could be seen as something that must be available to all people – as a sign of God's love for all God's people. In Genesis the Spirit is described moving over the face of the water. Without water there is no life. Access to water is everyone's human right.

Jaime Siancas: Preamble to Isaiah 59.1–11

Jaime Siancas spoke about Peru and about his own ministry. In Peru there is a great wealth of ecosystems – desert, mountain, jungle, rain forest and ocean. It has mineral wealth, vegetation and animals. Jaime had brought along some artefacts from ancient civilisations of the region: an arrowhead made from copper; a mould for figures; a shell

from Ecuador which was treasure for the Inca people; a shell that the Chasqui, who carried messages for the Incas, used for communication; silver ornaments and a whistle from the pre-Inca Chimu culture. Jaime's hat was from the north of Peru, of the type used by horsemen. Jaime blew the Chimu whistle in honour of creation and of Jesus Christ who called us here.

Jaime was born in Piura near the Pacific Ocean in the north of Peru, a desert area. It only has one season – summer. But climate change means that people now get cold in Piura. He has been a missionary in the coastal regions, mountains and selva (tropical moist broadleaf forest).

Jaime co-founded the Diocese of Peru's social outreach organisation *Comunión Perú*. He is a representative of the Anglican Church of Peru in *La Coordinadora Nacional Multisectorial en Salud* (CONAMUSA), a body which coordinates government and civil society initiatives concerned with health issues such as HIV/AIDS and tuberculosis. He is also president of the Council of Latin American Churches in Peru which currently has a number of focus issues: the environment; family; Indigenous communities and HIV/AIDS.

Jaime is licensed to the Anglican cathedral in Lima and has a ministry in the belt of poverty around the airport, an area called Cerro Cachito.

After the devastation of the earthquake in Ica in 2007, he was part of a team sent to set up feeding stations and visit the injured in hospital.

Bishop Michael Chapman: Preamble to Matthew 6.31–34

Bishop Mike or 'Miguel' is suffragan bishop in the Diocese of Peru. He spent his childhood and youth in Puerto Rico.

Bishop Mike described his journey to faith and ministry which brought him, with his wife, Linda, to Peru in 2008.

Mike was consecrated bishop in 2010 to serve in the Ayacucho/Ica/Huancavelica area of south central Peru.



Bishop Michael Chapman



Photo: Diocese of Peru

Sustainability and Sabbath

A Reflection by Bishop George Browning

Human beings struggle between a way of life in which we see ourselves *apart from* creation in our exploitation of its resources and *a part of* creation in that its health is our health and its destiny is our destiny. In coming to this meeting we will all be testifying to the fact that creation is in trouble. Because we are part of it we share this crisis. Poverty and environmental degradation are reverse sides of the same coin.

One of the many reasons for the crisis relates to water. Lima faces a water crisis. Two nights ago we were taken to a park of fountains in Lima where we sauntered through a tunnel with educational collages, including a description of how much water is required for various units of production. Far more water is needed for red meat production – 15,000 litres of water for one kilogramme of meat – than for other foods. The Bishop of London, Richard Chartres has become a vegetarian for this reason. In eastern Australia every person is directly or indirectly affected by the Murray Darling basin. More water is now being taken out of the basin than is going in. We have been mining underground water which is irreplaceable. We have taken water out of marshlands and spoilt existing ecosystems. Our current use of water means that although Australia is a vast continent, it has already reached a sustainable population level at under 24 million. If every global citizen enjoyed the same life style as an average Australian, we would need four or five planets. In Australia we emit 24 tonnes of carbon dioxide per person per year, more per capita than USA and Canada. Australians occupy a larger living area per person than citizens in any other country. Peak energy supply is required to air condition these large spaces. And yet, less than 50 per cent of Australians think we have an environmental problem.

The Australian Academy of Science and numerous other bodies say we have an environmental crisis, but we continue to live as if we have not. Science is belittled rather than taken seriously. As a young man in the 1960s I read Pierre Teilhard de Chardin's *The Phenomenon of Man* in which he claims that human horizons are stretched through science, philosophy, and religion. We live in a world where science is being let down because philosophy (thinking) and theology have not kept pace with science in the minds of the public. People do not change their lives because of statistics, facts, information alone, the bread and butter of science; lives are changed through commitment to a compelling narrative.

All nations of the world like to access the benefits created by a global world, but few, if any, nations are prepared to take responsibility for the challenges that the global world has created. Countries attending COP15⁵ in Copenhagen came to the agenda through the prism 'what is best for me?'



Bishop George Browning

and 'what will serve the best interests of my country?' The *right* questions are 'what can I bring to this situation?' and 'what is in global best interest?' So how can national self interest be turned into global best interest? What is it that sufficiently grabs the heart and spirit of human being to change human behaviour? It is in answer to this question that I believe the church and theology must step up to the plate. We have a compelling narrative. The prevailing global narrative is '24/7' – the catch cry of exponential growth, a narrative that demands everything be judged in terms of economic success. Most countries seek population growth, not for humanitarian reasons but in order to grow the economy. This narrative has to be changed.

The *right* questions are 'what can I bring to this situation?' and 'what is in global best interest?'

A narrative predominated by economic success must be replaced by one of human and environmental well being. How is this going to happen? It could happen through what I call the grandparent narrative! That is, I have no right to choices that limit the lives and choices of my grandchildren. The world they inherit cannot morally be a lesser world than the one I have enjoyed. However, today I want to put before you a biblical narrative, a theological narrative that I believe has the capacity to change the behaviour and life style of people of faith – the Sabbath narrative.

Christians generally understand the Sabbath through the Ten Commandments which are given twice in the Old Testament – Exodus 20 and Deuteronomy 5. In Exodus 20 the reason given for Sabbath is creation. In Deuteronomy 5, it is the exodus from Egypt. In other words we are commanded to keep the Sabbath because of both God's creating and redeeming works. Sabbath features so strongly in Hebrew history and as one of the identifying marks of Judaism that we will be surprised to learn that only 15 books in the Old Testament mention Sabbath at all. Of those that do, the majority link Sabbath and new moon celebration. Scholars have generally come to the conclusion that Sabbath was not practised as we understand it until well after the Exile. So where does it have its roots? It looks as if its origins lie in celebrating the life-giving cycles of creation. It looks as if embedded within its celebrations is an understanding that creation has been endowed with *rhythms and cycles that human beings cannot change or abrogate without consequence*. If this is true, then

⁵ The 15th meeting of the Conference of the Parties to the United Nations Framework Convention on Climate Change.

rediscovering what they are and telling their story becomes a matter of extreme urgency for creation and humanity alike.

The first account of creation climaxes with words relating to the seventh day (Genesis 2.1–4a). These few verses are dominated by the Hebrew word *sabat*, which in English is usually translated as 'rest'. At the end of God's creating, when it is 'finished', God 'sabats'. (The words of Jesus on the cross echo the words of creation, 'It is finished'). The word 'rest' should not be understood as 'cessation from work' but rather 'being present to' creation. When God rests, he makes himself present in creation. Because God is present to creation then all creation is hallowed and blessed, as these verses proclaim.

Sabbath celebration is a celebration of the totality of life.

Believing that God is sovereign within creation breaks down ownership by particular tribal groups. We are taken beyond family, tribe, or national allegiance. All humanity is bound together within the totality of the created order. Sabbath celebration is a celebration of the totality of life. The integrity and value of each individual part is celebrated but, more particularly, the focus of celebration is each part finding its fulfilment through harmony within the whole. This narrative is complimentary to science which in recent times has emphasised the relatedness of all matter. James Lovelock, an English scientist, gives the name *Gaia* to his understanding of the totality of creation as a single living organism. Faith and science should support one another in telling this narrative.

Through the predominance of global economics we have accepted a narrative which sets us apart from creation. This narrative is in direct contradiction to the Sabbath story which posits us, and God, within creation. The Sabbath

narrative is not an account of how one day in seven is to be lived, but speaks to the foundational principles and rhythms through which all days are to be lived.

We believe in a relational God who has made a relational world. God is present to his creation. We are made in the image of God and we too need to be present to creation. The failed experiment of humanity is that we have tried to live apart from it. In this Sabbath narrative the words 'blessing' and 'hallowing' are important – God blesses and hallows creation by being present to it. We bring blessing and hallowing by doing the same. If our conference is to be a success it will be, at least in part, because we have been able to be present to the culture, people and environment of Peru, and these have been present to us. Sabbath is a story of God travelling with creation, confirmed and reaffirmed in the person of Jesus who is the new creation. In the Networks of the Communion there is a growing sense that working with the poor means working with the environment. My sister Valerie is a Christian working in an Islamic community in Ethiopia. Her Muslim husband commends her Christianity because he observes it as a faith that is present to his own through the manner in which she serves the land, the culture and the people. She is a living testimony to the God in Jesus who is eternally present.

Jürgen Moltmann describes Sabbath as the 'crown of creation'. If this is so, it embraces the hard bits as well as those bits with which we rejoice. In Genesis 21.26–28 two Hebrew words *rada* and *kabas* are very hard to deal with theologically. *Rada* is usually translated 'to have dominion'; *kabas* 'to subdue'. *Kabas* is an aggressive word, a treading down word. It is almost impossible to treat it benignly, and yet we are told human beings are commissioned in this manner. *Kabas* stands in direct contrast with the word



Left to right: The bishops Tom Wilmott, Apimeleki Qiliho, George Browning, Bill Godfrey and Jean Paul Solo

shemer (Genesis 2.5) meaning 'to keep' or to look after that which belongs to another. The word recurs in the story of Cain and Abel. Cain kills Abel and God asks Cain 'where is your brother?', and Cain responds, 'Am I my brother's keeper?' – echoing the word in the second account of creation.

The creation story recognises the fact that we are a violent people who crush the earth and one another, and yet our vocation is to be the keeper, the good shepherd, towards each other and towards the whole created order. The first step is truthfully to recognise the problem. At the moment there is strong denial that our activity is causing violence to the created order. By recognising the problem we can work on the solution. Part of today's violence, on a massive scale, is undertaken by the mining industry. The mining industry seems even to be given priority over agricultural land. In Australia we are digging up our food bowl. It is possible that unless we change our ways, within a generation Australia could become a net importer of food. The creation story, crowned by Sabbath, has profound truths which need to be reclaimed.

The biblical scholar Walter Brueggemann suggests that humanity, at the beginning of the twenty-first century, is living out of a narrative of scarcity rather than a celebration of abundance – the Sabbath story. He claims that fear of scarcity drives people to hoard; the hallmark of a consumerist society. The fear of scarcity drives us to accumulate more than we need for ourselves and decreases our desire to share with others. And yet research indicates a supreme irony, that those who have hoarded the most, those who are most wealthy, are not happier than those who have far less.

Hoarding does not flow automatically into wellbeing; indeed some indicators suggest the reverse. Research has indicated that those who can scrape by are as happy as people who have more than enough. At a national and international level, Gross Domestic Product is not a measure of well-being and at best is an arbitrary measurement that needs to be down-played in its role as the sole arbiter of humanity's progress and potential future.

Abundance as bi-product of limitation should be pursued as part of our narrative.

Brueggemann also draws us into marriage as a metaphor of the relationships we share with the whole of creation. In marriage we choose to live with one person and in doing so we limit our involvement with others. The abundance that most humans find through an intimate relationship is possible because of the limitations accepted in relation to others. Abundance, Brueggemann declares, is therefore a product of limitation. In contrast, we live in a world in which limitation is not an acceptable value, a world in which nothing less than total and limitless exploitation is mandated. Abundance as bi-product of limitation should be pursued as part of our narrative.

The Sabbath finds its extension in the idea of the sabbatical and jubilee years. Within the memory of the older members of our communities it was common for rest to be given to the land in rotation. This is no longer the case, but through the use of artificial fertilisers the land is expected to yield its abundance every year.

...the resurrected Jesus calls humanity into a new community

Our twenty-first century economic culture has become a celebration of the individual. While we have now arrived at the pinnacle of this cult, it has been a celebration a long time in the making. The period of the enlightenment contributed greatly. Consumerism is about the individual and about personal gratification. But sadly Christianity has also been an ally in the cult's ascendancy. There has been far more focus upon the individual and individual salvation than was present in the early centuries of Christianity and more than is implied by the post resurrection narrative.

Paul claims that the resurrected Jesus calls humanity into a new community where old divisions disappear and peace exists not simply because aggression between two parties has abated, but because the two have become one in a new family relationship under God – they are united in one community. The Sabbath narrative celebrates the single community of the created order. Renewed emphasis upon the whole community and its interdependence is an essential part of our narrative and a direct challenge to the prevailing culture.

The Anglican Consultative Council has mandated five marks of mission for our Church, of which the fifth is the safeguarding of the integrity of creation. However, there is growing awareness that the fifth mark is also fulfilled in the previous four, not least the fourth, the challenging of unjust structures. We should not be surprised at the strength of antagonism toward environmental aspirations, because those aspirations are not simply ecological in nature; they challenge many unequal and unjust structures of human life. We can expect constant and continual opposition from wealthy and influential segments of society towards the narrative and values we proclaim.

To summarise: we are struggling to convince political decision-makers that they must deal with serious environmental challenges, not simply engage with what they perceive to be the higher priority economic issues. Since COP15 in Copenhagen, global conversations have gone backwards not forwards. How do we, people of faith, deal with this? We can do so with a narrative strong enough to convince our people, but not just people in our congregations, but also our political leaders that wellbeing, not economic success, should be the measure by which we gauge the health of society. The creation narrative – the Sabbath narrative – is not simply a narrative of faith, it is a narrative about life itself a narrative that has meaning for all people regardless of faith.

Experience from Northern Argentina

Dr Andrew Leake

Where can we engage creatively at the interface of poverty and environmental crisis? It is often a struggle to know where to start when it comes to engaging the church with environmental issues but this is beginning to change.

This presentation looks at experiences of the Anglican Church in Northern Argentina, in the dry and semi arid region known as the Chaco, part of the Gran Chaco, the second largest eco-region in the area after Amazonia. Wichi hunter-gatherer Indians are one of five Indigenous groups who live in the region, and are among those with whom the Anglican Church has worked over the past 100 years. Though now largely integrated into national society, they retain their own language, culture and distinct identity.

The Gran Chaco is an area of dry tropical forest, the size of Spain and France together. The area has one of the highest rates of deforestation in the world. Mechanised deforestation techniques mean vast areas of forest can be cleared in very short periods of time. Huge ship-anchor chains, strung between giant bulldozers, are dragged through the forests, literally smashing the vegetation to the ground where it is left to dry before being burnt. In this way, acres of forests that have stood for hundreds of years can be cleared in a matter of hours.

The Chaco is being cleared to make way for the cultivation of soya beans. The beans are exported to Europe and China where they are mostly used for animal feed. Extensive cultivation of this crop using agrochemicals is poisoning the land, the environment and its people. The unrestricted use

of agrochemicals is beginning to raise concerns in the medical community. Airplanes are used to spray toxic insecticides and herbicides with little control over their practice; some even fly with tanks open over inhabited areas.

Cleared land is often over exploited and production eventually tends only to be possible with the use of fertilisers. Within the remaining forests there is also significant exploitation of hardwoods, with the Chinese market helping to drive up demand. Expansion of the often illegal timber trade has a negative impact on Indigenous communities who begin to fight among themselves because of limited resources. Indigenous communities become involved in illegal extraction of hardwood because it is quick, easy money, though they are paid minimal amounts compared with the final value of the wood.

The Framework for Engagement

Considering the stumbling blocks and pitfalls that prevent many Christians from taking action concerning the environment, then what must we do? The following extracts from a paper by Calvin deWitt entitled 'Preparing the way to action'⁶ provide a useful framework that may help us to think how to address this question:

The simple, yet profound, response to this question appears to be this: 'Love God as redeemer *and* creator, acknowledge God's love of the world, be open to the leading of the Holy Spirit, and act upon this by following Jesus who creates, upholds, and reconciles all things' (Colossians 1.15–20; John 1.1–5).

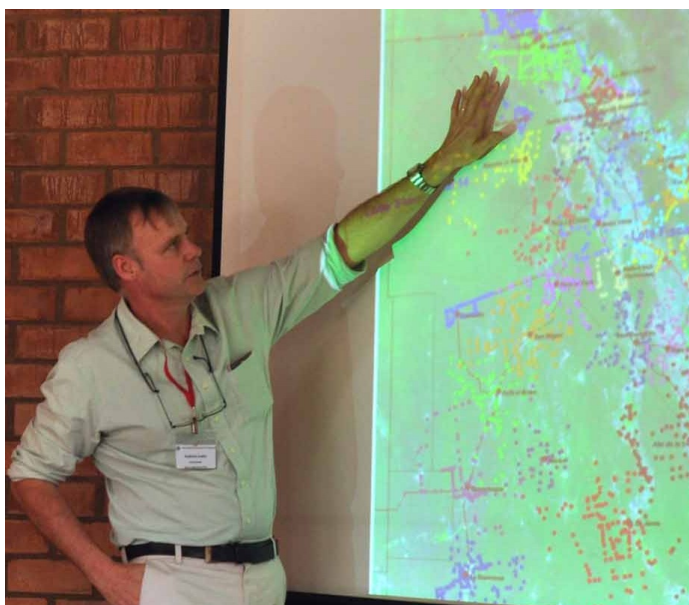
But a serious problem remains: most people today have been alienated from the Creator and God's creation, and thus it is difficult to love, uphold, and make right again a world that we really do not know. Therefore, many will first have to become aware of creation and its God-declared goodness. Once we have gained awareness, we then can move to appreciation, and from appreciation on to stewardship.

Here is a helpful framework:

1. *Awareness* (seeing, identifying, naming, locating)
2. *Appreciation* (tolerating, respecting, valuing, esteeming, cherishing), and
3. *Stewardship* (using, restoring, serving, keeping, entrusting).

Alongside these three steps is research. For example, learning from Indigenous people, asking questions such as, 'what do you eat and where do you get it from?'

John 20.24–29: 'Unless I see the nail marks in his hands and put my finger where the nails were, and put my hand into his side, I will not believe...'. 'Put your finger here; see my hands. Reach out your hand and put it into my side.



Dr Andrew Leake points out the extent of deforestation in northern Argentina

⁶ See www.asa3.org/ASA/PSCF/1994/PSCF6-94DeWitt.html.

Stop doubting and believe...'. Thomas said to him, 'My Lord and my God!'

Jesus addresses the one who needs the facts. Facts are needed. Presenting challenging facts to meetings of enquiry into the impacts of deforestation may not be welcomed, but they are needed, not least to contradict false facts being disseminated.

Philippians 1.9: 'And this is my prayer: that your love may abound more and more in knowledge and depth of insight, so that you may be able to discern what is best and may be pure and blameless for the day of Christ, filled with the fruit of righteousness that comes through Jesus Christ—to the glory and praise of God.'

ASOCIANA: Social Action

ASOCIANA is a non-governmental organisation (NGO) established by the Anglican Church in Argentina to address the social needs of the Indigenous communities within its Diocese. Initially its work focussed on the provision of services such as health and education. It has since moved to a rights-based approach, seeking to empower Indigenous people to claim their lawful rights to land and to protect the forests that they depend on for their livelihoods.

In Northern Argentina, Indigenous people live in small communities in the forest and along the rivers, and subsist on fishing, hunting, gathering wild fruits and making handicrafts. As deforestation has expanded, communities have lost access to their forests. Increasingly desperate, they occasionally will stop a bulldozer by standing in front of it but, over time, more and more communities are ending up as isolated islands in a sea of soya bean fields.

ASOCIANA has focussed its work on researching and mapping the expansion of deforestation into the Gran Chaco. It has also enabled communities to map their own territories, and make detailed documentation of their land



Image: ©2012 Europa Technologies; ©2012 MapLink/Tele Atlas
US Dept of State Geographer; © 2012 Google

and resource usage. ASOCIANA has helped communities to do this through a process of participatory mapping, in which local knowledge is combined with satellite images and field data gathered using the Global Positioning System (GPS). This has literally put the Indigenous people on the map! This information is then used by them to support their claims to their ancestral rights to the lands and forests.

ASOCIANA's work with mapping has played a key role in getting the local government to take Indigenous land claims more seriously than they were otherwise doing. Prior to this work, Indigenous people approaching the government had no means through which to indicate exactly which land their claims related to. Having this data has, for example, contributed to the imposition of a temporary court injunction banning deforestation in areas inhabited by Indigenous peoples.

Land for Life: Conservation

Legalising Indigenous land rights is a painfully slow process (though it must continue). Therefore, another, line of action also being pursued in northern Argentina, is focussing on the acquisition of lands for conservation. Implemented through an initiative called *Land For Life*, this approach seeks to raise interest among ethical investors to purchase lands that can be managed for conservation with a social benefit.

If lands can be successfully acquired and managed, they can provide neighbouring communities with access to some of



Soya bean fields on deforested land in the Chaco, Salta, Argentina. Photo: Andrew Leake

the resources they need for their subsistence. Conservation on these lands will also involve ventures aimed at generating income through the sustainable use of resources. Activities may include ecotourism, bird watching, and hunting. They may also provide the basis from where initiatives can be taken to influence other land owners in the surrounding region to manage their lands more carefully, thereby encouraging agriculture production with a conservation ethic.

Land for Life is also engaged in research work, in this case scientific research focussed on the biological impact of deforestation.



Wichi family in San Ignacio, Salta, Argentina. Photo: Tom Salisbury

Reports from Provinces of the Anglican Communion with examples of environmental mitigation, 'greening' and good practice

What follows is a synthesis of provincial reports presented during ACEN's meeting and reports submitted by ACEN provincial representatives who were unable to attend. This material is arranged around the elements of ACEN's Lima Statement and Action Plan found earlier in this report. The purpose of such organisation is to give a snapshot of Anglican concern and engagement Communion-wide. Not every detail of every report will be found here so the original reports should be consulted for more information.⁷ The assignment of material to one section over another is at times arbitrary. That said, it is hoped that such a synthesis allows a global picture to emerge.

Agriculture and Food

In many parts of the world, rural livelihoods and food security have already been severely affected by agribusiness and climate change. Governments and churches are responding in a variety of ways.

In **Burundi**, soil erosion, deforestation and unpredictable rainfall have worsened the already fragile livelihoods of many thousands of its people. With support from Christian Aid and Episcopal Relief and Development, the Anglican Church of Burundi initiated a three-year project to help communities understand the negative effects of climate change and develop adaptation strategies.



Photo: Anglican Church of Burundi

The project has included an integrated food security programme and agroforestry, whereby trees and agricultural crops such as bananas, sweet potatoes, cassava tubers, maize, beans, pineapples and vegetables are grown on the same piece of land. It is estimated that over 50 schools and thousands of households have benefitted directly or indirectly as a result. Capacity building for communities, pastors and staff has been a main focus of the project. The three-year time period ended in 2011 but the Anglican Church of Burundi hopes to continue the programme, with support, since the needs are still great.

Reports from the Anglican Church in **Aotearoa, New Zealand and Polynesia** and the Anglican Church of **Tanzania**

also identified the impact on agriculture of soil erosion and degradation as a significant problem. In the Dodoma region of Tanzania, where 90 per cent of the increasing population depends on the land for their livelihood, the government initiated the *Hifadhi Ardhi Dodoma* (HADO) project with a view, in part, to conserving soil and water and reclaiming depleted land. The project has raised and distributed millions of tree and fruit seedlings and encourages local communities, including parishes of the Anglican Church of Tanzania, to use the zero grazing method (by which animals are kept in stalls and a 'cut and carry' fodder system is used) and reduce the number of livestock in order to reduce soil erosion.

In **Mexico**, agriculture involves a fifth of the workforce. Crops include sugar cane, grasses, grains, coffee, cotton, cacao, and fruits and vegetables. Genetically altered seeds are a huge problem, especially corn, which is one of Mexico's major crops and, along with beans and chilies, is a staple item in the Mexican's diet. Farmers who plant native varieties are constantly threatened by cross-contamination. The farmers who use the altered seeds have to use more chemical fertilisers and have to buy new seeds for each crop as they do not reproduce themselves. Heavy rains and flooding during the rainy season wipe away precious topsoil and carry waste matter to Mexico's few rivers and eventually to the ocean.

Genetic modification of food has also caused concern in the Anglican Church of **Southern Africa**. The 2003 Synod of the Diocese of Natal authorised the diocesan Environment Committee to monitor the genetic modification of food in South Africa. This was done through the collection of newspaper articles on the subject as well as through the gathering of information from organisations that work on the issue. In 2007, following a presentation on food sovereignty at a traditional foods workshop at the botanical gardens in Durban, the Environment Committee worked on a book to promote the use of traditional vegetables. Written by Mary Kleinenberg and published in 2009, the book is called *Afro-Veg: Traditional vegetables, nutritional benefits and recipes*.

⁷ See <http://acen.anglicancommunion.org/resources/documents.cfm>.



Looking at traditional food plants at Durban Botanic Gardens.
Photo: Anglican Church of Southern Africa

In Southern Africa, as in other parts of the world, many Anglican women live in impoverished rural areas where the survival and health of their extended families depend on knowledge of their environment and skills in the careful use of local resources to provide nourishment and health. Intimate understanding of the use of Indigenous plants and vegetables is unfortunately sometimes lost in the move to peri-urban informal settlements and township surroundings. Yet many women do still cultivate their vegetable gardens when they have the space. Community vegetable and herb gardens are increasingly encouraged by local parishes.

In **Bangladesh**, climate change is already affecting food production and poses a severe threat to food security; for example by 2050, 8 per cent smaller rice harvests and 32 per cent smaller wheat harvests now look likely. Even conservative studies estimate that Bangladesh will lose between 17,000 and 22,000 square kilometres of land, nearly one third of the country in the southern part, due to a rise in sea level of 1 to 1.5 metres by 2050. Since 1981 the Church of Bangladesh Social Development Programme has been very aware of the environmental degradation and pollution caused mainly by the use of chemical fertilisers and pesticides and the indiscriminate felling of trees for cooking and brick fields. More positively, recent projects, often in cooperation with local NGOs, include developing nurseries, and encouraging floating gardens, kitchen gardens, drip irrigation for vegetables, and the growing of wild vegetables and medicinal plants.

Farming in **Australia** is vulnerable to climate change but skilful management is expected to alleviate some of this vulnerability. Higher carbon dioxide levels, fewer frosts and changed rainfall patterns may be beneficial to agriculture in some parts of Australia, but decreases in rainfall in other Australian regions are likely to have a detrimental effect on agriculture.

In **Brazil**, areas once protected are now used for the expansion of farming, generating threats to Indigenous

populations, rivers and bird migration. The Primate and the Secretary General of the Igreja Episcopal Anglicana do Brasil (IEAB) recently visited areas in the state of Rondônia where the church is significantly involved in mission. They could see for themselves the sad reality of deforestation where large forest areas have been flattened into grasslands to raise livestock. Many parishioners have blamed farmers for the high price of meat for the Brazilian population because cattle breeders are mostly interested in exporting the meat. The former forest areas that have been transformed into pasture for cattle are now called 'beefsteak plantations'.

IEAB is a relatively small church in Brazil but has an extensive reach. It has been trying to increase its understanding of how it can best engage with environmental issues. The Diocese of Southern Brazil, for example, has been producing and distributing seeds to plant in local communities.



The Primate and Secretary General of IEAB visit the state of Rondônia. Photo: IEAB

In the **Greater Horn of Africa**, especially in Ethiopia, Somalia and Kenya, an estimated 17.5 million people currently face food shortages caused by erratic rainfall and severe droughts linked to global warming. Deforestation, soil erosion, overgrazing and farming without using manure have exacerbated the problem.

For the Anglican Church of **Kenya** (ACK) food security for all is of primary concern, especially through Indigenous means of food production and avoiding dependence on external means of agricultural production. In order to mitigate soil erosion and enhance food security, the promotion of practices that enhance the fertility of the soil remains essential, especially soil conservation through contoured terracing, the use of natural compost, fallow farming, and mixed cropping with staple foods appropriate for each specific zone.

In 2009, Kenya experienced one of the most prolonged drought seasons in its history, with a third of the population facing starvation occasioned by massive food shortages. Formerly reliable rainfall had erratic patterns causing a drastic drop in food production thus increasing food prices. Livestock health was also affected due to a lack of pasture and water. Malnutrition levels increased especially among vulnerable groups in the pastoral, agro-pastoral and marginal agricultural districts. Among them are the Maasai who are a semi-nomadic people whose income is based on rearing and trading livestock such as cattle, goats and sheep. With the grazing lands limited and no more opportunities for territorial expansion, the large herds furthered environmental degradation of Maasai land through overgrazing and consequent erosion. During the drought season hundreds of livestock died; thus the emerging need for alternative livelihoods.

Through trainings and distribution of certified planting seeds, the community was encouraged to substitute the traditional animal keeping practice with agriculture. On a subsistence scale, food production of maize, potatoes and kales was embraced as a new practice. Water structures have been repaired to conserve water for dry seasons. Trainings were also held on traditional beekeeping and management as an additional means of diversification.



Community members on their farm in Emarti Kajiado, Kenya.
Photo: Anglican Church of Kenya

The Directorate of Social Services of the Anglican Church of Kenya based its selection criteria for the response areas on the extent of the drought and the vulnerability of its people, among them widows, orphans, the elderly and those infected or affected by HIV/AIDS.

According to Maasai culture, women herd the goats and sheep. To support them, there was a need for restocking for continued source of milk, meat and also trading with other items. In Kajiado, 71 households in the Oloilei, Olorukoti and Emarti areas were identified, each receiving two sheep and one goat.

During the drought, women and children had to walk long distances to fetch water carrying 20 litre jerry cans on their

backs. A shallow well was dug in Intinyika and water tanks installed for storage thus providing water for the locals and their livestock. Unlike other interventions which are periodic, the response will continue addressing the needs of local people such as lack of food and water in case of another bout of drought.



Project staff from various regions visit the Ukamba Christian Community Services drip irrigation project. Photo: ACK

The Ukambani area of Kenya is now characterised by long dry spells and insufficient water leading to regional droughts every year. The Ukamba Christian Community Services initiated the Wanzauni Livelihood Improvement Project in the area with the aim of improving livelihoods through water harvesting facilitated through the construction of sand dams, drip irrigation and organic farming.

The construction of the Kwa Muaa Sand Dam along Ngwani River has enabled the harvesting of water after the short rains and now the community is accessing the water by scooping sand from the river bed. The water is being used for domestic and livestock use, as well as small scale irrigation. The construction of the sand dam has contributed to the reduction of the walking distance for water from five to four kilometres. An increase in the number of water catchment points has greatly reduced waiting times at the source.

Five demonstration farms have been established to train farmers on the importance of drip irrigation and efficiently utilising water harvested from the sand dams. The farmers have planted vegetables in the demonstration farms and there is increased access and availability of fresh vegetables



Drawing water from a sand dam. Photo: ACK



locally. The farmer groups have also been trained on good agricultural practices such as integrated pest management and use of organic fertilisers. For ownership and sustainability, the local project management committee has been trained on organisational development and is able to conduct monthly review meetings.

In **Madagascar**, people have been taught to grow vegetables in bags and to mark circles of land for particular crops so that watering can be targeted. Water pumps have been used to irrigate the land.

In **Great Britain and Ireland**, churches have been invited to adopt the theme *Our Daily Bread – Food in God's Creation* and to use resources developed by Churches Together in Britain and Ireland on one particular Sunday or throughout the five weeks of Creation Time, 1 September to 4 October each year. These resources are free to download and include sermon outlines, prayers, an order of service with accompanying PowerPoint slides, group study notes, harvest thanksgiving ideas and background information on food and agriculture.⁸

Livestock farmers in many remote rural areas in **Scotland** are experiencing depressed incomes. Declining support services such as public transport, affordable housing and accessible health care and out-migration of school leavers and graduates are threatening the long-term viability of small communities. Along with the rest of Scotland, these communities are beginning to report the impacts of climate change: increased flood risk; changes in length of the growing season; changes in biodiversity. A report of the Scottish Episcopal Church's Rural Commission to the 2009 General Synod provided an insightful commentary on these issues and practical ways in which the Church could assist rural communities in addressing these challenges.⁹

In western **Canada** and upstate New York in the **USA**, many Anglicans participate in local food initiatives as a way of supporting local agriculture, gaining access to nutritional and in some cases organically grown vegetables and meat products. Local food initiatives enrich community life and often provide important shared mission opportunities for local churches and dioceses.

Biodiversity

In **Australia**, the impact of climate change on plants and animals will be variable. Habitat will expand for some species, while for others it will contract. However, the inability of many species to migrate as a result of both land use change and habitat fragmentation means that biodiversity is likely to decline overall, in line with observed global trends. Higher temperatures on the forested mountaintops of northeast Queensland, for example, may exceed the heat tolerance of some endemic species in the wet tropics, resulting in their extinction.

In **Bangladesh**, the changes in temperature and water resources resulting from climate change will have a direct impact on many climate-sensitive species and cause increased erosion and deterioration of soil quality in many upland forested areas. Increased rainfall intensity will increase erosion upstream and cause sedimentation. Saline intrusion is already a major problem in the Sundarbans (mangrove forests). Increased precipitation will also cause an increase in freshwater flows from the major distributaries with but the extent to which this may offset salinity intrusion is uncertain.

Mexico is immensely rich in wild life and is home to around 10 per cent of the world's biodiversity can be found in Mexico. It is number one in the world in terms of species of reptiles, number two for mammals, fourth for amphibians, and fifth for plants. A system of Protected Natural Areas covers 15.9 per cent of the country.

Brazil comprises different ecosystems such as the Amazon Rainforest, recognised as having the highest biodiversity in the world, the Atlantic Forest in the south and the Cerrado in the centre of the country. Environmental preservation areas are decreasing as farming expands, thus generating threats to Indigenous populations, rivers and migration of birds.

The dengue virus, transmitted primarily by the *Aedes* mosquito, has been endemic in **Malaysia** for years. Genetically modified mosquitoes have been proposed as a solution to curb its spread. The mutant male mosquitoes do not produce any offspring and help lower the mosquito population. Great fears, however, have been expressed over this experiment as experts say removing the mosquito from the ecosystem could wreak havoc on other species, and ultimately, the environment.

In 2010, the Selangor Agricultural Development Corporation, a federal agency, proposed converting the 7,000 hectare Kuala Langat forest reserve into oil palm plantations. The clearing of the forest could reportedly generate a billion Malaysian Ringgit in timber revenue. Selangor Executive Councillor for the Environment, Elizabeth Wong, has led opposition to this proposal. A biodiversity audit, done with the assistance of environmental groups, found tapirs, sun bears, white-handed gibbons and rare trees.

Singapore's rapid development has seen the country lose 90 per cent of its forest, 67 per cent of its birds, about 40 per cent of its mammals and 5 per cent of its amphibians and reptiles.

⁸ See www.ctbi.org.uk/creationtime.

⁹ The report is on-line at <http://tinyurl.com/me7xqd>.

Climate Change, Climate Effects, Environmental Refugees

In terms of the impact of climate change few places in the world will experience the range of effects and the severity of changes that will occur in **Bangladesh**:

- rise in average temperature
- more extreme hot and cold spells
- less rainfall when it is most needed for agriculture, but more in the monsoon when it already causes floods
- melting of glaciers in the source areas of Bangladesh's rivers, altering the hydrological cycle
- more powerful tornados and cyclones
- sea level rise displacing communities, turning freshwater saline and facilitating more powerful storm surges.

The impact will be intensified by the fact that Bangladesh is both one of the most populated and one of the poorest nations on earth.

Bangladesh has been ranked the third most vulnerable country in the world to sea level rise in terms of the number of people affected, and is in the top ten countries in terms of

percentage of population living in the low elevation coastal zone. Therefore the threat of communities being forced away due to the effects of climate change is one of the most severe on earth. The island of Kutubdia, just off the coast of the southern district of Cox's Bazar, has shrunk by half in less than 50 years and is expected to vanish completely in another 70 years because of erosion.

Communities uprooted from the costal belt may put pressure on, and come into conflict with, minority ethnic groups already living on the plain. It is likely that there will also be conflict in the Chittagong hill tracts as these areas belong to tribal *Adivasis* (Indigenous people) and already many Bengali communities have occupied their lands.

Mr Timothy Biswas, ACEN representative for the Church of Bangladesh reflects that:

As we celebrate the memory of Jesus, the refugee who experienced the pains and pathos of being a refugee in Egypt can be seen in the life of almost 26 million climate refugees already scattered all over the world. There will be many more to add if justice is denied towards global warming.



Barriers protect the shore at Kivalina, Alaska. Photo: Michael Schut

The ACEN representative for the Anglican Church in **Aotearoa, New Zealand and Polynesia**, Bishop Apimeleki Qiliho, reported that the likely need to resettle many island people due to climate change will require moral courage, imagination and skill. 'The possibility of brothers and sisters in the islands leaving their beloved countries is very real. The change in weather patterns affects the whole.' The rising sea level and storms present a serious challenge in several Pacific Island nations including Kiribati, Tuvalu, Nauru, and Fiji.

Climate Change is adversely affecting **Australia** with increasing severity and frequency of climate events. Floods and bushfires are now annual catastrophes. It is likely that higher temperatures and changing patterns of wind and rainfall will change the patterns and frequency of extreme fire weather, and also lead to more heat-related deaths and fewer cold-related deaths. The average surface temperature has increased by about 0.7°C since 1960, with some areas having warmed faster and some showing relatively little warming. The warming has caused an Australia-wide average increase in the frequency of extremely hot days and a decrease in the frequency of cold days.

Modelling studies indicate that rising levels of greenhouse gases have made a clear contribution to the recent observed warming across Australia. Decreases in atmospheric ozone over Antarctica and increases in greenhouse gases are also likely to have contributed significantly to climate trends that have been observed over the Southern Ocean in the past few decades, including stronger westerly winds and the southward shift of weather systems. The overall pattern of increasing pressure in mid-latitudes and decreasing pressure at high latitudes over time in the southern hemisphere is consistently seen in climate model projections and is therefore likely to be due to human-induced climate change through a combination of increases in greenhouse gases and decreases in stratospheric ozone.

At Kivalina, a traditional Inupiat village in **Alaska** (where The Episcopal Church has a diocese), coastal ice used to form in October and protect the land from winter winds and storms. The ice no longer forms, which means that land is being lost.

Climate Justice and Advocacy

In **Tanzania**, the Anglican Church of Tanzania (ACT) is a member of the Christian Council of Tanzania, which has a department dealing with economic injustice and the integrity of creation. This department is helping to lift up the voice of Indigenous people so that they are taken into account by investors, especially when economic activity is affecting them socially and economically.

Since environmental degradation and climate impact constitute a single justice issue, Anglicans in **Bangladesh** network with Tearfund, other churches and secular bodies so that strong advocacy and lobbying can be taken from

grassroot level to national level. Former Moderator Bishop of the Church of Bangladesh, the Rt Revd Michael Baroi, and the present Moderator Bishop, the Rt Revd Paul Sarker, have spoken on many occasions, for example, in the General Assemblies of the Church of Scotland and during the 2008 Lambeth Conference, in favour of climate justice and on behalf of the poor and severely affected countries.

In **South Africa**, many Anglicans have become more deeply involved in activism for economic and environmental justice. The Southern African Faith Communities Environment Institute (SAFCEI)¹⁰ was founded and most recently has been mobilising and organising faith communities around COP17 in Durban.



Bishop Geoff Davies, Executive Director of SAFCEI, with Kenyan Nobel Peace Laureate, Professor Wangari Maathii, at the launch of SAFCEI in 2005. Photo: SAFCEI

In **Brazil**, the Igreja Episcopal Anglicana do Brasil parish of Holy Trinity in São Paulo held an event to mark its participation in the *Primavera para a Vida* (Spring for Life) campaign promoted by the ecumenical body *Coordenação Ecológica de Serviço* (CESE) and involving Christian churches and social justice groups such as the People-with-no-Land Movement, the Recycling Workers Movement, and the Movement of the Homeless. The event was opened with a lecture by Leonardo Boff, a respected figure in the causes of liberation theology who has made important contributions to the life and mission of the churches.

In the **USA**, The Episcopal Church interacts closely with the National Council of Churches' Eco-Justice Office. Members of a number of mainline Protestant denominations as well as the Orthodox Church are actively involved in the Eco-Justice Working Group which significantly guides the work of the Eco-Justice Office itself. The Office engages in a good deal of advocacy in Washington, DC – particularly on energy, climate change, and environmental health and justice issues.

¹⁰ See <http://safcei.org>.

Floyd Lalwet, Provincial Secretary of the Episcopal Church of the **Philippines**, and Michael Schut, Economic and Environmental Affairs Officer for The Episcopal Church based in Seattle, **USA**, are developing a programme of information-sharing between their churches. Floyd had pointed out that, 'Villagers sometimes question why they should engage in environmental and creation care work when those responsible for the problem – those who over-consume – seem to do so little'. In response, Mike reflected on how eco-justice, or perhaps climate justice specifically, might become an issue around which the churches of the Anglican Communion could work together: 'Could churches in the USA be inspired by connecting their actions to reduce greenhouse gas emissions with people directly impacted by those emissions?'

From this discussion came the idea of a pilot partnership between TEC's Diocese of Olympia in the USA and the Episcopal Diocese of the Southern Philippines. The partnership is still in its development phase, but the idea is that churches in the Diocese of Olympia that have committed to greening their church and reducing greenhouse gas emissions, would be partnered with churches, or perhaps schools, in the Philippines. In recognition of their work, the Filipino church or school would engage in environmental action, for example, planting trees. Such a project could provide a model from which churches in other parts of the Anglican Communion could learn and apply globally.

In **Scotland**, the threat posed by climate change both locally and globally has been brought repeatedly before the General Synods of the Scottish Episcopal Church (SEC). Motions urging governments to develop policies to meet the challenge of ever-increasing greenhouse gas emissions have been combined with initiatives by SEC's Church in Society Committee to promote ownership of the issue by congregations and individual church members. Congregations eager to take up this challenge have used resources developed or promoted by Eco-Congregation Scotland. The congregation of St John's Church in Edinburgh has developed its own in-house activities funded by the Government's Climate Challenge Fund. One of the key outcomes of St John's *Let the Earth be Glad*¹¹ programme was a 25 per cent reduction in energy use by 40 people between 2007 and 2009. By January 2011, 60 more members of the congregation were participating and the programme was being promoted among other churches and faith groups.

Corporate and Consumer Responsibility

Corporate and individual attitudes and practices must change in the face of climate change and environmental degradation. This is a shared responsibility.

In **Tanzania**, the Anglican Church of Tanzania (ACT) is currently running a solar light programme for the entire country through its head office and dioceses. Solar equipment is used in rural and urban areas, reducing the use of dangerous and polluting kerosene lamps and reducing carbon emissions. In ACT's five-year strategic plan, 'Objective Two' aims to enable the Church and communities to use all resources responsibly and empower individuals to realise holistic development. This will include training church and community members and providing them with the skills needed to improve the environment.

The Vision and Mission of the Anglican Church of Tanzania

Vision: To have a sustainable Church working together effectively for the growth of God's kingdom through prayer, worship, preaching, teaching, pastoral care and social services.

Mission: To proclaim the Kingdom of God through spiritual and socio-economic transformation and empowerment of individuals and communities to experience the fullness of life in God.

In **Southern Africa**, Archbishop Thabo Makgoba has shown courageous leadership in the environmental field. He has bravely challenged Eskom (a South African electricity public utility and the largest producer of electricity in Africa), and has advocated for the development and use of renewable energy. Also from South Africa, comes this prayer incorporating the language of social and corporate responsibility:

Holy Father–Mother God

We hold up for your Healing and Love the soils, holes [mines], streams, humans and creatures experiencing the toxic effects of acid mine drainage. May the myriad characters with their competing interests cooperate and act for good.

We pray that the Government of South Africa will exercise responsibility to guard the nation's water resources. We pray for the courageous activists opening up the political space and building awareness, that their efforts will bear the fruits of Justice and Healing.

We pray against corruption and denialism of both climate change and the dangers of acid mine drainage, that people of integrity and truth will be chosen for positions of influence and power.

For the humans and non-humans living in dangerous circumstances we pray for justice, that the Life you have given may prosper and be in celebration.

While the carbon emission rate in **Bangladesh** is only 0.3 tonnes per person per year, Church of Bangladesh ACEN representative Mr Timothy Biswas points out that it is one of the hardest hit countries in the world 'due to the

¹¹ See www.earthbeglad.org.uk.

economic supremacy and lust of wealth of some western and Asian counties’.

In the present context, with high rates of emission of greenhouse gas by the industrial countries ... the climate issue first needs to be considered as a justice issue and for that we need to plan proper advocacy at different levels for changing the lifestyle of populations causing global warming and, at the same time, educating others not to adapt or follow the same western life style and trend of economic development. And the priority should be reducing carbon emission by all who are major contributors to global warming and severely affecting the innocents’ countries.

Timothy Biswas, ACEN representative, Church of Bangladesh

In **Mexico**, good laws are in place concerning social and environmental issues but there is insufficient vigilance regarding their application. Greed is a problem, according to the ACEN representative for the Anglican Church of Mexico, Mrs Anne Hill Mayagoitia: ‘An example involves people who clandestinely collect turtle eggs because they can be sold for a large amount of money and are purported to be aphrodisiac in nature. But, fortunately, hundreds of volunteers swarm to the beaches to help protect the baby turtles and direct them to the water after they hatch.’

Economic growth in **Brazil** in recent years has had an impact on the environment. The growth of different social classes in urban regions has increased energy consumption. Intensive migration into cities has increased urban pollution and carbon footprints.

In **Malaysia**, the federal government intends to build the Kuala Lumpur Outer Ring Road through the Selangor State Park to ease traffic congestion. This is in spite of the park being categorised as an ‘Environmentally Sensitive Area’ under the National Physical Plan. It serves as an important water catchment area and, as such, no development except for eco-tourism, research and education purposes should occur there.

The highway was originally designed to cut through the park and a potential UNESCO World Heritage site, the Klang Gates Quartz Ridge. The Selangor government convinced the developer to dig a tunnel to avoid damaging the quartz ridge last November. But it remains to be seen whether they can also persuade the developer to re-route the Kuala Lumpur Outer Ring Road away from the state park. Public outcry, not just from environmental groups but also concerned residents, continues.

Also in Malaysia, the *No Plastic Bags* campaign commenced in Penang in 2009 is now nationwide. Plastic bags are no longer free of charge on Saturdays except in Penang, where they are never free. Although the campaign may reduce reliance on plastic bags, it is mainly symbolic. The campaign helps consumers to rethink the impact on the environment of a ‘use and throw away’ approach but is unlikely to eliminate all use of plastics bags, or plastics.

In **Indonesia**, areas of particular concern include forests and fisheries. One problem is the lack of transparency in the processes controlling access to such resources. Other problems include weak natural resource governance, poor institutional coordination, limited monitoring of natural resources and environmental quality parameters.

Singapore has taken environmental issues seriously since its independence almost 50 years ago but its headlong rush into developing a modern megalopolis over the last 30 years has taken a terrible toll on its natural environment. The Republic of Singapore has frequently been cited as having one of the highest per capita carbon emissions globally by the Energy Information Administration (EIA), which provides energy statistics to the USA government, factoring in data such as carbon emissions from bunker fuel, aviation and refining processes.

Canada is described by many as a ‘petro-state’. According to the ACEN representative for the Anglican Church of Canada, the Revd Ken Gray, the biggest challenge in addressing limits to growth, discussing transitional economies and thinking about resources, community and sustainability, is the ever present dominance of neoliberal politics and economics. ‘Complaint comes with an occasional whimper from, among others, faith groups including Anglicans.’

KAIROS Canada – a movement which unites several churches and religious organisations in action for ecological justice and human rights – undertook a fact finding trip to the Alberta tar sands in 2009. Their findings and reflections are described on the KAIROS Canada website.¹² Their recommendations were as follows:

1. No further approvals for tar sands projects.
2. Support Indigenous communities’ and environmental groups’ longstanding calls for independent studies, funded by the Alberta and federal governments, on the cumulative impacts of the tar sands development, especially on health, water and ecosystems. These studies must involve Indigenous people and be accessible to them and the public.
3. The federal government must develop a clean and sustainable energy strategy, based on conservation and the development of renewable energy as well as a funded transition plan for sustainable jobs in a renewable energy sector. The principles of ecological sustainability and Indigenous Rights must be applied to the development of renewable energy projects.

Given the refusal of governments at all levels in Canada to restrain Alberta Tar Sands expansion and development, and given Canada’s attentiveness to market trends, it seems that the best way to influence change in Canadian mining and resource extraction is through Social Responsible Investing (SRI) practices. The question is not so much ‘what to say?’ but ‘to whom must we speak?’

¹² See www.kairoscanada.org/sustainability/the-tar-sands/.

Early in 2010 FairPensions,¹³ a UK-based charity, let ACEN know that shareholder resolutions concerning risk factors associated with the expansion of tar sands would be moved at the annual general meetings of Royal Dutch Shell and British Petroleum. The supporting statement for the shareholder resolution to Royal Dutch Shell included the following:

At a time of growing international consensus regarding the need to regulate and price greenhouse gas emissions there is a risk of significant costs arising from future [Canadian Oil Sands] projects. It involves a method of oil production that is among the most energy and carbon intensive of any used in the oil industry producing on average three times the greenhouse gas emissions of conventional production.

The resolutions were not only discussed at the 2010 annual general meetings, but also found some support. This was encouraging news.

In no other sphere of current concern has there been a more religious tone to public awareness than in dealing with issues concerning the natural environment. For it is here that we come face to face with the fundamental question of our place in the universe and our responsibilities for it; with the destructive potential of our human intervention on the one hand, and on the other, the awe-inspiring beauties of so many life forms now at risk due to climate change...

We do not own the natural environment. We are its trustees on behalf of God for the sake of future generations. Life forms are not inventions but discoveries. They are I believe God's loan to us, entrusted to our collective care. Not only do we not own nature but we are duty bound to respect its integrity...

I believe the implied condition is that we would use nature in such a way so as to be faithful to the Creator's purpose. Hence, the mandate to exercise dominion is not technical but moral and is limited by the obligation to protect and conserve ... In that respect, I come here to reaffirm on behalf of the Anglican Church in Aotearoa, New Zealand and Polynesia the call that we as Christians have a God-given mandate to care for, look after and protect God's creation.

Bishop Apimeleki Qiliho, ACEN representative for the Anglican Church in Aotearoa, New Zealand & Polynesia

COP17

While ACEN representatives were meeting in Peru, the Anglican Church of **Southern Africa** (ACSA) and other churches and faith groups were preparing for widespread and significant action around the 17th Conference of the Parties (COP17) to the United Nations Framework Convention on Climate Change (UNFCCC) scheduled for November 2011 in Durban. This conference was the latest in the climate change negotiation process between the nations of the world in attempting to reach a binding agreement regarding greenhouse gas emissions.

ACEN representative for ACSA, the Revd Tim Gray, related how COP15 in Copenhagen in 2009 had ended with fatigue and disappointment, though optimism had surrounded the civil society initiative '350.org' - despite the fact that returning to 350 parts of carbon dioxide per million is now seen to be unachievable in the near future. In fact, an increase is inevitable, so scientists are looking at what the implications are of increased levels: 450 and 550 parts of carbon dioxide per million. We are currently at 390 parts per million.

The Archbishop of Canterbury has noted that with 6.9 billion people, a safe emission per person is 2 tonnes per person per year. Australians emit 24 tonnes per person per year, for example, and Ethiopia emits less than 1 tonne per person. For reasons of justice, Ethiopia and other nations should be allowed to develop and emit more, which means that over-emitters must make drastic reductions.

COP16 in Cancun, Mexico, in 2010 rescued something from the Copenhagen conference in terms of transparency, and a Green Climate Fund was established, diverting funds from developed to developing countries. A process was saved but not the planet.

Environmentalists in South Africa, the host country for COP17, were concerned that the President of the Republic did not mention COP17 in his February 2011 State of the Nation address. However, a few days later, the Minister of International Relations and Cooperation was asked to chair the conference, with the Minister for Environmental Affairs leading the South African delegation.

SAFCEI took the lead in mobilising faith groups in Southern Africa and two conferences of faith leaders took place, in Lusaka, Zambia, in May and in Nairobi, Kenya, in June 2011. Statements were issued by both conferences and the 'Pan African Inter Faith Statement' from the 130 faith leaders



Logo: Matthew Anderson. www.350.org

¹³ FairPensions promotes responsible investment by pension funds and fund managers, using shareholder power to hold companies to account. It brings together leading charities, trade unions, faith groups and individual investors, and aims to catalyse a shift at each level of the investment chain, so that responsible investment becomes the norm. See www.fairpensions.org.uk.



African faith leaders in Nairobi, Kenya in June 2011. Photo: SAFCEI

gathered in Nairobi is included as an appendix to the ACEN Lima Statement.¹⁴ This statement highlights anthropogenic climate change as an issue of justice, ethics and peace, and challenges the nations of the world not to see economics as the sole criterion for adjudging national and global well being.

It is clear that Africa needs to make its voice heard in regard to climate change. Of the 28 countries adjudged worst affected by climate change, 22 are in Africa. Previously, faith communities generally in Southern Africa had not added their voice to the climate change debate and seemed to have failed to hear the appeals of its own people increasingly threatened by intensifying drought and flood patterns. These events continue to be seen as weather issues and are seldom associated with the fossil fuel energy demands of industry and technology.

Further events scheduled to take place in Durban included a Faith Communities Rally hosted by Archbishop Emeritus Desmond Tutu on 27 November – the day before the official opening of COP17; the handing over of a 'We have faith: Act now for climate justice' petition to world leaders attending COP17; a Global Day of Action march through the city on 3 December, and a Service of Prayer on 4 December to pray for the success of the talks – all with the intention of sending a clear message to the political leaders of the world that, for the sake of our people and our planet, and in obedience to our Creator, COP17 must arrive at an

agreement based on moral principles that help protect and preserve the world for future generations.

COP17 would be an 'Africa opportunity'. The continent is already highly affected by climate change which, in many ways, reflects historic exploitation. This would therefore be



COP17/CMP7
UNITED NATIONS
 CLIMATE CHANGE CONFERENCE 2011
DURBAN, SOUTH AFRICA

Logo: The 17th Conference of the Parties (COP17) to the United Nations Framework Convention on Climate Change (UNFCCC) and the 7th Session of the Conference of the Parties serving as the Meeting of the Parties (CMP7) to the Kyoto Protocol.

¹⁴ See page 14.

a symbolic meeting and solidarity with the representatives of faith communities who would gather in Durban was important.

Deforestation and Reforestation

Forests are vital to a healthy environment. They absorb and store carbon in their trees and soil. But if forests are cleared or disturbed, this carbon is released as carbon dioxide and other greenhouse gases. Provincial reporting highlighted large-scale deforestation with disastrous implications and many churches are playing an active role in mitigation.

In **Burundi**, the most significant cause of deforestation is the collection of firewood. The country's Ministry of Energy and Mines estimates that 96.6 per cent of energy in Burundi comes from wood and, with a growing population, it is clear that deforestation will continue at an increasing rate if alternatives are not found. Other causes of deforestation are bush fires and the extension of land used for agriculture and pasture.



Archbishop Bernard Ntahoturi joins the community, promoting agro forestry and livelihoods. Photo: Anglican Church of Burundi

With support from partners, the Anglican Church of Burundi embarked on a programme of community-based natural resources management that included the reforestation of 6,000 hectares within three years and the planting of fruit trees and agroforestry.

The programme was due to come to an end in 2011 but in view of the scale of need, the Anglican Church of Burundi hoped to secure funding to continue the work.

In **Bangladesh**, over 200,000 trees for fruit and timber have been planted in areas where the Church of Bangladesh Social Development Programme is at work, with the purpose of maintaining a healthy natural environment. Tree planting continues as a main activity.

During National Environment Day in **Tanzania**, all citizens are encouraged to take part in planting trees. Religious and

political leaders and groups take part and in some instances tree-planting begins with prayers.

Bishop Apimeleki Qiliho reported that deforestation is one of the issues of particular environmental concern for **Aotearoa, New Zealand and Polynesia**, along with associated problems such as soil erosion and plant and animal extinction. For example, the lush tropical rainforest that once covered the interior of the island nation of Nauru has been cleared for phosphate mining which has scarred the land and left only a thin strip of coastline for the island's inhabitants to live on.

In the south of **Mexico** there is considerable deforestation, largely by livestock owners who destroy patches of tropical rain forest to make room to graze their cattle.

ACEN representative Professor David Morales noted that over the next few years, **Brazil** will host a number of international events: Rio +20 in 2012; the football World Cup in 2014; the Olympic Games in 2016. Given the extensive deforestation and cattle ranching in Brazil, there is concern in the country about its image in respect of the environment. Brazil is one of the world's emerging economies and if the country would make a stand on climate change, its influence would reach far beyond Brazil itself.

Meanwhile, the construction of roads through the Atlantic and Amazon forests, such as the BR-230 and BR-163, has opened up previously remote areas to agriculture and trade. A process of desertification in the northeast of the country is a consequence of burning trees. It erodes the topsoil which in Brazil is normally about 20cms or 8 inches deep, and the rains and winds disperse the nutrients.

Among activities in the IEAB to raise awareness and encourage good practice, the Diocese of Southern Brazil has been considering an initiative called *Green Growth* which is intended to inspire church members to plant native trees.

Recently in **Kenya**, the conversion of forest land to urban and agricultural use has resulted in a great reduction of water mass in the water towers. According to the United Nations Framework Convention on Climate Change (UNFCCC) secretariat, the overwhelming direct cause of deforestation is agriculture, with subsistence farming responsible for 48 per cent of deforestation and commercial agriculture accounting for 32 per cent. Acknowledging the church's responsibility concerning environmental stewardship, the Anglican Church of Kenya (ACK) has encouraged tree planting projects to mitigate the environmental degradation that has been caused by deforestation, soil erosion, and overgrazing.

The Anglican Church of Kenya is one among several provinces in the Anglican Communion that encourage congregations to mark key events such as baptisms, weddings, and the official opening of projects, by tree planting. Among ACK's educational programmes, groups of church members have been trained in tree nursery management. The tree nurseries established so far have a



Archbishop Eliud Wabukala assists tree planting in Nyeri, Kenya.
Photo: Anglican Church of Kenya

total of over 25,000 assorted seedlings for planting at the onset of rains. The project generates income for church members as the seedlings are sold to non-group members and institutions. Raising awareness of the importance of terracing, road water harvesting and good farming practices is being integrated into programmes. Biodiversity conservation is ongoing through tree planting and terracing in individual farms, with over 5,000 metres of bench terraces and cut-off drains dug so far. Diversification and micro-enterprise development is being promoted among the groups to increase food accessibility at household level and thus alleviate the impact of increased crop failure.

Indonesia faces a challenge of staggering proportions over the coming years in managing its rich forests and conserving their biodiversity. This resource not only supports economic growth by generating foreign income, but it also supports much of the country's poor rural population. Seventy-five per cent of Indonesia's poor live in rural areas, and about half are affected by the degradation of forestlands, which make up 60 per cent of the country's land area. High rates of deforestation are a result of poor governance and failure to regulate properly forest access and use. The situation has been further compounded by excessive capacity in the wood processing industry, which artificially stimulates wood demand. As a result, some of the world's most biologically rich and diverse forests are being degraded at dramatic rates. Forest loss and degradation are also undermining forest ecosystem services, such as slope stabilisation, watershed protection and carbon sequestration.

In **Thailand**, converting forested land into agricultural land using methods such as slash-and-burn (as in Malaysia and Indonesia) has greatly reduced forest cover. For example, forest cover fell drastically from 53 per cent in 1961 to 25

per cent in 1998. With a government measure in place to prohibit logging, deforestation rates have now dropped, however, the impacts of deforestation, such as erosion, are still being felt.

In **Madagascar** over 1,000 hectares of forest have been destroyed for cobalt extraction. A multinational organisation (USA, Canada, Korea, Japan) has undertaken the mining having bought the land from the government. ACEN representative Bishop Jean Paul Solo reported that the current President of Madagascar has tried to stop this but is up against big business and the government is locked into contracts. Local people were employed for the first two years, and now have been left with no jobs. In his own diocese, the Diocese of Toamasina, Bishop Jean Paul Solo has been involved with tree-planting projects for fruit production and income generation, assisted by Trinity Wall Street and USPG.

Energy and Power Generation

Energy policies are an essential component towards sustainability. **South Africa** has some of the best solar and wind resources in the world and needs to move from a coal intensive and fossil fuel based generating policy to renewable sources of energy. The Anglican Archbishop of Cape Town has given a lead in speaking out against government plans to build two new coal-fired power stations and calling for renewable energy. This is an example of a witness that faith leadership can give. Following the Archbishop's 2010 Good Friday sermon in which he challenged the South African government on its energy position, the chair of Eskom requested an opportunity to have a discussion with him.

In **Bangladesh**, the church has encouraged communities to use fuel efficient smokeless stoves and, to benefit from alternative sources of energy, has set up biogas plants and devices that make use of solar energy.

In **Mexico**, almost all electricity is generated by oil and coal. There is one nuclear plant and very little hydroelectric generation. Recently an effort has been made to generate electricity by converting wind energy. There is ample wind but local farmers have held up the project demanding considerable compensation for the use of their land. Solar power generation is expensive and also in its infancy, and is mostly used to power emergency telephones along the highways and an occasional water heater.

The construction of hydroelectric power plants means the provision of clean energy; however, they may have a significant impact on local eco-systems, forests and biodiversity, and affect the lives of Indigenous people and communities living alongside rivers. For example, the proposed Belo Monte hydroelectric dam complex on the Xingu River in the state of Pará, **Brazil**, has been heavily criticised by environmentalists. They are concerned that thousands of people will be displaced and that a significant

area of Amazon forest will be flooded. Brazil currently has one nuclear power plant with three reactors (one of which is not yet operational) at Angra dos Reis. Four to six more reactors in other parts of the country are planned to come on line by 2025, with the first units expected to begin operations in about five years' time.

In **Malaysia**, the federal government decided to 'go nuclear', announcing in May 2010 that a nuclear power plant would be built by 2021. Serious concerns were raised regarding safety and feasibility, considering the disastrous effects of accidents and shoddy radioactive waste management. Activists also questioned whether the government had exhausted renewable energy options, especially solar and biomass. Despite this, the Energy, Green Technology and Water (EGTW) Minister announced in December 2010 that Malaysia intended to build two plants, the second expected to be ready a year after the first. To date, the government has not made public its nuclear waste management plan or emergency plan detailing what steps it would take in event of a radioactive leak or natural disaster. Meanwhile, the federal government is planning to build a 300-megawatt coal plant on Sabah's pristine east coast. The environmental coalition Green Surf and other activists have been campaigning tirelessly against the plant, reminding the government to consider cleaner alternatives like biomass and geothermal energy. The plant's detailed environmental impact assessment was rejected by the government's environment department. However, in December 2010 the EGTW minister said that the proposed coal plant would go ahead, claiming it was the best option to ensure uninterrupted power supply.

Still in Malaysia, the flooding of Bakun dam began in October 2010. The flooding of the 69,000 hectare area (roughly the size of Singapore) to the top of the Bakun Dam wall (about half the height of the Petronas Twin Towers) was expected to take over seven months. Disputes over compensation for the approximately 10,000 Indigenous people displaced from their land remain unresolved. The construction of the dam began in 1996 and its cost was reported to have ballooned from 4.5 billion to 7.5 billion Malaysian Ringgit due to overrun and compensation for delays. Despite this, Bakun is just the beginning. The 944 megawatt Murum dam is currently being constructed, and it was announced in February 2010 that five more dams with a combined capacity of 3,000 megawatts are in the pipeline.

Indigenous Insights and Empowerment

Bishop Apimeleki Qiliho grew up in a village in **Fiji** and remembers the unwritten rituals for planting, harvesting and fishing. These became intrinsic to him as part of the rhythms of life. From the elders he learned about the seasons for planting and harvesting root crops, the season for certain foods to bear, the best times for fishing – night or day. He learned to watch out for signs of stormy or calm weather. He also learned about religiously significant trees,



Bishop Apimeleki Qiliho

pieces of land, animals and sea mammals which were part and parcel of a life that has deep religious significance.

His ancestors' fate was dependent on the turn of the wind, on a certain sea current, and on the fertility of the soil. These were represented by deities. Hence, if the crops failed or the breadfruit did not bear or the fish stock decreased, it was interpreted as the result of a failure to adhere to the seasonal rituals for planting, harvesting or fishing, which angered the gods. These rituals instilled a valuable sense of respect and awe towards the natural environment.

Many provincial reports to ACEN's meeting highlighted the need to understand and benefit from Indigenous insights into the integral relationship of humankind with all creation, and also to ensure that the livelihoods, well-being and historical land rights of Indigenous peoples are given due attention and respect. This is reflected under several headings in this report.

Dr Andrew Leake's account of experiences from Northern **Argentina**¹⁵ includes a description of how Indigenous people affected adversely by deforestation and associated activities can be supported and empowered.

Similar support is offered in **Brazil**, where the IEAB, in its Missionary District covering the states of Mato Grosso do Sul, Mato Grosso and Rondônia, has maintained a liaison with the Evangelical Missionary Work Group (GTME) which supports Indigenous communities in their struggles for land against the harassment of landowners and loggers.

¹⁵ See page 22

Liturgy

Where there is strong sense of God in all creation along with a faithful desire to strive to safeguard the integrity of creation and sustain and renew the life of the earth, it is a natural instinct for worshipping communities to develop patterns of worship and prayer around relevant themes and occasions. In turn, the role of liturgy is vital in the formation of our attitudes and beliefs.

Prayers from the Anglican Church of Kenya

Tree leaves and stems

Lord we praise you for the trees in the woods and forests. We recognise their beauty, their service to humankind and the positive influence they have on our health and the climate change of each region. We appreciate and pray for the protection of the world's forests and all people, animals and insects.

Conservation and tending the environment

We pray for the healing of the land. God, help us not to destroy the land and to be good stewards of the resources that ultimately belong to you.

Each year in the liturgical calendar of the Anglican Church of **Tanzania** there is a harvest ceremony whereby church members thank God for creation and for providing food for all humans and animals. Also, during the planting season, church members bring varieties of seeds, such as maize, millet, sorghum and sunflower to the church for the blessing.

The *Greening Anglican Spaces* task group of the Anglican Church of Canada developed special liturgical resources for Earth Day on 22 April 2011, which coincided with Good Friday. The confluence of the two events on a single day was an opportunity not to be missed.¹⁶

Churches in a number of Provinces make use of **Eco-Congregation** worship materials. Its country websites have links to a wealth of resources,¹⁷ including Eco-Congregation's own compendium for greening worship, *Celebrating Creation: Ideas and Resources for Worship*.

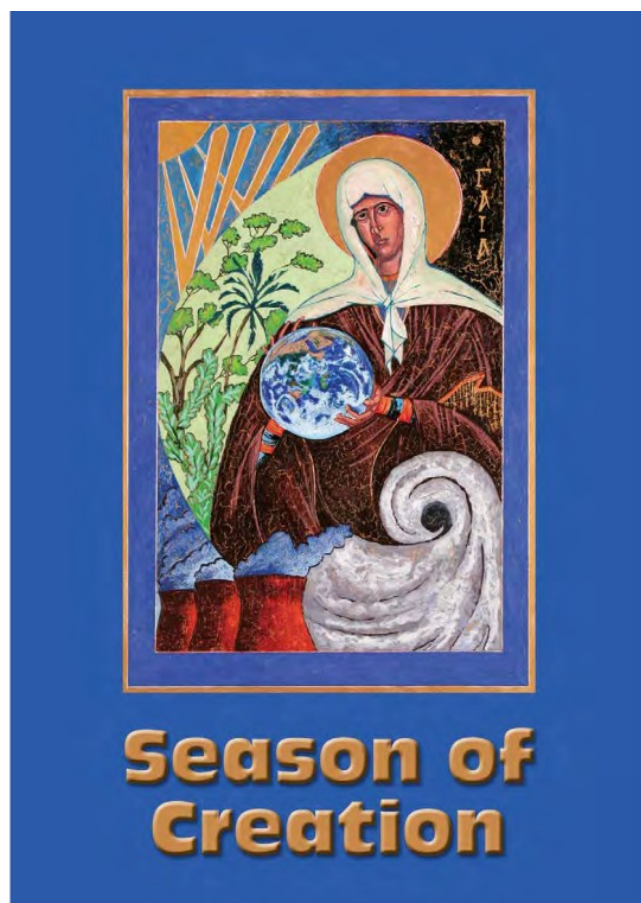
In 2009 the 76th General Convention of **The Episcopal Church** established a 'Liturgical Creation Cycle of the Pentecost Season from St Francis' Day to Advent for the purpose of affirming the sacredness of God's creation, of spreading hope about God's reconciling work in creation and an understanding of environmental stewardship and ecological justice'.

The resolution passed by General Convention directed the Standing Commission on Liturgy and Music 'to develop

prayers and other liturgical materials celebrating a Pentecost Season Creation Cycle for inclusion in the next edition of the Book of Occasional Services'. TEC's ACEN representative Michael Schut reflected that, in practical terms, this indicated some official recognition of the importance of the liturgy in forming us as people of faith in terms of how we relate to the rest of God's creation.

In 2007, the Revd Canon Rachel Mash of the Anglican Church of **Southern Africa** (ACSA) facilitated a team that developed a liturgical resource entitled *A Season of Creation*. This comprehensive collection of liturgies, theological material, and resources for study and reflection and for engaging children and youth, focuses on six environmental themes: biodiversity; land; water; climate change; greed, and stewardship.

It has been made available to all ACSA churches and can be viewed or downloaded from the publications section of ACSA's website¹⁸ or from ACEN's website.¹⁹ The material contained in *A Season of Creation* has no copyright restrictions and may be freely reproduced.



Cover icon 'Fragile Earth' by Bob Mash, Cape Town 2007

¹⁶ See www.anglican.ca/relationships/action/greening/earthdayliturgy2011.

¹⁷ For example, at <http://ew.ecocongregation.org/resources/module2>.

¹⁸ See www.anglicanchurchsa.org.

¹⁹ See http://acen.anglicancommunion.org/resources/docs/season_of_creation.pdf.

In spite of such positive signs and developments, there is considerably more to do to embrace all God's creation in the daily rhythms of our lives and faith. The Revd Canon Bruce Jenneker, Professor of Liturgy and Homiletics in Cape Town, South Africa, reflects that:

... while groups throughout the Church labour diligently at holding concern for creation before us all, we have by and large slipped into apathy again ... The Church must undertake a fresh investigation of the theology of creation and the language we use to explore it, together with a reflection on how that theology can be expressed liturgically in the context of a selfish world that is blind to the peril in which we have placed our 'island home'.

Mining

The presence of mineral resources has the potential to provide a nation with wealth and employment for its population. However, their extraction can become a curse where it fuels conflict and creates *environmental disaster*.

In **South Africa**, Acid Mine Drainage (AMD) from coal mining in the Eastern Highveld in the Mpumalanga province fouls

both the prime agricultural land of the country, and the source of the Vaal River and its tributaries. Land over the abandoned coal mines collapses and AMD poisons the soils and waters. Geologists in the country's universities have called for a moratorium on further mining in the interests of the water sources and the agricultural land.

A hundred and twenty years after gold was discovered, Gauteng province also faces the perils of AMD. The gold-bearing rocks of the Witwatersrand formed 2.5 billion years ago before the earth's atmosphere had free oxygen, but now the rocks are exposed by mining. The minerals oxidise, and the rising water in the mines brings sulphuric acid and other heavy metals (some radioactive) to the surface.

Tens of millions of litres per day foul the land and destroy river creatures. The humble Tweelopiesspruit flows from the West Rand town of Krugersdorp through a nature and game reserve. Polluted water from the West Rand also compromises and compromises the Cradle of Humankind, a UN Heritage site where pre-human remains occur in vulnerable limestone.

In the Kruger National Park, crocodiles suffer tragic effects as their body fat atrophies. A wonderful dolomitic aquifer spans a large area from the Highveld to the Kalahari, accumulated over eons as a source of precious quality water, but the AMD is entering it too.

Huge financial implications of AMD in Gauteng province cause much political jockeying ... who will foot the bill - the private sector or the taxpayer? Activists labour to hold the government accountable while the private sector looks for financially viable solutions. The 'polluter must pay' principle, wisely entrenched in South Africa's progressive water laws, comes up against the reality of abandoned mines whose owners cannot be held accountable because they have long since died or vanished.

South Africa also has lots of coal. The coal is used to generate electricity and to convert coal to gas at such high energy cost that the company Sasol's plant at Secunda is the world's single biggest emitter of carbon dioxide. South Africa is a large emitter of carbon dioxide, ranked 13th in the world by quantity and 33rd per capita.

Mexico is rich in minerals, including copper, zinc, lead, tin, sulfur and silver, where it is the second producer in the world, after the leader, **Peru**. Mexico is one of the world's largest producers of oil with vast oil and gas reserves in the Gulf of Mexico.

In **Madagascar**, cobalt mining has increased carbon production and there are concerns about radioactivity.

Mining Companies in **Australia** are in a constant contest with Aboriginal people over land use, limitation of damage and royalties following an Australian Supreme Court landmark decision to acknowledge that Australia was not *terra nullius* at the time of European invasion and dispossession.



The Tweelopiesspruit, Krugersdorp Game Reserve.
Photo: Earthlife Africa Jhb., Stephen du Toit



Alberta Tar Sands. Photo: Jiri Rezac/Greenpeace

For many in **Canada** the expansion of the Alberta Tar Sands, the largest carbon emitter on the face of the planet, provides a sound economic future and is a source of national pride; the project is an ample source of employment and a necessary generator of wealth. For others, especially within the faith communities, it is a total embarrassment no less for its huge carbon footprint and its addiction to non-renewable resources; it is a threat to local First Nations and a huge investment in traditional, fossil fuel, extraction-based industry and dependence. It is sustained by huge provincial and federal subsidies which could be re-directed towards renewable development and capacity building.

The following comes from the final text of an agreed statement of the international Ecumenical Conference on Mining held in Toronto in May 2011:

Those who came from beyond Canada's shores encountered its resource-based economy. We met in Toronto, Canada, as this country is home to 75 per cent of the world's mining and mineral exploration companies, and Canadian stock exchanges raise 40 per cent of all mineral exploration capital worldwide.

Mining activities in the global South, as well as in Canada, raise critical ethical issues of social justice and respect for God's Creation that are matters of concern for all people of faith the world over. Some speakers pointed to the role of Canadian companies that take advantage of, exacerbate or provoke conflict in contexts of weak democracies.

Many participants spoke of a crisis in the relationship between human beings and the environment. New commitment to peaceful struggle for social and ecological justice is required.

Water

The Anglican Church of **Tanzania** works with an organisation involved in construction of underground water tanks for rainwater harvesting. Some of the dioceses have been working with this organisation to help communities in rural areas, enabling them to access clean water and get light.

In **South Africa**, Nelson Mandela said at the 2002 World Summit on Sustainable Development:

One of the many things I learned as President was the centrality of water in the social, political and economic affairs of the country, the continent and the world.

Southern Africa's water-energy-food needs are a nexus of challenges. Water takes energy – to pump, purify, and desalinate. Coal-powered energy takes clean water, but the coal mining fouls water sources through acid mine drainage (AMD). Growing food needs clean soils and water and energy, but the fertilisers foul the water. On top of this, climate change might bring dryer weather and make crops more difficult to grow. The demand for water is increasing; Southern Africa's population is increasing, and it is urbanising. Many people cannot meet their basic needs of potable water, sanitation, electricity, food, and housing, so there is an urgent political imperative to supply these needs. Waste of water makes things even worse. Water sources in the form of springs, aquifers and wetlands are threatened by AMD, and the rivers and dams absorb ever greater amounts of fertilisers and urban sewage, often untreated and loaded with phosphate detergent. More water is needed but less is available. It is an urgent crisis.

The late nineteenth century discovery in South Africa of gold in huge amounts gave rise to the 11 million strong, and

growing, mega-metropolis of Johannesburg in Gauteng province, and the country of South Africa became an economic and regional power. Johannesburg is an unusual city in that it does not lie near a body of water but is on a watershed divide, the Witwatersrand ('ridge of white waters'). Water feeding the city is pumped, at an energy cost, from afar, making Johannesburg's water footprint many times larger than its geographical area. Sorely needed employment is generated by progressive conservation schemes like the *Working for Water* campaign²⁰ to remove invasive alien plants that use an excess of groundwater.

In parts of **Aotearoa, New Zealand and Polynesia**, the water is of poor quality and in short supply.

Bangladesh has a double-sided problem with water: there is both too much and too little – prolonged flooding and less potable water. Water for drinking is becoming increasingly scarce in the country's coastal belt.

Recent drought in the north of **Mexico** has hit hard. Throughout Mexico, drinking water, even though it has been through a process of purification, is still not safe to drink directly from the tap in most places. An immense amount of bottled water is sold.

Australia's rarest mineral is water which ultimately determines the 'carrying capacity' of a country with respect to its human population. The Anglican Church of Australia's Environmental Working Group prepared a discussion paper on the future of the use of water in the Murray Darling Basin. This has recently been released by the chair of the Working Group, Dr David Mitchell, and includes the following:

There are real issues of importance as the nation tries to balance the issues of human welfare in the present generation against the need to maintain the rivers and natural environment for future generations. It is a real struggle, as scripture makes it clear that God has concern for both people and the wider creation ... Recent proposals to limit the availability of water for agricultural production in order to ensure its continuing sustainability of the basin have been strongly rejected by many of those whose livelihoods may be adversely affected by such developments ... there can be no doubt that practices that have the strong likelihood of irretrievable damage to natural ecosystems must be prevented and replaced by scientifically sound, environmentally sustainable agricultural practices.

In a pastoral letter on the environment in August 2009, the Primate of **Kenya**, the Most Revd Dr Eliud Wabukala described an urgent situation:

Our rivers are drying up and our water supply is no longer adequate both in rural and urban areas. Our river-based electricity is no longer reliable because the water level on our dams goes down before the next seasonal rains are due. People spend much time, effort and money

bothering about water for domestic use. Our industries have to reduce production because of water and power cuts.²¹

Archbishop Wabukala also promoted the harvesting of rainwater and storage for future use, especially at home and in small community projects in all areas – from roofs, river valleys, streams, gulleys, farms and grazing grounds.

Wambua Muteo, 22-years-old, lives in the dry Mukaa area in Kenya and has been the sole breadwinner for himself and his two brothers since the death of their parents. Foregoing schooling to work on the inherited farm, agriculture is Wambua's only option despite prolonged drought. Produce has been negligible due to erratic rainfall. Water conservation is rare thus exposing the local people to the same severity in the eventuality of another drought. Water flows through the area towards the ocean and there has been rainfall but none was being conserved for future use. The Mukaa community-based organisation decided to build a barrier across a river so that they could trap more sand during the scarce rainy season and conserve more water. The Anglican Church of Kenya donated relief food to the area and supported the Mukaa community-based organisation in buying more than 200 bags of cement to build a sand dam. With the sand dam they are assured of being able to harvest water during the short rains for domestic use, livestock consumption and small scale irrigation.

In **Indonesia**, the provision of sewerage services is one of the lowest in Asia, at 46 per cent in rural and 69 per cent in urban areas. There is widespread contamination of surface and ground-water in urbanised areas, leading to epidemics of gastrointestinal infections and high incidence of typhoid.

In **Thailand**, as a result of growing quantities of untreated domestic sewage, industrial wastewater and solid hazardous wastes, approximately a third of Thailand's surface water bodies are considered to be of poor quality. Mean while, increased water needs are leading to tremendous pressure on Thailand's water resources; the country ranks as one of the lowest in Asia for water availability per capita.

Water is a common problem for the nations of the **Indian Ocean**. In **Madagascar**, the east coast has rainforest but areas in the south, centre and west are dry. There used to be a cyclone through Madagascar every year, but it has not come for the last three years, so there is drought.

Oceans

Pollution, over-harvesting and general habitat destruction are seriously affecting the earth's vast, yet extremely fragile marine environment. Rising sea levels associated with human-induced climate change have the potential to have disastrous impacts on human populations and the natural environment and land-use of coastal lands and islands.

²⁰ See www.dwa.gov.za/wfw.

²¹ For full text of the pastoral letter see <http://tinyurl.com/7lt9zff>.

Around **Australia**, regional ocean currents have changed. For example, there has been a southward shift of the Antarctic Circumpolar Current and an increasing southward penetration of the East Australian Current, associated with wind changes in the South Pacific.

Sea level has risen around Australia at a rate of about 1.2 millimetres per year since 1920, resulting in coastal inundation events becoming more frequent. Since the establishment of the Australian Baseline Sea level Monitoring Project in the early 1990s, sea level measured relative to the land has risen at about 2 millimetres per year in the southeast, and over 8 millimetres per year in the northwest.

Warmer ocean temperatures will lead to further changes in the distribution of marine animals and plants, with some tropical fish moving progressively southward. As a result of increased carbon dioxide in the atmosphere, oceans will become more acidic and, in combination with the higher temperatures, coral bleaching events are likely to become more frequent and severe around northern Australia.

Sea level will increase, inundating parts of the Kakadu freshwater wet lands and causing increased coastal flooding with consequent change to sandy coastlines. As sea levels rise, coastal infrastructure around Australia will become more susceptible to damage.

Brazil has an extensive Atlantic Ocean coastline of some 7,500 kilometres. The advance of the sea inland has already affected local populations.

In **Thailand** excessive fishing has reduced fish catches by as much as 90 per cent. Fishers have had to spend more time at sea to catch the same amount of fish, while the amount of 'trash fish' – commercially unimportant fish, including juveniles – per catch is also increasing. Decreasing fish stocks are leading to conflicts between small-scale fisher folk and commercial operators.

Pollution adversely affects the marine environment. Red tides, caused by excessive algal growth resulting from pollution, oil spills, and invasive species are some of the factors that are affecting Thailand's marine biodiversity. Along coastal areas, which are popular locations for tourism and urban and industrial development, populations have grown, putting coastal wetlands, coral reefs, mangroves and sea-grasses under threat.

For endangered species such as whale sharks, dugongs, and turtles, such developments represent added concerns regarding their local survival prospects.

Bangladesh has been ranked the third most vulnerable country in the world to rise in sea level in terms of the number of people affected, and in the top ten in terms of percentage of population living in the low elevation coastal zone. Therefore the threat of communities being forced away due to the effects of climate change is one of the most severe on earth. Currently almost 40 million live in the

Sea Level Risks - Bangladesh

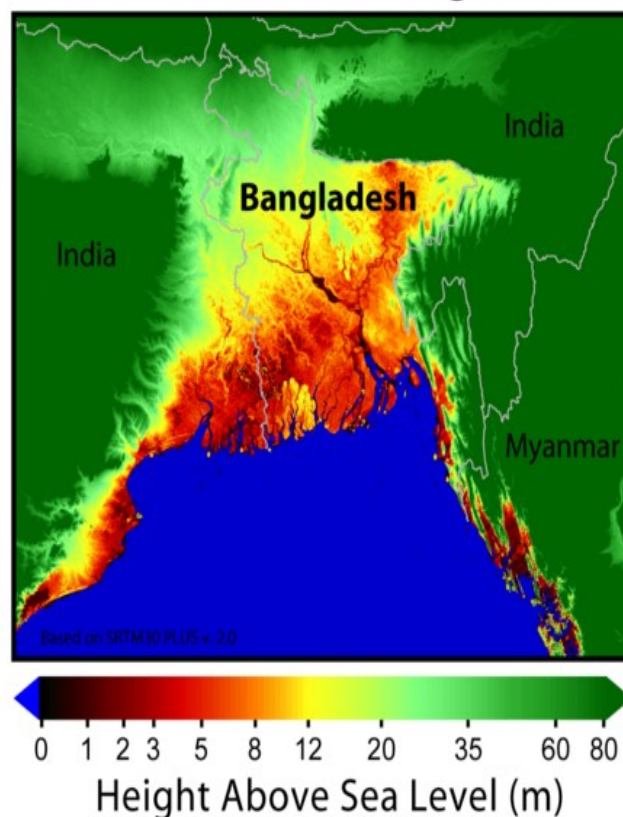


Image: Robert A Rohde/Global Warming Art

coastal areas of Bangladesh but depending on the rate of population growth, by 2080 when the situation will be more serious it could be between 51 and 97 million in this vulnerable area. In the year 2050, assuming a sea level rise

of 27cm, around 26 million people will be at a low risk and almost seven million will be at medium risk of flooding. Some 58 per cent of these people will be from the Khulna, Jhalokati, Barisal and Bagerhat districts. In the year 2080, assuming a sea level rise of 62 centimetres, 17 million, 12 million and 14 million people are expected to be at low, medium and high risk respectively, of being permanently displaced by flooding from the sea.

The total length of the Bangladesh coastline is 710 kilometres and, historically, the coastline has been undergoing erosion and deposition. However, the balance between the two is being affected by climate change, such as more powerful cyclones and a higher sea level, with the result that more erosion is likely to occur but less deposition of sediments.

As a result, for a 2 centimetre rise in sea level the coast may go back two to three metres a year, or 80 to 120 metres by the year 2030, which means that Cox's Bazar beach, the longest in the world, will completely disappear.



Eco-Congregation

Eco-Congregation is an ecumenical programme helping churches in many countries to make the link between environmental issues and Christian faith, and to respond in practical action in the church, in the lives of individuals, and in the local and global community. Becoming an eco-congregation is an easy way for parishes to become ecologically engaged.

Eco-Congregation's resources include sections or 'modules' on greening worship; theology and environment; children and creation care; young people and environmental issue; resources for small groups; greening the church building; greening church finances; church-yard conservation; lifestyle issues; working with the local community; thinking globally, and managing your carbon footprint. These are all free to download from Eco-Congregation websites.

Eco-Congregation is operating in a growing number of countries including England & Wales, Ireland, Scotland, Canada, Norway and South Africa. See www.ecocongregation.org for a list of its country websites. Churches in other parts of the world are welcome to use Eco-Congregation resources and are encouraged to register their interest by contacting enquiries@ecocongregation.org.

Local Initiatives and Plans

Responsible environmental stewardship most often means thinking globally and acting locally. The following is a selection of provincial, diocesan and parish initiatives, schemes and commitments designed to embed the care of creation and environmental justice into the churches' activities and Christian living.

There has been a groundswell and slow flourishing of environmental initiatives in dioceses and parishes of the Anglican Church of **Southern Africa**, including the development of eco-congregations. The Diocese of Natal has been working towards becoming an 'eco-diocese' and ACEN representative Tim Gray in Johannesburg Diocese has developed his parish as an 'eco-congregation node' and the centre from which the Johannesburg Anglican Environmental Initiative (JAEI) operates. JAEI's objectives include fostering environmental awareness among Anglican Christians in the diocese and encouraging parish environmental projects.²² SAFCEI is the implementing agency for Eco-Congregation in Southern Africa.

In 2007 the General Synod of the Anglican Church of Australia adopted a 'Protection of the Environment Canon' which, among its clauses, acknowledges God's sovereignty over creation through the Lord Jesus Christ; gives form to the Fifth Mark of Mission – to strive to safeguard the integrity of creation and to sustain and renew the life of the earth; recognises the importance of the place of creation in the history of salvation, and acknowledges the custodianship of the Indigenous peoples of the land. The text of the Canon stipulates that 'Every diocese which adopts this Canon undertakes to reduce its environmental footprint by increasing the water and energy efficiency of its current facilities and operations and by ensuring that environmental sustainability is an essential consideration in the development of any new facilities and operations, with a

view to ensuring that the diocese minimalises its contribution to the mean global surface temperature rise.'

Adopting the Canon also requires a diocese to establish an environment commission or similar body in order to give leadership to the church and its people in the way in which they can care for the environment, use its resources responsibly, and pray in regard to these matters.

Also in 2007 the Australian General Synod adopted a motion on caring for the creation. Within the text of the motion, dioceses and individuals were asked to:

- contribute thoughtfully and prayerfully to public debate about how to:
 - achieve justice not only for current Australians but for our descendants
 - nurture and protect life on this fragile land with all its beauty and diversity
 - share in a world of finite resources, showing love for our neighbours particularly those who live in the two-thirds world.
- remain confident in the gospel of Jesus Christ to address environmental challenges as it calls people to turn from human selfishness and greed.

In the IEAB Diocese of Southern **Brazil**, cooking oil is reused to make a homemade soap known as 'solidarity soap'. Funds raised from selling bars of the soap support children's Sunday Schools. In urban areas in the Diocese of São Paulo, parishioners are encouraged to car-pool, as well as use bicycles to attend services. They are also encouraged to use ecological instead of conventional light bulbs and to organise recycling activities for waste generated in their communities,

IEAB itself has a five-point plan intended to increase its practical engagement in environmental issues:

- To form an Environmental Working Team, in the short term, with a view to creating a Provincial Environmental

²² See www.jaei.org.za.

Commission at the next General Convention in Rio de Janeiro in 2013.

- To challenge the dioceses of IEAB to develop an environmental policy taking into account local realities.
- To raise funds to promote local environmental projects aimed at reducing problems caused by climate change.
- To challenge IEAB seminaries and educational institutions to incorporate environmental justice themes in their curricula.
- To enter into partnerships with ecumenical bodies in order to attract more people and form agents of change called to serve the Lord by being involved in sustainable and protective approaches towards God's creation.

In February 2008 the Executive Council of **The Episcopal Church** (TEC) passed a resolution that included the following:

...the Executive Council of the Episcopal Church, recognizing the challenge of global warming and our need to do our part in reducing carbon emissions, directs appropriate staff ... to obtain bids to calculate our 'carbon footprint'

...this examination should include the full range of church operations, including the Episcopal Church Center and its regional offices and program operations, the Executive Council, the General Convention and all CCABs [Committees, Commissions and Boards] and all travel involved in the operations of the national Church

...these bids [should] also include what it would cost to reduce carbon emissions by at least 15 to 20 per cent by the year 2020 (or sooner), and at least 80 per cent by the year 2050 (or sooner), including strategies of behavioral and technological changes, and carbon offsets, as well as a clear understanding of the short term costs/savings and long term costs/savings.



Parishioners from Grace Episcopal Church in Syracuse, New York, covert their parking lot into planting beds.
Photo: Jennifer Baskerville-Burrows

Fifty-six per cent of emissions resulting from TEC's church operations come from air travel. The next largest contribution, 33 per cent, comes from energy usage in its buildings, primarily electricity in the Episcopal Church Centre in New York City. Church management recently decided to purchase 100 per cent of that building's electricity from energy supplier Green Mountain Energy which supplies electricity from renewable sources such as solar, wind and geothermal. This is a significant and positive step for the church. TEC's ACEN representative, Michael Schut, hopes that steps to address and reduce air travel, and developing guidelines for doing so, will be seriously considered as well. The carbon footprint of TEC's church operations will be measured every three years.

The *Genesis Covenant* was memorialised at TEC's 2009 General Convention. Simply stated, the covenant commits those who adopt it to reducing greenhouse gas emissions from every facility they maintain by 50 per cent in ten years. The commitment applies to places of worship, offices, schools, camps, retreat centres and other facilities. In his report to ACEN, Mr Schut noted that the covenant signifies that TEC recognises the reality of climate change and supports strong action to mitigate those emissions for which its facilities are responsible.

Two TEC dioceses have been particularly active in their efforts to implement the *Genesis Covenant*: the Diocese of Chicago and the Diocese of Olympia (western Washington State). Chicago, for example, has asked each of its parishes to conduct an energy audit and measure their energy use. Both dioceses have decided to use the Environmental Protection Agency's *Energy Star Portfolio Manager*²³ tool to measure and track energy use and are sponsoring workshops to train parishes in the use of that tool.

Since October 2010, TEC has partnered with GreenFaith,²⁴ a non-governmental inter faith organisation that features a strong two-year holistic *Green Certification Program* for congregations to assist them to green parish operations, education and worship. The programme is composed of 'spirit requirements', environmental justice requirements, stewardship requirements and communications requirements.

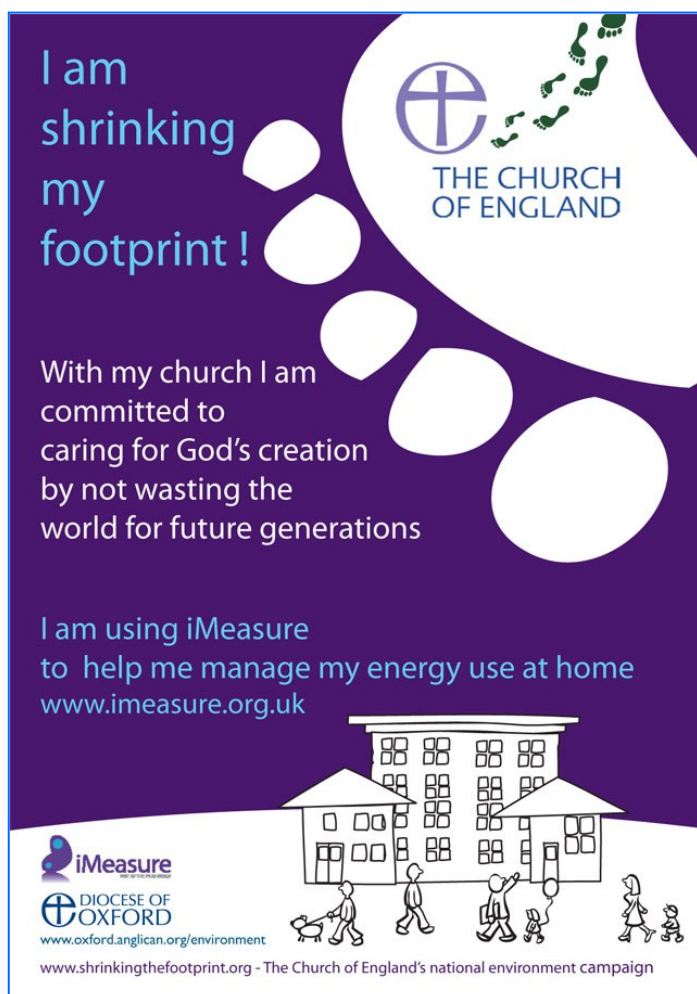
TEC is providing tuition subsidies for Episcopal congregations participating in the programme. So far, eight congregations and one camp and conference centre have applied, been accepted and started the process.

In 2006 the Church of **England** established its national environmental campaign *Shrinking the Footprint*.²⁵ The campaign involves the promotion of sustainable management of church buildings, land and lifestyle. Its objectives include a carbon reduction target of 80 per cent

²³ See <http://tinyurl.com/2o96hn>.

²⁴ See www.GreenFaith.org.

²⁵ See www.shrinkingthefootprint.org.



by 2050 (in line with UK government commitments), with an interim target of 42 per cent by 2020.

Shrinking the Footprint's message to all Church of England congregations, clergy, schools, national and diocesan staff, is that caring for the environment is a Christian duty and not an optional extra, and should include support for those who are most affected by environmental changes.

In 2011 a pilot on-line audit system was launched and offers Church of England parishes, initially in two dioceses, with an opportunity to use energy monitoring software to help track and reduce energy use.

Other *Shrinking the Footprint* initiatives include:

- a national conference for diocesan Environment Officers
- working with Church of England schools in York as part of the Diocese of York's *Year of the Environment* initiative²⁶
- for future carbon footprint audits, investigating the possibility of integrating energy use measurement into the annual archdeacons' visitations to parishes
- including advice regarding solar panels and green electricity suppliers on its website.

²⁶ See www.dioceseofyork.org.uk/your-church/environment.

- supporting *Caring for God's Acre*, an initiative that assists local communities to care for churchyards in a way that benefits people and wildlife²⁷
- supporting St Alban's Cathedral as a founding member of the *Green Pilgrimage Network*, a new global network aimed at greening religious pilgrimages
- promoting a series of films for environmental training for clergy on YouTube, featuring a number of environmental issues and showing practical action that churches can take, together with theological reflection.²⁸

All Christians have an important role to play in developing their own environmental awareness and encouraging it in others.

The Archbishop of Canterbury, Dr Rowan Williams

In October 2008 the diocese of Cashel and Ossory in the Church of Ireland adopted a 'Green Charter'. ACEN representative for Ireland, the Revd Elaine Murray, reported that the charter has become a guide to living lightly on our planet for each of the diocese's 149 church communities. Actions arising from the charter include an annual Eco Seminar with speakers who are specialists in such issues as conservation, water, wildlife, and energy saving, and an annual environmental competition which church communities enter under various categories such as environmental diligence, capital projects, motivation of the young, church environs and global awareness.

In 2010, Cashel and Ossory's Diocesan Synod formally endorsed the *Earth Charter*,²⁹ and the Church of Ireland's General Synod adopted a proposal by the Diocese of Cashel and Ossory's environmental committee:



School assembly on the environment. Photo: Elaine Murray

²⁷ See www.caringforgodsacre.org.uk.

²⁸ See www.arcworld.org/projects.asp?projectID=521.

²⁹ See www.earthcharterinaction.org/content/pages/Read-the-Charter.html.

That this synod:

- recognises the need for the Church of Ireland as a whole to have an authoritative code of Environmental Good Practice
- commends the existing Green Charter of the Diocese of Cashel and Ossory as a possible way forward.

The Anglican Church of **Canada** currently expresses its ecological desires through a single motion passed by General Synod in 2010:

Be it resolved that this General Synod:

- join with other faith communities and secular groups to press the Government of Canada to adopt a comprehensive climate action plan with firm targets for greenhouse gas emissions
- encourage dioceses and parishes to join with other faith communities and secular groups in researching and providing information on the climate crisis to members of their own communities
- encourage dioceses to work with the *Greening Anglican Spaces* project group of the Partners in Mission and Ecojustice Committee to estimate and place their data in a national database, to consider professional audits, and to participate in a measurable and authoritative monitoring process.



ACEN representative Ken Gray reported that, sadly, the work is not well resourced and supported for a variety of reasons. Nevertheless there are numerous volunteer-based diocesan initiatives in the Anglican Church of Canada including EnviroAction in the Dioceses of Huron, Ottawa and most recently Nova Scotia and Prince Edward Island. Some initiatives are new; others have been active for as many as 15 or more years.

The challenge is always maintaining momentum, refreshing leadership and supporting advocates who tend to tire easily given the huge obstacles they confront.

The Scottish Episcopal Church now has 34 of the 269 eco-congregations in **Scotland**. ACEN representative Professor Alan Werritty reported that Eco-Congregation Scotland is seen as a key partner by the Scottish Government in its engagement with civil society to reduce greenhouse gas emissions by 42 per cent by 2020 and by 80 per cent by 2050 against 1990 levels.

These targets are amongst the most ambitious in the world and will not be achieved without major take-up by civil society and associated behaviour change. Current Scottish Government funding of a full-time manager is evidence of

Eco-Congregation Scotland's perceived value in providing direct access to civil society via nearly 300 local groups which can begin to promote the necessary behavioural change.

A series of reports and motions in successive General Synods of the Scottish Episcopal Church led up to the June 2011 'Statement of Principles' concerning environmental sustainability and its place within the mission of the church. This Statement comprises:

- Our daily thanksgiving, prayer life, and worship should acknowledge the wealth and beauty of God's creation.
- Sustainability has to be applied to an environment that is constantly shaped by the forces of a dynamic earth.
- Pressure on sustainability from economic expansion and increasing population cannot be ignored.
- Exploitation of human and material resources, the global energy demand, and uncontrolled consumerism undermine the basis for sustainable living in Scotland.
- A dialogue with modern science and technology is required to address global sustainability issues.
- Understanding the systems that sustain life as a whole should shape our responses and actions for sustainable living.
- Natural biodiversity of the land mass and its surrounding seas is a precious resource which we lose at our peril.

In the associated motions passed by the 2011 Synod it was agreed that each diocese and congregation would conduct an environmental sustainability audit and identify opportunities to reduce energy consumption. Dioceses were charged with auditing this requirement, possibly via its quinquennial building surveys.

This represents the strongest and most focused action yet in terms of the Scottish Episcopal Church reducing its collective carbon footprint.



Photo: Eco-Congregation Scotland

Theological Education

In order to become truly mainstream as an issue of deep Christian concern, environmental issues must feature in the curricula of theological colleges and seminaries and in continuing ministerial education. However, provincial reporting did not reveal any widespread effort to provide this.

In **South Africa**, the provincial Theological College of the Transfiguration gives very little space to environmental issues in its curriculum. Environmental issues form part of the Ethics courses and in the Liturgy course, students are introduced to the Province's *Season of Creation* resource. In systematic theology there are clearly ways of including environmental concerns, for example, when looking at humanity as stewards of creation, or considering the work of Anglican theologians such as Sallie McFague who proposes that the earth be viewed as a metaphor for the 'body of God'.

There is certainly an academic awareness of environmental issues but there is also a large gap between awareness and action.

St Andrew's Theological College in the Church of **Bangladesh** has not yet included subjects related to climate change but it does provide education on basic ecology. The National Council of Churches in **India** is seeking to include environmental and climate issues as a compulsory subject in their colleges and St Andrew's may eventually follow this lead. Education events in Bangladesh have included a two-day seminar in collaboration with Tearfund and the College of Christian Theology in Bangladesh on the issue of environmental degradation and the impacts of climate change.

Youth and the Environment

Involving young people in environmental issues, initiatives and decision-making is essential and the churches have an important role in making space and enabling youth to participate and use their gifts and creativity.

In **Tanzania**, the problem of unemployment has forced the youth, especially in rural areas, to engage in charcoal making which leads to deforestation. The Anglican Church of Tanzania, through its Youth department, therefore initiated a small loans programme to help young people to establish income generating activities.



WCC photo petition. Photo: Elaine Murray, Church of Ireland



20 young adults aged 18 to 30 gathered in Seattle, USA, in August 2011 for a six-day eco-justice immersion experience.
Photo: Michael Schut

In **The Episcopal Church**, 20 young adults aged 18–30 gathered in Seattle in August 2011 for a six-day eco-justice immersion experience. Their time together provided:

- advocacy training
- education (emphasising eco-theology and sustainable economics)
- opportunities to tour places impacted by ecological degradation and interact with the people that live in those communities
- time to interact with green teams from around the Diocese of Olympia and worship together
- time to take a day hike together
- time for the young adults to discern if and how they might feel called to eco-justice leadership within the church.

Youth from around the world, including the Church of **Ireland**, have participated in the World Council of Churches' photo petition ahead of COP17 in Durban, South Africa, in November 2011.

In **South Africa**, African youth planned to fill a small wooden ark – the 'second ark of life' – which would carry thousands of petitions to be delivered to the chair of COP17 in Durban by Archbishop Emeritus Desmond Tutu at the start of the conference. This brought countrywide awareness to church members of the significance of COP17.

In **Canada**, many Anglican young people are involved in campaigns allied with local NGOs, for instance the *Stop Coal Campaign* in British Columbia, as reported by the Anglican Communion News Service:

Canadian environmental group, the Wilderness Committee is calling on Anglicans and members of all faith-based communities to take a stand against the globally destructive practice of coal mining.

The group is asking for an immediate moratorium on new coal mining projects and the phasing out of existing coalmining projects by 2050. Cam Gray, a coordinator for the Wilderness Committee said, 'The proposed Raven Coal Project would have devastating ecological, social and economic impacts. Over its 16 year lifespan, the mining operations would emit over 52 million tonnes of climate change-causing greenhouse gas emissions into the atmosphere, and would have devastating impacts on local groundwater supplies.'

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In 2008, the Provincial Youth Network of the **Scottish Episcopal Church** initiated its *MiDGes* campaign designed to raise the profile within the church of the Millennium Development Goals, among which, Goal Seven is: 'Ensure environmental sustainability'.

Contributions

A 'Church of God the Creator'

A reflection by the Very Revd Dr Andrew Warmback

Dr Andrew Warmback, an archdeacon in the Diocese of KwaZulu Natal, imagines what a 'Church of God the Creator' might look like:

One Sunday morning in my mind I paid this church a visit....

In travelling to the church, I passed a number of people making their way there by foot. Some had travelled by taxi. On entering the church property I was given a warm welcome and shown my way to the entrance.



I could not miss noticing the birds and butterflies as I walked past the vegetable and muhi garden, set out according to permaculture principles. Some of the property still remained as natural grassland. I was told that this community vegetable garden on the property was used to grow vegetables to supply the local AIDS clinic with nutritional food.

While the garden was designed as a water-wise one, any further water needed was taken from the water tanks next to the church building. It was hard not to notice the recycling containers: not only could you bring to church paper, tins and glass but also plastic, used oil and old batteries.

As I approached the entrance of the church I was struck by the beautiful building, which I learnt had been built from the stone in the area by local workers. Inside I noticed its design was such that there was no need for artificial lighting and heating.

The service was led by the pastor, a young woman, who had previously worked for the National Biodiversity Institute. The service was engaging – it was part of their annual Season of Creation celebration. The singing in a number of different languages seemed to include everyone.

The liturgy was a simple one which people knew by heart. There were no hymn books, service sheets or pew bulletins to be seen. The reading was by a very elderly man who read from The Green Bible and the sermon slot, led by the preacher, included a short play by the children, dance and some discussion by the congregation.

Our prayers included prayers for the world, for the upcoming international conference on climate change, for the work of Earthlife Africa and the Botanical Society, as well as the success of the appeal against the development of a nuclear power. (In the notices, given later, people were encouraged to join in a local protest against this development).

Later in the service a child was baptized. Her parents were given a fruit tree to be planted at home. The water used in the baptism would be used to water the tree when it was planted and the parents were told that after the child was bathed the bath water was to be used to further water the tree. When the tree bore fruit the fruit was to be sold to support the child's education.

Receiving of communion intrigued me. Those in wheelchairs and the visually challenged were guided first to the communion rail. Organically grown, non-genetically modified and locally produced bread and wine were used. We were given extra bread to take home to our communities to give to those who were hungry.

After the service, the congregation was invited to the hall for further fellowship, reflection on the service and refreshments. Solar panels on the roof were used to heat the water for the drinks. I learned that the hall was used during the week for the eco-coffins project and other community projects.

The young people had an active guerrilla gardening campaign in the neighbourhood and stored their plants in another area of the hall.

I left feeling strengthened, challenged and blessed...



Concerning ACEN Direction, Strategy and Possible Outcomes

At the request of the Revd Ken Gray, ACEN Secretary, the Revd Canon Jeff Golliher PhD, Program Associate for the Environment and Sustainable Development in the Office of the Anglican Observer at the United Nations (AUNO) prepared a strategy discussion paper raising questions on ACEN direction, strategy and possible outcomes. Introducing his paper to the meeting Dr Golliher noted the following:

1. Environmentally, the world is a different place since ACEN was first established.
2. It is time to ask 'what can we reasonably expect from the UN?' and 'what can ACEN do to help the Anglican Communion?'
3. The role and activity of the office needs to be explained. AUNO undertakes advocacy on human rights, empowerment of women and environmental justice. Often these three issues run together. When Primates or diocesan bishops call with issues, then AUNO assists, perhaps by visiting the UN Secretary General's office or embassies. This is quasi diplomatic work. AUNO does not work for the UN but does believe in its potential as a forum for helpful global discussion. This is significant given the obvious influence of corporate forces on UN discussions especially in the realm of climate change negotiations.

In discussion it was noted that nature itself has been commodified. Scientists and theologians understand that we need bio-diversity. Corporations behave as if bio-diversity is dispensable. The way they operate can be an attack on communities – their loyalty is to their shareholders, not to the communities that are affected.

Concerning COP17 an agreement is needed to replace the current version of the Kyoto Accord which is more or less defunct. Even if a new agreement is developed soon, it will take more time for it to be ratified by member countries, and the environmental degradations, levels of carbon dioxide, etc, will persist for centuries.

The increasing influence of China on global affairs cannot be overestimated. We saw this in Peru and elsewhere. This is not to demonize the Chinese, but to understand that lack of shareholder accountability will provide options not available to other northern or western corporations.

Communities need to look for and articulate sustainable solutions, or corporations will offer their own unchallenged solutions, which will not be based on justice, human rights, and the well-being of communities. Many competent governments have become powerless in the face of multinational corporations. The vision has to come from faith groups and civil society.

If we focus on local communities, who is going to confront corporations, oppressive or failed states? The Indian activist



Dr Jeff Golliher and members of ACEN

Vandana Shiva provides an excellent example of how a scientist can work on both political and community levels. She took her extensive knowledge directly to the village communities of India, and helped them resist the influence of corporations such as Monsanto (Big-Agriculture) by helping them organise and plant the many different Indigenous types of rice rather than the monoculture kind being imposed on them that require fertiliser that is expensive and environmentally harmful and in fact, less adaptable to the land. In the end, the women in the communities where she has taught have been empowered, and can control their major source of both food and income. Time and again, corporations harvest, and then move on with little concern for the lingering effects of intervention. It amounts to an invasion - not a geographic invasion but in a sense it is another layer of colonialism. Some of our churches have the same characteristics as the corporations. Being in Peru and engaging locally has been highly significant for this meeting.

The spiritual dimension of what is needed is important. We need to grab hold of the strength that we have before it is too late.

The complete text of Dr Golliher's paper now follows.

The Crisis We Face: Where do we go from here? What would the Good Shepherd do?

The Revd Canon Jeff Golliher PhD

Introduction

If there was ever a time when the world needed hope and help, that time is now. The environmental problems we face are huge; their magnitude, almost unthinkable. They actually are unthinkable in the sense that we must depend on computer simulations to help us discern what the consequences might eventually be. Yet more and more people are seeing evidence of the unthinkable accumulating before their eyes. Everyone at this meeting is aware of the bad news; and the good news, which we also know, is that

substantial parts of the world are living more sustainably. Many national and local governments, financial institutions, and corporations are playing positive roles, as the churches have been for many years, including the Anglican Communion. The good news is good, but it is not enough, and it is not happening fast enough.

So where in the grand scheme of things are we now, and where do we go from here? What we did not want, 20, 30, maybe 40 years ago - when the environmental movement began to take root - was to reach a point now where we could plainly see environmental destruction on this scale. When we can see evidence like this writ large - when I can see it where I live, and you can see it where you live, across the world from me - we know that we have crossed a threshold of interwoven changes from which we may not be able to turn back. Many environmental scientists believe that we will not be able to return to the way things were, let us say, 200 years ago. But that is not to suggest that a final catastrophe is written into the script.

Hopefully, we can still change course enough to avert the worst scenarios. Nevertheless, carbon levels have been too high and increasing for too long; and now, we are living in a world radically different from the one that any of us (or our ancestors) have ever known.

I am thinking of climate change and more than that: tremendous losses in biodiversity, forests, farmland, available freshwater, ocean and river life, and, as a result, swelling numbers of environmental refugees. All these tragedies are so tightly interwoven that we cannot solve the problems behind one without solving the others too. Any one of them would be huge without climate change. With climate change, on top of predicted population increases over the next 50 to 100 years, the consequences of all other environmental problems are magnified greatly.

Strategically, none of these issues can be ignored, played down, or postponed while we focus on one or two, including climate change. Our crisis is systemic. All the issues must be addressed, all at once. In this regard, the United Nations (UN) needs to renew its vision for sustainable development by addressing how we can reduce greenhouse emissions, provide adequate, healthy food, and increase water security in an integrated way.

Here, I want to discuss my concerns as a person, as a priest who works locally and globally, and as someone who is involved in eco-justice ministry. I think about these things whenever I speak with someone at the UN or in my congregation. I ask myself about the outlook on the world that we are offering, projecting unconsciously, and expressing openly - in addition to our Christian vision. I wonder how they perceive the work of the church, at home and internationally, and what they really feel about it in their hearts and souls.

That is a lot to think about, but all of it centres on two questions, the first relating to the UN:

What can we expect from the UN with regard to life and death environmental issues like climate change, food, and water? What kind of solutions can it reasonably offer?

The second question involves us, the Anglican Communion Environmental Network (ACEN) and the Anglican Communion that we represent:

What kinds of eco-justice ministry should we be doing and encouraging within the Anglican Communion? What kind of help can we, in ACEN, give to the Anglican Communion?

It goes without saying that our ministry should be rooted in sound Christian teachings. Here, I am thinking in a more strategic way: given the condition of the global environment and where it might lead, what must we do now? What would the Good Shepherd want us to do?

I will begin with the UN, and then offer some reflections and suggestions on our collective ministry in ACEN, when my tone and concerns will shift a bit, given my work at the Anglican UN Office and as a parish priest. But first, a few words on my background. My early upbringing was in a relatively poor region of exploited factory workers, small farmers, and miners in the United States. That part of the US, called 'southern Appalachia', has a great deal in common with developing nations everywhere, and I cannot help but see environmental issues through those eyes. Before becoming an Episcopal priest many years later, I worked as a cultural anthropologist, both in the field and as a teacher, which is another perspective that I bring to this work. When I was in seminary, I was fortunate to begin my ministry at the Anglican UN Office. After seminary, I continued at the UN as one part of a larger ministry as Canon for Environmental Justice and Community Development at the Cathedral of St John the Divine in Manhattan, New York. There I was part of a team of priests, scientists, and philosophers who were trying to understand spiritual teachings from the standpoint of the Living Earth - a third perspective that I hold dear to my heart. For the last eight years, I have been a parish priest in a rural area of the Diocese of New York, while continuing the work at the UN. The connection between our ministry for the Anglican Communion on the one hand, and the local congregation on the other, has been a concern of mine for some time.

The United Nations and the Environment

The UN first adopted the environment as a serious part of its work in the 1970s. At that time, religious NGOs (like the World Council of Churches) were concerned about this otherwise positive development. Why? The reason was not because the churches failed to perceive how serious the issue was, even back then. Rather, the reason was the church's concern that the UN would interpret the environment primarily from a scientific or economic point of view (as a collection of extractable resources for the benefit of developed nations), and not as a sacred trust involving serious moral questions about spirituality, justice,

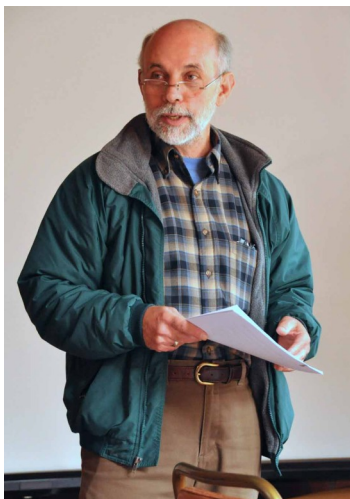
stewardship, and respect. It turns out that this kind of critique underlies most serious discussions about the environmental crisis today.

Twenty years or so of deliberation and debate culminated in the early 1990s with the Earth Summit in Rio de Janeiro.

That conference, which linked together environmental conservation, poverty eradication, and sustainable development, significantly transformed the UN's vision of and strategy for development programs. Holistic, integrated, ethical thinking was the way it was done. Poverty was the key. Among NGOs, the name of Leonardo Boff, to name one notable example, was often mentioned, and he occasionally spoke there. Because the UN recognised that some economic systems create poverty, their overall strategy was to transform economic development by moving it in a sustainable direction. For similar reasons, grass-roots environmental groups in the 1990s began to understand their work not so much as 'environmental', but in terms of environmental justice and eco-justice. Personally, I have never considered myself to be an environmentalist. That is all a long story rolled into a few sentences. The strategy of the UN was and still is (at least officially) to eliminate poverty and save the environment at the same time. In effect, eliminating poverty would save the environment. This strategy is the best and most ethical one that we have, and it could still work. Along these lines, the Millennium Development Goals initiative, which was meant to rescue people and the sustainable development strategy (once it was realised that some Member States were not particularly committed to it), is showing some progress, despite startling shortfalls in reaching specific goals.

The Earth Summit was the beginning of a series of large international conferences on different aspects of the UN's overall strategy (known as 'Agenda 21'): women, population, social development, biodiversity, small island states, and human settlements. I attended most of those conferences. In addition, special pressing issues, like climate change, biodiversity, and deforestation, were brought to the forefront, and parallel tracks of deliberation and policy-making were created for them. All this was good; all the processes were exceedingly helpful in bringing together the points of view of NGOs, civil society, and governments.

Now I should make a few comments about the Anglican UN Office. We represent the Anglican Consultative Council and the Archbishop of Canterbury at the UN. Our mandate for advocacy is established in the content of Anglican



Dr Jeff Golliher

Consultative Council (ACC) resolutions and other related declarations and official documents, including those from ACEN. We use those statements frequently. Although we agree with the overall vision of the UN and its work (founded, as it is, on documents like the 'Universal Declaration on Human Rights'), we do not work for the UN, nor do we agree with everything the UN does.

It is important to remember that the UN, as an organisation, is inseparable from the nations that make up its membership and pay for its work. For that reason, criticisms of the UN itself and its decisions are often misdirected. On the whole, the UN is perceived as considerably more significant and more effective (even essential) by developing nations, than by developed nations, especially the United States. Developing nations tend to see the UN as a lifesaver, since they receive desperately needed development assistance and humanitarian relief from the UN. Developed nations – here I am referring to some politically powerful constituencies in the United States – might see the UN as a waste of time, money, and resources, if not a threat to the sovereignty of Member States. It should also be pointed out that developing nations sometimes have similar objections, but for very different reasons; specifically, they may feel that the UN could become a threat to their national interest when developed nations control its decisions and policies.

The point of view of the Anglican UN Office is that we need the UN because there is no other organisation like it. The UN is vital to global peacemaking and the promotion of justice. Its agenda is largely the world's agenda, as the first Anglican Observer, the Most Revd Sir Paul Reeves from New Zealand, put it years ago, and the UN is where we sort it out. For example, the UN's commitment to peacekeeping and human rights is singular and essential. Specific programmes like the UN Environment Programme, the UN Development Programme, and the Food and Agriculture Organization (to name only a few) do vital work, much of it focused on local communities, renewable energy, the empowerment of women, environmental protection, and sustainable development. These are all priorities of the Anglican UN Office in keeping with the meaning and intent of innumerable ACC resolutions.

The UN, the Role of NGOs, and Corporate Influence

There are persistent problems with the implementation of the UN's sustainable development strategy, which, for the most part, reflect the same economic and political dynamics that we see operating everywhere in the world today. These dynamics have two dimensions. First, the role and importance of NGOs, like the churches, have decreased at the UN since the 1992 Earth Summit in Rio. Second, the role and importance of global corporations and financial institutions (the IMF and the World Bank) have considerably increased (the emphasis here is on corporate influence). Likewise, in many countries the interests of ordinary citizens have decreased as a result of corporate influence in the halls of government, even democratic ones.

Power relations of this kind have always been intrinsic to the political process, but the tightening grip of corporate interests at the UN to such an extent is a remarkable development at this point in time. Not every staff person at the UN would agree, at least publicly, with this assessment. But staff people at the UN come and go, and many of the newer staff are unaware of the gradual changes that have taken place in the last 20 years. Changes along these lines have happened and continue to happen, in part, as a result of pressure, mostly behind the scenes, applied by the more powerful developed nations who contribute relatively large amounts of yearly dues to the UN. Corporate interests often shape the priorities of those nations. This is nowhere close to the whole story, but it is an important part of it. If those nations and the financial interests they represent do not get what they want, the threat is that they will withhold their funds and dues. It is effective.

This suggests that, with regard to political advocacy, we (ACEN and its members) should focus our attention as much on corporate boardrooms and shareholder activism as on government policies and legislation – perhaps even more on the former insofar as that is where large decisions affecting the global economy and the environment are actually made.

The reasons for the inability of the UN to deal effectively with environmental issues on the scale that is necessary today are a direct result of these political and economic dynamics. In other words, the UN itself is not the problem as much as the complex forces that Member States bring to its deliberations. Let me explain this a bit more with regard to environment issues. My purpose is to help us understand better how decisions are made there, and how they relate to the work we do.

In the early 1990s, developed nations understood that the growing activism of NGOs, which was effective in those years, would challenge their influence at the UN. That is when the UN began to relate to NGOs differently. I will give some examples. The UN's *Forum on Forests* (its purpose is to implement the Convention on Forests, a legally binding agreement mandated by the Rio Summit) reformulated their definition of what qualifies as a *forest* in line with corporate interests. For the most part, tree plantations now qualify as forests. In some ways, the same corrupting influences fell upon the Rio Summit's Convention on Biodiversity. The first set of guidelines and principles for this Convention were stated in primarily economic and financial terms. In other words, how much is that forest or this desert worth financially? I am making a point here, but not overstating the implications. Enough pressure was put on the UN at high levels to force them to convene another group to write an alternative policy-making document called 'Spiritual and Cultural Values of Biodiversity'. Because I was a member of the team who wrote it, I am well aware of the political dynamics involved. The interesting point here is that the UN

Environment Programme did not, at that time, have the resources and organisational capacity to produce the alternative set of guidelines. Instead, the UN Development Programme commissioned the work and organised its completion.

Similar forces have played upon UN deliberations on water. Now the privatisation of water is less of a contentious issue (not so at the UN Office) than it was ten years ago, which is unfortunate.

I do not want to make negative comments about particular agencies or departments of the UN. They all do good work. I only want to point out that when we are thinking about or participating in any given UN project in our home countries or internationally, we need to look closely at what the goals, strategies, and capacities actually are. This is especially true of programmes involving human rights, food, agriculture, and water, and where issues of privatisation, genetic modification, and land ownership and control come into play. In practice, it is very difficult to know the differences among corporate interests, government interests, and UN interests, much less to discern where the peoples' interests or the web of life's interests are in the midst of the rapid and vast changes that are taking place everywhere – the UN included.

The UN and Climate Change

The same patterns discussed above also apply to climate change. On the whole, the failure of the Kyoto process and UN Climate Change Conference in Copenhagen (COP15) can be attributed to the efforts of some Member States to maintain their status as superpowers through economic influence. Those interests include more than oil, but also land, forests, food, water, and military power. This is what you would expect. They are calculating how to preserve economic and political power, not in denial of climate change (even the Pentagon in the United States has long recognised that climate change presents a security threat and increases the likelihood of armed conflict), but as a strategy for managing a gradual transition from fossil to renewable fuels. They want to control this process within limits that they consider 'reasonable'. According to their free market-based strategy, catastrophe (within certain limits) can be an economic opportunity. I am not against markets or making an honest living, and public/private partnerships have a crucial role to play in sustainable development. Nor am I suggesting that every global corporation has rejected social and environmental justice. This is definitely not the case, but the ones that try to operate according to the ethical standards of economic, social, and environmental justice play a small part in the larger picture. What I am saying is that the operating strategy, at this point in time, is to manage the limits of catastrophe, while exploiting the opportunity that large corporations and some developed nations believe it offers. Obviously, climate justice is not their primary concern. It is a concern to the extent that a

popular uprising might interfere with their overall goal. So far, this has not been tested, except at World Trade Organization meetings several years ago, which were quelled. In the meantime, substantial parts of the world are considered to be acceptable losses: small island states, coastal regions, and whole countries, not to mention the polar and circumpolar regions.

I realise that this might sound cynical. But when we look at the reality on the ground and witness the lack of transparency in public negotiations, it is an accurate description of the positioning that is taking place. Climate change denial plays a smaller part than we might think, except in outright propaganda for the public where it looms large.

I will give one last example, relating to the climate change summit in Copenhagen. The one outcome that was adopted was an apparent greenhouse gas-reducing programme called *Reducing Emissions from Deforestation in Developing Countries* (REDD). There was no discussion of this programme on the floor of the negotiations. One of the many purposes of REDD is to encourage forest management, rather than deforestation, by putting a price on the ability of forests to absorb carbon – which is a thorny and contentious subject. Carbon trading and carbon offset projects may have an important role to play in curbing greenhouse gas emissions. Nevertheless, some studies of the actual practice of carbon trading show that it is managed in much the same way that financial derivatives have been managed in mortgage lending.

Regulation and oversight of these programmes are often non-existent. In addition, carbon trading and offsets give the impression (usually false) that emissions are being reduced when, in fact, they are not. REDD significantly expands the carbon credit market into forest management under an agreement that involves public funds as well as corporate investments. It presumes that forests are commodities whose value is determined by the marketplace, rather than by the people who care for them and live within their bounds. One consequence is that traditional and Indigenous peoples will no longer have access to them or the right to manage them sustainably.

This example, like the others, points to a chain of doubtful, if not unethical and unjust assumptions that drive large environmental programmes and policies. The assumption that governs them all is that resources can be managed and profits made more sustainably by a globalised free market, than by local communities, businesses, and municipalities. Reasons given for this are based on truly ominous trends, for example, the urgency of the environmental crisis, population growth, and so on, which evoke legitimate fear, while manipulating consent. To make matters worse, these same strategies disempower (if not destroy) local communities and local governments, forcing them into deeper cycles of dependence on the corporatist global economy.

It still seems likely that Member States of the UN will reach an agreement on reducing greenhouse emissions within the next few years, perhaps sooner. It also seems likely that the agreement will be subsequently modified as environmental conditions change and political thinking becomes hopefully clearer. What we must understand is that as much as we desperately need an agreement, it will not alter the consequences of harmful environmental changes that we have already set in motion – and those consequences are serious. With an agreement, the kind of world that we are creating now, for better or worse, will remain a pressing question. That world will very likely be more sustainable than now, but sustainable for whom? And after what level of damage is done, and with what kinds of supposedly ‘acceptable’ losses? By that, I mean whole ecosystems, thousands of communities, some nations, and millions of people whose livelihoods and possibly lives will be, in effect, stolen.

Sustainable Development and Sustainable Communities

If we continue to move in the direction that we are currently headed – pursuing a model of corporate-driven sustainable development at the expense of sustainable communities – then massive programmes in humanitarian relief as a result of environmental destruction will become commonplace. This is already beginning to happen in some parts of Africa as a result of prolonged drought. Given how the global economy operates, we might expect humanitarian relief to become a ‘growth industry’ in the years ahead, which will strengthen dominant power structures, at least for a while, seeming to justify their rationale. According to the ‘logic’ of this system, almost anything that involves significant costs and represents security threats can be transformed into an economic opportunity for large investors.

I would not want to overlook the fact that substantial parts of UN programmes are dedicated to nurturing sustainable communities. These programmes are often focused on food and agricultural systems, water security, and the empowerment of local communities and women – all areas identified as critical by the early conferences on sustainable development. I am thinking especially of the Women’s Conference in Beijing and the Conference on Social Development in Copenhagen, where the input of NGOs was more direct; and the controlling influence of global corporations, less dominant. It was then that major UN programmes and large segments of civil society, including the church (largely through the ecumenical presence of the World Council of Churches), agreed that sustainable local communities are the absolutely essential ingredient in sustainable economic development. This should be of serious concern to the church. Communities (whether they

are found in villages, towns, or urban neighbourhoods) represent the very places where the ministry of the church is lived out every day. Our congregations are communities, and we are our congregations.

Development that ignores, undermines, or destroys community life amounts to an indirect assault on human existence in large parts of the world, sometimes under the corporate guise of *greening* or *saving* the earth. In rural areas, this colonising process has the impact of *clearing* the countryside, a tragic fact of history that the church has witnessed many times before. One relatively recent outcome of this kind of exploitation is that half of the world's people now live in cities. By 2030 that figure will rise to nearly 70 per cent. These environmental and economic refugees will be seeking a life that has been lost, any kind of livelihood to ensure survival, and a semblance of community. As people of faith, we must confront the forces that drive this process and actively resist them, while meeting the humanitarian and spiritual needs of the people who are the victims of those forces.

What Would the Good Shepherd Do?

Based on the successes and failures of the environmental work of the UN and its Member States, it appears that we in ACEN (or any similar church-based environmental group) have three broad areas where our efforts should go. I have identified them on the basis of experience with the UN, but I am also thinking of Jesus' high priestly prayer in John (17.11b), 'Father, protect them ... that they may be one, as we are one'. Here, my purpose is to explore what it means 'to protect' at a time when the struggle to survive has become commonplace among so many people worldwide.

The first area goes without saying: we must do everything we can to reduce greenhouse emissions to safe levels and to conserve arable farmland and drinkable water. Here I am pointing to four urgent concerns that are interrelated and immediately identifiable by members of our congregations: air pollution, renewable energy, food, and water.

The second area involves a shift in our perception about the way things are. Specifically, we must adapt to deteriorating ecological systems in order to survive (eg, conserving precious resources like food and water), while learning to repair local ecosystems (eg, wetlands and forests) at the same time. Put another way, the facts on the ground and in the atmosphere indicate that we will not be able to return to the ecological conditions of a generation or two ago. This will require serious reflection on life's meaning and, in that light, on the purpose and effectiveness of local and global environmental ministries. For example, what really needs to happen where we live, and what can we do to make it happen? In order to accomplish this, we will need to learn how to perceive the consequences of our actions (in the church and elsewhere) from the perspective of the Living Earth.

I will give an example. In Matthew 15, Jesus says, 'Do you not see that whatever goes into the mouth enters the stomach, and goes out into the sewer? But what comes out of the mouth proceeds from heart, and this is what defiles.' This teaching involves the deeper spiritual significance of dietary laws, but ultimately the message points to the grace of God and the Spirit's presence in the human heart. Nothing can separate us from the love of God, even the environmental crisis, terrible as it is.

Yet, this is not to say that whatever enters the mouth and goes into the sewer has no ecological and spiritual significance – a question that parishioners will inevitably (and hopefully) raise. If they do not ask about it openly, they will think about it privately, perhaps wondering what their personal questions mean. From the standpoint of the Living Earth, this teaching has great meaning. I am thinking of recent studies of freshwater in the United States that reveal, among other things, measurable amounts of hormone disrupting chemicals (used in industrial agriculture and harmful to human reproduction) and therapeutic antidepressants (evidence of an unacknowledged epidemic in the United States). Does the presence of these chemicals separate us from God's love? Of course it does not. But it indicates serious issues relating to mental and emotional health, compromised food systems, poor stewardship, a lack of ecological awareness, and serious problems with the love of neighbour, not to mention water pollution generally. To suggest or imply that this is somehow okay with God, as if it is an acceptable cost of doing business or of a way of life, grossly distorts the meaning of love and stewardship in Christian teachings.

The third area follows from the first and the second: we must build, rebuild, and renew actual, face-to-face human communities – including our congregations – in a sustainable way. This is necessary not only because environmental destruction rips our communities (and congregations) apart, but also because programs for sustainable development that primarily serve corporate interests have the same negative impact. Ecological relationships, of which we are all a part, consist of 'communities within communities', each dependent on the others. Our congregations (and the communities of which they are a part) must be grounded in this basic ecological fact and in the spiritual teachings of the church. The extent to which they (ecology and spirituality) seem to be incompatible is a measure of unsustainable practices and/or religious teachings that must be prayerfully revised.

Towards the end of 2010, at an Anglican UN Office Advisory Council meeting, I asked Archbishop Rowan Williams a general question about environmental ministry. I had in mind strategy, advocacy, and organising. His response was that we must get our own house in order for all kinds of reasons, one reason being the need to become more effective advocates internationally. He was not saying

that we cannot or should not speak out in the meantime, especially about climate justice, as he has done and as Bishop George Browning has done for many years. What I heard him say was that, given where we are now and given the powers-that-be in this world, the effectiveness of the church depends on the witness of the church as a whole – that is to say, leadership by the example of everyone in all parts of the church, clergy and laity.

In that moment, I believe Archbishop Rowan was thinking of the many environmental initiatives in the Church of England. I would imagine he wants to see every congregation in the Church of England involved in some kind of environmental programme. It seems to me that something along those lines, but applied globally, should be our goal too, as farfetched as that might sound.

We, in ACEN, should be thinking in farfetched ways – according to the level of scale that is appropriate to our work and to the crisis we face. That might mean reorganising the Environmental Network in the light of a thought out, long-term strategic vision for mobilising the entire Anglican Communion, not so much around ‘issues’ as such, but by the way we live in our congregations and homes.

It would take years to accomplish this, but it can be done and it has to be done. The facts of the environmental crisis suggest that it is our only realistic goal. We need to let the ACC know what we believe to be happening environmentally and what we should be doing in response. The time frame that we have to accomplish this goal is probably one generation (30 years), which is the amount of time that I have been working in this ministry. In the grand scheme of things, that is a blink of an eye.

René Dubos, one of the early visionaries in ecology who consulted for the UN, said ‘Think globally, act locally’. We have 80 million plus members in the Anglican Communion, organised in 38 Provinces, in 44 regional and national churches, and in more than 165 countries. That is the global dimension. They are all members of the Anglican Communion by virtue of being members of local congregations. That is the local dimension. Think globally; act locally. That is a lot of potential leadership by example, a lot of Christian witness, a lot of environmentally sustainable congregations, and a lot of troops on the ground (a military metaphor that is wrong for the church, but makes the point).

We also have about 150 theological schools in the Anglican Communion. This is where a great deal of spiritual formation takes place and where many leaders of the church are trained.

They need to know, if they do not already, what sustainable communities are and how Anglican congregations can be models of them.

From the standpoint of Anglican educators, clergy, and parishioners, the local congregation plays the most important of all roles in the life of the church. From the standpoint of the Living Earth, the local congregation plays the most important of all possible roles in the church’s relationship to life itself. It is there that the church has the greatest impact on the web of life, for better or worse – hopefully, for the better. Given the opportunity and presented in the right way, congregations would want to know not only how the work of ACEN relates to them and benefits them, but also how they can be more involved. The question that many of my parishioners ask is, ‘how can I help?’ It is a good question, and the right one, given the severity of the environmental crisis. That is why I would like us to work in a more strategic, organising way to mobilise the whole Anglican Communion.

I will state my point again: the destructive impact of corporate states has been directed at local communities – on work and livelihoods, social ties, heritage, basic necessities like food and water, habitation, the environment generally, and on our congregations. That is why the most basic and important contribution that ACEN can make is to create, renew, support, and protect sustainable congregations. Good stewardship and good eco-justice depend on congregations rooted in a genuinely spiritual and ecological vision of community (communities existing within the larger community of life). Dietrich Bonhoeffer spoke of community as our ‘life together’ during the devastation of World War II. Today, we face another kind of devastation, and the depth of reconciliation that we need among the world’s peoples and with the Living Earth goes farther than he (or anyone else) would have thought possible 60 years ago.

The transformation of local congregations into living examples of sustainable communities lies at the heart of the gospel message. It will demonstrate what the ‘good news’ can be like in our era.

This transformation may depend less on programmatic, issue-oriented or argument-oriented programs than on a fluid, creative, ecologically inclusive, community building invitation to the ministry itself.

If I understand the work of the Anglican Alliance correctly, this strategy is in keeping with their purpose and goals. Humanitarian relief in response to environmental crises, including climate change, is one part of their vision. Increasingly, this will be humanitarian relief in response to environmental crises that have undermined and destroyed the capacity of human communities to survive. Regional consultations are an important part of the Alliance’s work. Bioregional thinking has always played a prominent part in environmental organising. The whole world must organise in creative ways to meet the challenges ahead. And another Lambeth Conference is coming up in 2018. The opportunity

that we have to do what needs to be done begins now, but we should set our sights on that Conference as a crucial and timely step along the way.

For the purpose of organising, we might think in terms of regions, more effective communication, and finding the skills we need to create and mobilise sustainable congregations.

How we, in the Anglican Communion, respond to the crisis we face now can be a delicate and difficult matter to discuss. Our many congregations live in very different environmental, political, and economic circumstances. Yet, we all share in the responsibility to care for God's creation, and the globalised nature of the environmental crisis calls us to act together as never before.

In different degrees, this ministry offers opportunities for people of every age, every walk of life, and with all interests and skills. For some people and in some situations, it can also be a dangerous pursuit, as corporations, working in concert with governments, defend their interests militarily and through the emerging global security state. I was once arrested, with many friends and colleagues in the church, while engaged in civil disobedience against police brutality in Manhattan, New York. At the very least, I would rather not have my phone calls and emails monitored to the end of my days, which is, in recent years, a minimal consequence of civil disobedience.

Nevertheless, if present trends continue politically and economically, many of our brothers and sisters will need legal and spiritual support, as well as solidarity. We should be prepared to give it.

In the years ahead, it is likely that the severity of the environmental crisis will challenge the confidence that people have in traditional structures, including the structures of the church.

That is why the highest priority must be given to strengthening our parishioners' confidence in the structures and teachings of the church, especially with regard to the most basic concerns. For example, will the church help my family and me to survive in this world? I hope the answer will be yes; but based on the world that is unfolding now, this is a reasonable question that anyone might ask about any church, any denomination, anywhere.

Many of our members, perhaps the vast majority, need to reflect upon and talk with each other about the ecological and spiritual foundation of community life, as well as the many contributions that congregations and communities can make to our mutual survival. In other words, what environmental and spiritual roles do congregations play in meeting survival needs? What purposes do they serve when ecological systems (communities within communities) are

being destroyed? A working assumption behind my ministry has been that the *first church*, the church in its most basic form, is God's creation in a process of renewal. In my view, this understanding of the church relates to the 'sole ark of salvation' that St Cyprian wrote about centuries ago, interpreting it in a different way for a different time. The ark (the Living Earth) is in desperate need of restoration and repair; that is to say, if we expect to survive. Otherwise, the Living Earth will survive without us. The difficult reality in which we find ourselves today forces us to confront a spiritual and scientific truth that we tragically resist: we are part of the Living Earth, and without it there would be no people and no church. The work of the church that we routinely call 'the church' begins with God's *first commandment* in Genesis – to care for the Living Earth in order to thrive in our lives every day. Jesus shows us how deep this teaching goes and how much we still have to learn about our faith.

Caring for creation must be more than an idealistic moral teaching that is learned in school. It already is a matter of day-to-day survival. Assuming that we begin to understand what survival means in the years ahead (what does 'surviving' really mean from a Christian point of view?), we might gain some insight into what a thriving web of life and a thriving humankind actually look like. The last few generations have not had the opportunity to see that kind of thriving first-hand. The role of the church must be to help the present generation to survive and future generations to receive the possibility of thriving as a sacred gift.

The Anglican Alliance for Development, Relief and Advocacy

Participants in ACEN's meeting watched a slide presentation prepared by staff of the new Anglican Alliance which seeks to coordinate Anglican initiatives for development, relief and advocacy across the Communion.

Bishop Bill Godfrey of Peru contributed to the inception of the Alliance after the difficulties he and his diocese had experienced in the aftermath of the 2007 Peru earthquake when trying to access and coordinate relief support from a number of agencies in different parts of the Communion. The Alliance will prove invaluable in such disaster situations and its partners have already had helpful conversations, for example, with regard to the earthquake and tsunami in Japan, and crises in Pakistan and Sudan.

The Alliance is presently funded through a three-year start-up plan and is using a regional consultation structure in its growth phase. It has a steering/reference group made up of Anglicans from around the Communion.

The Alliance provides a mechanism for mobilising multiple Provinces in the undertaking of advocacy. For example, during the Alliance Africa consultation, food security emerged as a prime issue so, with the G20 Food Summit in view, the Alliance produced and disseminated advocacy materials, including draft letters.

ACEN and a number of other Anglican Communion Networks contributed to the original discussion process prior to the setting up of the Alliance. Provincial reporting to ACEN's meeting together with engagement locally in Peru now reinforced awareness of the relationship between environmental destruction and issues of justice. ACEN members agreed that the network and the Alliance might usefully enter into dialogue around the tight connection between climate change and environmental degradation and, for example, the displacement of entire cultures. This opportunity is reflected in ACEN's Lima Statement.



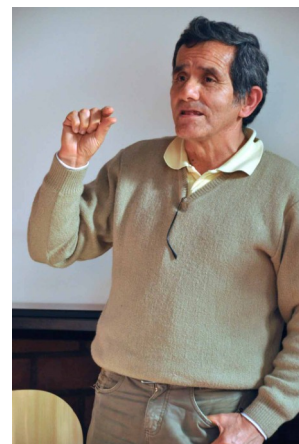
Photo: Anglican Alliance for Development, Relief and Advocacy
www.anglicanalliance.org

Ecumenical and Inter Faith Encounter in Peru

Participants in ACEN's conference had an important opportunity to meet with members of ecumenical and inter faith bodies in Peru who share a concern in environmental issues and who are active in a variety of local initiatives.

Bishop Bill introduced friends from the Interreligious Committee of Peru which is linked with the international Religions for Peace.³⁰

A Roman Catholic representative on the Committee explained how Peru's tremendous ecological diversity means that the country has a fragile environment. It is third after Honduras and Bangladesh in terms of vulnerability to climate change. The Roman Catholic church has been keen to see the connection between environmental degradation and health. Peru is rich in minerals, and mining is not treated with the caution that is required. Leftovers from former mining operations are affecting water systems now. And new mining sites are perpetuating the problem. Peru is highly vulnerable when it comes to water. Peru's coastline is desert. Its water supply comes from the glaciers and these are receding. The Roman Catholic church is asking people to take water samples; this helps people to understand that water at its source is pure, but that it becomes contaminated by the time it comes to them. This energises them to take action. The Committee takes the opportunity to raise the environment on different days in the calendar, for example, Environmental Day. Out of 200 conflicts in the country, 160 are around environmental issues. The environment is a priority for all churches.



Environmental issues are also a point of interest for the *Joining Hands* network, a social action development of the Presbyterian church in the USA. A local representative of the network described its focus, alongside other NGOs, on La Oroya, one of the five most polluted towns in the world. One of the prime polluters has been an American company, Doe Run. The strategy has been to try to reach the company owner as a group of religious leaders, to try to convince him to change his attitudes to what has been going on. A group travelled to the USA. The company's work has been paralysed for the last couple of years but between 1997 and 2007 operations were polluting land, air and water with cadmium and other heavy metals. Contamination is now primarily in the soil.

³⁰ See www.wcrp.org: Religions for Peace is the largest global coalition of representatives from world religions, dedicated to its mission to stop war; end poverty; protect the earth.

The Joining Hands network is also concerned with water. Peru's water source is high in the mountains, the same areas where mining companies are finding new places to mine. They are using and contaminating the water so that Peruvian ecosystems – Peru's greatest wealth – are being destroyed. The Peruvian government gives companies permission to mine without consulting local communities. Sometimes farmers do not know the mining is going to happen until drills turn up and start work. Just over a year ago, a settlement tank cracked and spilled its contents into the local river. The Peruvian government declared an emergency. This was lifted after three months but the pollution remains.

A representative of the Iglesia Evangélica de los Peregrinos del Perú described a church project in the east of Lima called *Comunidad Consciente y Activa en el Cuidado Medioambiental* (Community Aware and Active in Environmental Care). The area is poor and highly polluted by factories making tin cans, paper pulp, and other products. Trucks use the highway running through it, leaving rubbish and producing smog. The church is proclaiming a holistic gospel, that nature is a gift and needs to be cared for. The key objective is to change attitudes and behaviour in relation to looking after the environment. This is done in collaboration with other churches and civil society and municipal authorities in the area. The project includes working with church members because they too are not always environmentally aware. Sunday School teachers are trained to introduce the environment into their classes. Women are taught to use recycled materials in making handicrafts such as bags and place mats out of plastic bags. Our slogan is 'reduce, reuse and recycle'. There are many other elements in the project, for example, encouraging the neutering of dogs, clean-ups of parks, tree planting with the municipal authorities, and teaching handicrafts to families and to school teachers (training the trainers).

Vida Abundante: Acociación Cristiana para el Desarrollo Sostenible is an NGO that roots its work in John 10.10b, 'I came that they may have life, and have it abundantly. The Director of the organisation depicted abundant life as life in harmony with God, with our neighbours and with the environment. Vida Abundante is a Christian organisation



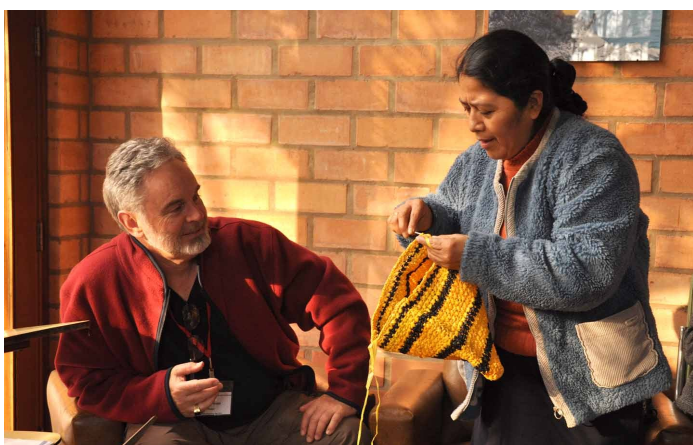
but works with all people, currently in Mirones Alto, a very poor shanty town where Lima's recyclers live, people who climb into rubbish bins and find recyclable items to sell in order to make a living.

Vida Abundante engages with child nutrition because poor, under-nourished children are more vulnerable to environmental pollution. It is a mistake to think of Peru as a First World country. Many people are poor and live in shanty towns. Vida Abundante trains women in nutrition so that with limited resources they can feed their children better; with one sol (30 cents) they can either buy five bananas or junk food. Women are also trained in the production of items from recycled materials and connected with vendors.

Through the organisation's activities malnutrition has been reduced from 80 to 10 per cent. Guinea pigs are native to Peru and have high iron content and so are good for reducing anaemia in children. Children are taught to rear guinea pigs and grow vegetables and engage in business in the local community, selling their produce. They also eat from what they produce. Vida Abundante has also shown children how to collect organic waste from their homes and put it into a bio digester which transforms the compost and guinea pig droppings into fertiliser for plants. The children sell the fertilisers to the municipal authorities, generating important income for their schools. Along the way, they learn about their environment, learn skills and benefit from extra income for their education.

Vida Abundante provides scholarships for young people through their *Redime* (in English, 'Redeem') scheme. Young people learn about environmental issues alongside biblical reflection, and then sensitise people in their own churches. In two and a half years 14 people have attained professional qualifications – and developed attitudes and a heart for creation.

When Vida Abundante moves on from an area, the organisation hands over its projects to the municipal authorities.



Trip to La Oroya in the Altiplano

An account by Bishop George Browning

After six years without a meeting, the Anglican Communion Environmental Network met in Peru, partly to build relationships, confidence, trust, and commitment through face to face encounter, and partly because the network wanted to experience firsthand some of the environmental challenges faced by people in a developing country.

Thus at six o'clock on Monday 9 August the conference delegates found themselves packed into a minibus for the six hour journey to La Oroya in the high plateau of the Andes, to meet a community with firsthand experience of the advantages and pitfalls, the successes and disasters, of being a community in a country with rich mineral resources for which the world has an insatiable appetite.



Snow-capped mountains in the Altiplano

Few of us had much idea about what lay ahead. We knew we would journey over a pass at nearly 4,570 metres. We knew we were going to a mining area and in particular to a community with a smelting operation in its midst, but none of us would have anticipated the complexities that we were to encounter.

The smelting operation in La Oroya has been in place since the 1920s, passing from initial ownership by an American corporation to state ownership and then purchased in 1997 by the US-owned Doe Run Corporation. It is clear that inadequate care has been taken, or investment made, in ensuring environmental best practice for human and non-human life alike. Decades of pollution have rendered the local river and the earth in the surrounding hills toxic. Community members have shown dangerously high levels of lead in their blood and have suffered severe bronchial conditions, development and other health issues. Children remain particularly vulnerable. The problems the community has had to face began well before Doe Run's ownership, but persist.

We met in the La Oroya home of the Roman Catholic priest, a most impressive community leader, both in his understanding of the complex issues, and in his respect for and support of all members of the community, and by no means least in his concern for justice. So engaged were we by the conversation that we emerged from his house three hours late for our lunch engagement in another community.

We learned that Doe Run closed the smelter in 2009, reportedly because of the impact that the 2008 global financial crisis had had on commodity prices, though some in the community question the sudden shift from high-level profit to financial crisis and are concerned that other factors might be involved.

We also learned that a condition of Doe Run's acquisition of the smelting operation was that the company should take on the State owned company's environmental Remediation and Management Programme involving such measures as the elimination of toxic emissions, cleaner processes, water treatment and safe disposal of waste.

Doe Run has completed most of the programme, but the company continues to ask for extensions to the timeline originally agreed. Claims for compensation have been taken out by some members of the community against the company, while in turn the company has taken out claims against the Peruvian Government.

It was explained to us that problems caused to the community by the closure of the mine are almost as great as the pollution that seeps out visibly and invisibly and which settles everywhere. A large number of people who had employment now have none. Sadly human relationships have also been torn asunder. Some members of the community are eligible for compensation, others are not. Others are grateful for the industry mining and smelting has provided and for the charitable donations and training opportunities it has made to the community. Of those who were in gainful employment many have been retained on a part wage since the closure of the smelter, but have nothing to do, while others have no wage at all.



Smelter at La Oroya



ACEN members listen to the Roman Catholic priest in La Oroya

It was clear from conversations with a variety of people that the community wants the smelter reopened in the near future. In a country where some are poor and many others are very poor; the opportunity for work is a lifeline.

There is every reason to believe that the experience of La Oroya is similar to the experience of mining communities the world over where foreign investment is made with the expectation that it will return a considerable dividend to owners and shareholders. This situation is not likely to improve without significant external pressure and encouragement in an environment where world demand for resources continues to grow and availability fails to keep pace.

What is the way forward? How can or should the Church locally, and through its national and international structures, engage with such issues?

There can hardly be an easy answer to this question. The following are put forward as suggestions the Church might take up through its various legislative bodies and networks as it pursues its mandate to address unjust structures.

1. Where obvious malpractice has occurred through foreign investment, the world community should consider the establishment of an industrial tribunal, similar to the war crimes tribunal in The Hague which can independently examine the situation, impose penalties and have a mandate to carry them out. Unfortunately when this matter is left to parties that have an interest in the outcome, including national governments, there is no guarantee that justice will be done for the local community. It is clear that negotiations between the company and the Peruvian Government have not always been in the best interests of the local community.
2. When foreign investment is being sought an agreement should first be made with the local community before agreement is signed by Government. An independent arbiter should also be appointed to ensure that the terms of the agreement are constantly monitored and fulfilled.
3. When investment is made by a company with shareholders, the expectation of the shareholders for a dividend must be balanced by the vital and just interests of the local community for their health, employment, community infrastructure and long term, generational, expectation for sustainability.
4. When negotiations are not transparent, when money is offered to buy people's silence, or acquiescence, then corruption is multiplied. In any enterprise involving



ACEN members and clergy of the Diocese of Peru with women textile artisans

foreign investment there should be an independent body to which community leadership can appeal and through which review, perhaps on an annual basis, is conducted.

5. Where possible the local church should be encouraged to take a strong lead as we observed of the Roman Catholic church in this very difficult and complex situation, not taking sides, but listening to all and standing for justice and equity.

People of goodwill in the global community should be cautious about signing a petition for or against an interest about which they know little. They should first be satisfied that those who have prepared the petition have had access to dialogue with members of the community directly impacted by the issue at stake and fully explain the complexities involved.

A footnote to Bishop George's comments from ACEN Secretary, the Revd Ken Gray, Anglican Church of Canada

Following our conversation about the history and experience of local miners and smelter workers, and with the knowledge that unemployment continues to stress the community, we toured a local textile factory supported by Pan American Silver Corporation, a Canadian based mining company with interests in the region.

The operation was clearly a source of pride and hope for those employed in the production of high quality textiles for an export market.

As we left the room to travel to our next appointment, I was briefly interviewed by a local journalist, possibly employed by Pan American Silver. Thinking nothing of this moment, I was surprised to see a note on my desk upon return to



Canada from the Pan American Silver's head office in Vancouver BC. I was further surprised when I spoke with their representative to discover that my comments had been published in a newsletter distributed company-wide. I enjoyed a good conversation about the state of mining in Peru and of Pan American Silver's involvement in South American mining. I was further delighted to connect with a former Canadian diplomat with recent experience in Canadian-Peruvian mining projects. Both were very familiar with the La Oroya situation and were hopeful that the communities of La Oroya and neighbouring Morococha would, in time, flourish given Peru's desire to enact and enforce legislation which would put all commercial activity on an equal footing with greater emphasis on sustainable practices than in the past. I was also pleased to hear that Pan American Silver planned to continue to support the textile operation for the foreseeable future given their continuing presence in the region. Time will tell.

Peru and Ancient Religion

Peru and Peruvian life remain in touch with the country's ancient stories, traditions and religions.

Throughout the Communion, many Anglicans have discovered meaning and common ground in the beliefs and traditions of the First Peoples and lands where we have been privileged to witness to the Gospel of Jesus.

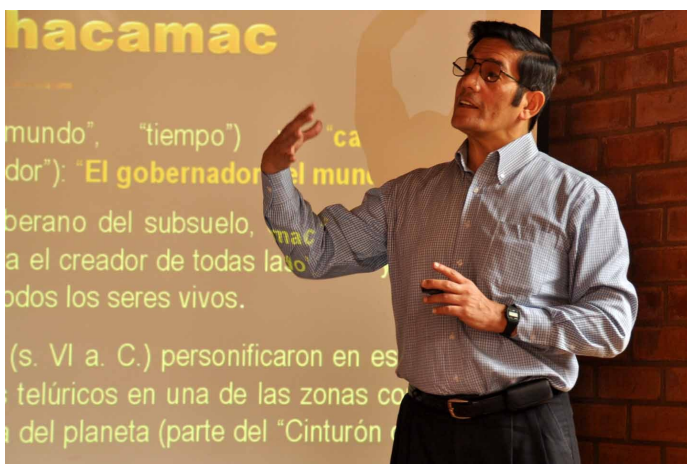
The question can be asked, how might the Christian faith be enriched by Indigenous tradition, or, how might the Christian faith be seen as the fulfilment of that which had previously been only partly understood?

The following summary of a presentation by Canon Jorge Zamudio of the Diocese of Peru will strike a chord with those of us who are familiar with the ancient stories of our own lands and be a reminder that human relationship with creation demands honour and respect - honour and respect which we have come to understand in Jesus, the first born of all creation.

A Presentation by Canon Jorge Zamudio

The gods of ancient Peru were closely associated with earth, nature and natural phenomena. Along the coast the chief god was Pachacamac, the name meaning 'governor of the world'. He was most particularly god of the subsoil and husband of Mother Earth. Until the sixth century AD, Peruvians understood Pachacamac to be in earthquake events and other such extreme events. He is depicted with a face in front and a face at the back. The impressive 5,000-year-old ruins of the temples and pyramids of the Pachacamac religious centre lie 32 kilometres to the south of Lima.

In the Andes, Pachamama, meaning Mother Earth, was the chief god, and was associated with earth, fertility, motherhood and the feminine. The fiesta of the Pachamama is still celebrated once a year in many places. A pottery urn containing food is buried close to the house along with coca leaves, alcohol and cigarettes. People wear white with black chords attaching neck, wrists and ankles – as protection



against the anger of Pachamama. *Apachetas* – stone piles – are placed along the road and paths as sites of prayer monuments to Pachamama.

The *Apus* and *Wamanis* were gods of the mountains. A religious fear of the mountains remains. When the volcano overlooking Arequipa smokes and when there are earth tremors, people may still offer animals and agricultural products to Apus, as well as going to Mass.

Other gods were Mama Cocha – Mother of the Sea, and Mama Sara – Mother of Maize. These days there may be a Mass to pray for good fishing. After the priest has gone, it is not unusual for the locals to make their offerings to Mama Cocha. In the jungle people believed in tree, pond, flower, thunder, serpent and water gods. There was belief in divine presence in mud, orchids and the moon.

A Local Perspective

A Presentation by Eleanor Zúniga

Eleanor Zúniga is an Anglican and a journalist for the Peruvian Times. For almost 100 years, the Peruvian Times, one of the oldest English-language publishing houses in South America, has reported and analysed events in Peru.



Indigenous people in the Puno district of Peru are concerned about damage to their land by mining companies. Larger companies are now more environmentally aware because they have to keep shareholders happy. But local Indigenous people are not consulted. Much environmental damage has taken place with complete disdain towards local people's perspectives. Local people

have demonstrated and set up road-blocks. Five people were killed and thirty injured before the last elections. All future mining concessions were cancelled as a knee-jerk reaction. A major hydroelectric project has also been cancelled, which would have flooded a large area including a section of new highway. Over 100,000 people would have been displaced.

Traditionally farming works with channels of water between planting areas. This is a sustainable method but it is being lost. Terraced farming used to produce more crops than were needed. Fertilisers were not needed and there was no need to leave land fallow. There are efforts now to recover this method. It is not a popular idea with industrial agriculture but, as a method of self-sufficiency farming with excess produce for local towns, it would be workable. The Cusichaca Trust has pioneered the restoration of traditional Andean agricultural terraces and irrigation canals. The Trust works with local partners in Peru, devising projects that reduce poverty and increase self-sufficiency amongst isolated rural communities, and showing how the technological achievements of the past can be put back to work to help solve contemporary problems.³¹

There has been a move towards genetically modified crops but to date they have not been introduced. There is a huge diversity of plant species in Peru, not least of maize and potatoes.

Peru has become a two strata nation – very poor and very rich. The very rich can be inflexible, but Peru has an opportunity to take a leadership role in showing the benefits of low impact, high yield agricultural methods. This is not 'big business' but it is sustainable.

Consumers need to be educated. Potatoes are delicious whatever their size and shape. Supermarkets want uniformity of size and shape to satisfy consumer demand. There needs to be more awareness of carbon miles. For example, Britain is both importing (Haagen-Dazs) and exporting (Walls) vast amounts of ice-cream. A young Peruvian woman in the jungle area runs a small NGO teaching, for example, health, through soap opera broadcast by radio. It has proved to be a good method of teaching. Would this also be a way of reaching the 'upper classes'?

There are two ways of looking at the economy, one involving business and financial return, and one looking at mother earth, at creation. To root the economy entirely in the first is unsustainable. The traditional approach was that the earth gives and must be paid back. Sometimes large companies might employ chaplains but fail to respect nature.

There is corruption in politics and in society, often sustained by the attitude that 'If I do not take the cash, someone else will'. There is a lack of morality which did not used to be the case. The churches need to be involved in restoring values.

³¹ See www.cusichaca.org.

Steve de Gruchy 1961 – 2010

An Appreciation
by the Very Revd Dr Andrew Warmback³²

Introduction

There were many sides to Steve de Gruchy: a warm human being, husband, father, anti-apartheid activist, conscientious objector, pastor, preacher, guitarist, gender activist, writer, editor, academic and advocate for the earth. Steve died in a tubing accident on the Mooi River on 21 February 2010, at the age of 48. At the time, Professor de Gruchy was Head of School, Religion and Theology, University KwaZulu-Natal (having been appointed in 2000 as the first Director of the Theology and Development Programme in that department).



Of his death, Archbishop Emeritus Desmond Tutu wrote: 'His passing from this life leaves the world a considerably poorer place.' Steve and his wife Marian Loveday, have three children: Thea Siphokazi, David Maphakela and Kate Tshiamo.

Writer

Steve was a prolific writer; there is a book being prepared on his writings (and another, a festschrift). His writings covered a broad range of areas. With Paul Germond, he edited *Aliens in the Household of God: Homosexuality and the Christian Faith in South Africa*, published in 1997, with a foreword by Archbishop Desmond Tutu – a pioneering book for South Africa at the time. While undertaking development work as the director of the Moffat Mission Trust in Kuruman (1994–2000), and having started the Kalahari Desert School of Theology, he wrote a book on spirituality, *40 Days in the Desert: Meditations from Moffat*

³² Dr Warmback is Rector of St John the Baptist, Pinetown, Diocese of Natal and Archdeacon of Pinetown. Steve was supervisor of his PhD thesis, *Constructing an Oikothology: The Environment, Poverty and the Church in South Africa* (UKZN, 2006).

Mission on the edge of the Kalahari (1999). Together with his father, John de Gruchy, one of South Africa's foremost theologians, he updated *The Church Struggle in South Africa* (25th Anniversary Edition; SCM Press, 2004).

Editor

In 2000 Steve took over editorship of the *Bulletin for Contextual Theology in Africa* (based at the University of KwaZulu Natal). In 2003 he became editor of the *Journal of Theology for Southern Africa*, perhaps South Africa's premier theology journal, which was begun by his father in 1972. Steve served on the editorial Board of the Australian based *Journal for Anglican Studies*.

Theologian

While ordained a Congregational minister, Steve, with his wife, an Anglican, became part of the Anglican Church. As a theologian, Steve was to put his gifts at the service of the church at large. The Anglican Archbishop of Cape Town, the Most Revd Dr Thabo Makgoba, commenting on these skills, wrote:

We shall miss Steve hugely for the gifted theologian that he was, with a remarkable ability to draw links between academic theology, government policy-making, and the realities of the lives of the poor.

The wider Anglican Communion experienced his skills when Steve delivered a keynote address at the international Towards Effective Anglican Mission (TEAM) Conference. His talk, entitled 'A Funeral and Four Weddings', picked up on the Millennium Development Goals and sustainability and was published in *Faith in Action: Njongonkulu Ndungane – Archbishop for the Church and the World* edited by Sarah Rowland Jones (Wellington: Lux Verbi, 2008), 330–347.

Environment

It was in the area of the environment, that Steve has left us with a rich legacy of theological resources. Arising from the South African context, where people were uprooted from their land and alienated from the natural environment, Steve worked to bring together elements that were often separated, and formulated integrative frameworks.

Oikos and Olive Agenda

Steve helped popularise the *oikos* metaphor, which links ecology with economy, and assisted the Diakonia Council of Churches in producing their prophetic document, 'The *Oikos* Journey: A theological reflection on the economic crisis in South Africa'.³³ Steve proposed an 'Olive Agenda', in which he drew together the green and the brown issues ('An Olive Agenda: First thoughts on a metaphorical theology of

³³ See www.diakonia.org.za/attachments/39_The%20Oikos%20Journey.pdf

development', *Ecumenical Review*, Vol 59, No 2/3, 2007, pp 333–345). Sometimes he combined these images ('Oikos, God and the Olive Agenda', www.sacc.org.za).

Earth Crisis

In the tradition of Larry Rasmussen's book, *Earth Community, Earth Ethics*, Steve argued that what we face is not so much an environmental crisis but rather a crisis of values, of culture, of how we live. Steve would integrate these ideas into much of his work, such as in his work on mission ('Agency, Sin and Grace: Protestant Perspectives on Mission and the Earth Crisis', *Missionalia* 34, no. 2/3, (2006), 362–379). He took a strong interest in and wrote about the Millennium Development Goals, seeking development that links poverty eradication to water, sanitation and sustainability.

Steve used health as an overarching focus for much of his work. For him, to be healthy requires a healthy environment. And being a proponent of asset-based community development, he collaborated actively in the African Religious Health Assets Programme (ARHAP). He lectured his students and wrote about the Sustainable Livelihoods Framework, an approach he felt helped understand poverty eradication in a context of varying possible support mechanisms.

Food and Water

Knowing that climate change related to the 'bread and butter' issues of life, Steve wrote about food. He opposed the genetic modification of food ('Life, livelihoods and God: Why genetically modified organisms oppose caring for life', *Ecumenical Review*, (2002), 251–261; 'Biotechnology as cultural invasion: Theological reflections on food sovereignty and community building in Africa', *Scriptura* 82, 2003).

Towards the end of his life Steve focused on water. In January 2009 he gave a paper to the Third World Forum on Liberation and Theology, meeting on the theme *Water, Earth, Theology – for another possible world*, in Belém, northeast Brazil. His paper was entitled 'Dealing With Our Sewage: Spirituality and Ethics in the Sustainability Agenda'. A version of his paper was subsequently published in the *Journal of Theology for Southern Africa* 134, 2009.

Conclusion

As a creative and imaginative public theologian and a friend to many, Steve has been sorely missed. Yet he has left us with theological tools to help us in our struggle for the earth, especially in a context of rapid climate change.

Afterword and Assessment

Good News and Bad News

by the Revd Ken Gray, ACEN Secretary

It remains for me to add some thoughts on meeting goals and outcomes for the benefit of future meeting planners and Anglican Communion Network representatives.

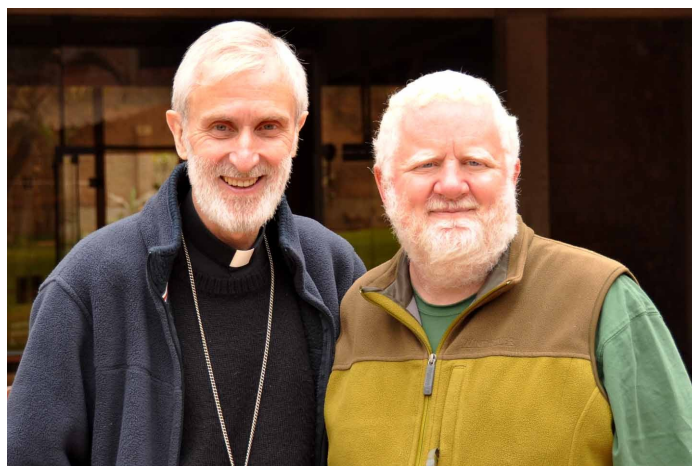
The year 2012 will mark the tenth year that global Anglicans have formally collaborated on ecological advocacy and reflection on the stewardship of creation. Following the very successful *Global Anglican Congress on the Stewardship of Creation* in Johannesburg in 2002,³² which gave rise to ACEN itself, and following the first formal meeting of the network in Canberra, Australia, in 2005, much significant work has occurred. Given the global challenges confronting creation and human inhabitants however, accomplishments seem (at least to this author) small. This in no way should diminish the sacrificial efforts of many Anglicans around the Communion. We are speaking however of creation itself, which, apart from God, is as significant a reality as can be imagined. Moreover, the forces we confront are huge, in proportion with the principalities and powers of Ephesians 6.12:

For our struggle is not against enemies of blood and flesh, but against the rulers, against the authorities, against the cosmic powers of this present darkness, against the spiritual forces of evil in the heavenly places. Therefore take up the whole armour of God, so that you may be able to withstand on that evil day, and having done everything, to stand firm...

Behind the profit-oriented actions of so many persons and groups stands a powerful greed, supported by a tacitly accepted philosophy which demands the capitalistic accrual of surplus as a buffer against insecurity, and a fear that humans, especially rich humans, cannot live without taking from others. The attitude is as pernicious as it is prevalent and our churches are not immune.

Our attempt, and the attempt of many who contribute to our network, to combine ecological observation with economic analysis can and must continue, and speak to as broad a constituency as possible. The work is not easy and victories will be small. For good health, and over the long haul, we must integrate Sabbath keeping into our work.

Speaking of Sabbath, I note that in our time together, and this is a personal view, Sabbath was slow to emerge. Even as we discussed Sabbath our discussion quickly jumped to



Bishop Bill Godfrey and ACEN Secretary, the Revd Ken Gray

action. As we shared a brief Sabbath retreat, well, let us just say we did not linger long at the oasis of calm. The activist in us seemed jealous of the contemplative despite ourselves. Possibly a future gathering around the theme of *kenosis* (Philippians 2) might be helpful and instructive.

We leave Lima with a master plan of action over which I will preside and request accountability. When we left Canberra in 2005 we agreed that folks who had energy for a project should take it on. The structure was very informal, too informal in fact. We leave Lima with specific commitments to certain portions of an agreed statement. Hopefully our structure will encourage us and help us honour our commitments.

We are a very different group from those who gathered in South Africa in 2002. Then we assembled as clusters of folks from different regions of the world who shared common visions or strategies, at that time, without official representative status. Now we have formal representation from the structural leadership of many though certainly not all Provinces of the Communion. This is an improvement but leaves room for greater engagement. We will use the publication of this report as an opportunity for further recruitment.

Bishop George Browning has done a fine job of stressing the fullness of a Trinitarian theology of God which can fully encompass creation within its orbit where the human condition resides within it. He rightly cites the deficiencies of a theology which is wholly anthropocentric, where humanity's sole focus is individual salvation, so often at the expense of appropriate care for God's gift of creation and a lively engagement with God in God's fullness. Such a traditional approach may explain why in my experience in North America, people lose interest in ecological justice

³⁴ Proceedings were published as 'Healing God's Creation: the Global Anglican Congress on the Stewardship of Creation, the Good Shepherd Retreat Centre, Hartbeesport, South Africa, August 18-23, 2002, http://books.google.ca/books/about/Healing_God_s_creation.html?id=KgvYUtAADTgC.

when they lose sight of the human. The challenge remains for us all to re-frame the place of humanity within God's glorious creation in a manner which informs and inspires an audience which loses interest ever so quickly. To be hopeful and simultaneously challenging is so often the preacher's task. Likewise here in ACEN.

I am acutely aware of both the need for and the costs of gathering. We need to develop relationships of trust amongst ourselves in a face-to-face setting in order to maintain a creative and effective presence to each other electronically post-conference. Sadly, the technology that enables people to communicate easily and effectively through video conferencing is in the early stages of development and is not yet routinely available. Telephone is still best though time zones present considerable challenges. Email and listserv communication is clumsy and encourages passivity. Given the increasing difficulty around visas, which posed enormous difficulties for us and for other recent Communion gatherings, the impetus to develop more effective remote communication technology will increase. In five years' time, meetings will hopefully look quite different and be easier and more effective.

So what of the costs? We are most grateful to the Archbishop of Canterbury's Anglican Communion Fund and to The Episcopal Church for generous support of our meeting. Complicated by visa processes, travel for some participants was the single most significant cost. Our meeting also cost a lot in terms of carbon. One reason we did not meet in 2008, as originally planned, was my concern around the ecological impact of meeting together. The days of endless jet-setting are long gone and rightly so. Further, in my case and for most participants, other work suffers in order that this work may prosper. I think I am correct in noting that only three of our formal ACEN representatives are exclusively dedicated to social or environmental justice work. This is a sobering statistic and may explain our sometimes slow response to emerging situations and issues.

Another factor present in my mind throughout our meeting was a concept used in the Justice Camps Initiative of the Anglican Church of Canada where *the wisdom is in the group*. Our assembly was not a collection of experts, though many demonstrate significant experience and talent in a particular task or region. Each person brings gifts, and a collective wisdom emerges in our particular community. On one hand this might seem obvious; in many situations however, this subtle process had a profound effect on our discussion and outcomes.

The model of engagement with a host diocese worked brilliantly in our case. We remain profoundly grateful to Bishop Bill and Dean John Park for their gracious hosting and to their large team who worked out the details of our engagements. Everything we sought was provided. Thank you all. Yes, it was sometimes a challenge to balance our own needs for conversation with our need to be immersed in the Peruvian church. And so it goes....

We have so appreciated the leadership, writing and speaking of our outgoing (in more ways than one) moderator, Bishop George Browning. He will remain in relationship with us and has committed to some tasks, but it is time to cultivate a new relationship with his successor, the Most Revd Dr Thabo Makgoba, Archbishop of Cape Town, who has already taken leadership in his own context as described earlier in this report.

The efforts of the Revd Terrie Robinson, Anglican Communion Networks Coordinator, cannot be overstated. She worked through thousands of details before, during and after the meeting. Her detailed note-taking and summary of key issues allowed us to have a fruitful and accurate record upon which to base a discussion that led to the formation of the Lima statement itself.



Bishop Bill Godfrey and Dean John Park

On more than one occasion, Bishop Bill underscored the product of our efforts, that is, local parishes; Anglicans in local communities. While global conversations at the level of, say, the UN, are important, the genius of Anglicanism is its ability to speak to and encourage local actions in local communities. To an affluent population in many parts of the world which often says that *size matters*, and the larger the better, Anglicanism states that *all sizes matter*. Where two or three are gathered, a tree can be planted, water can be cherished and consumed, the power of the sun can be harnessed and a Sabbath moment shared.

When I let my guard down, I sometimes admit to folks that I often find this work boring. My interests are more allied to the arts, to music and to creative endeavours. That admitted, I believe this environmental work to be amongst the most important work in which our global church can and must engage. I feel called to its challenge as do those ACEN representatives who attended Lima and those unable to attend. We can only hope to draw more people into this particular forum of Godly action as we take up the challenges of the Lima statement for ourselves, for our people and for God.

God
whose Christ-presence
changes the consciousness
of the human mind,
give us new understanding of the planet
which we,
with all its creatures,
articulate through our existence;
that in communion
we may proclaim its beauty,
being and holiness.
Amen.

The Revd Tim Gray

Participants

including Representatives, Hosts and Observers



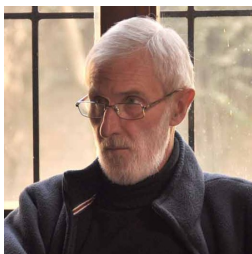
Mr Timothy Biswas, representative, Church of Bangladesh

Timothy Biswas is consultant for the Church of Bangladesh Social Development Programme. His work links with other programmes, eg, projects concerned with HIV/AIDS, trafficking, drugs, and religious fundamentalism. He will strengthen ties between ACEN and the World Council of Churches' Ecumenical Water Network.



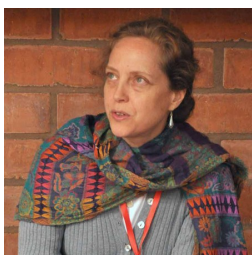
Bishop George Browning, outgoing ACEN convener

George Browning has been ordained 46 years, a bishop for 26 years and recently retired as Bishop of Canberra and Goulburn in the Anglican Church of Australia. He has been moderator of ACEN since its inception and has raised environmental issues at the Lambeth Conferences of 1998 and 2008. He steps down as moderator after this meeting.



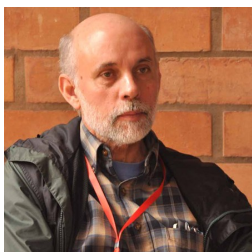
Bishop Bill Godfrey, host, the Bishop of Peru, Iglesia Anglicana del Cono Sur de America

Bishop Bill Godfrey has lived in South America for over 25 years, first in Uruguay and then in Peru. Under his leadership, the Diocese of Peru has flourished in all ways including social outreach.



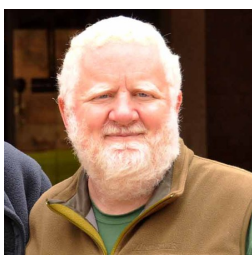
Mrs Asha Golliher, conference assistant

Asha Golliher has assisted the AUNO with environmental projects, including the 2002 Global Congress on the Stewardship of Creation. She works in a community library and will shortly commence studies in a library science programme. She organises and manages a local farmers' market and is a certified yoga teacher, a skill she shared with our group.



The Revd Canon Jeff Golliher PhD, Program Officer for the Environment, Anglican United Nations Office (AUNO) in New York

Jeff Golliher is a parish priest in the Diocese of New York. He has worked at the Anglican UN Office in New York on environmental issues for 20 years. Jeff has published two books on spirituality, his most recent on the topic of fear.



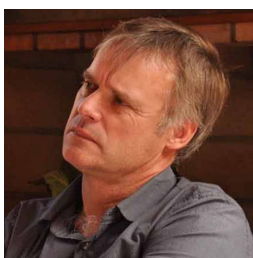
The Revd Ken Gray, representative, Anglican Church of Canada

Ken Gray is a parish priest in western Canada. He has been secretary for ACEN since 2005 and currently manages its operations. He chairs the Greening Anglican Spaces task group for the Anglican Church of Canada. Legally blind since birth, Ken's photographs appear throughout this report.



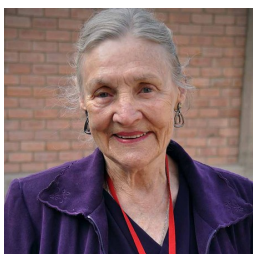
The Revd Tim Gray, Representative, Anglican Church of Southern Africa

Tim Gray is a parish priest, a member of the Johannesburg Anglican Environmental Initiative and the South African Faith Communities Environmental Institute (SAFCEI). His environmental work focuses on eco-congregations and research into sustainable mining. He will edit the ACEN Digest which is regularly circulated to all ACEN members.



Dr Andrew Leake, Special Presenter, Argentina

Andrew Leake is a missionary from Argentina. In the 1990s he helped to set up Asociana, the social justice organisation of the Anglican Church in Northern Argentina. Prior to that he was in Honduras working with a project supported by Tearfund. His recent work concerns the effects of deforestation on the land and Indigenous communities.



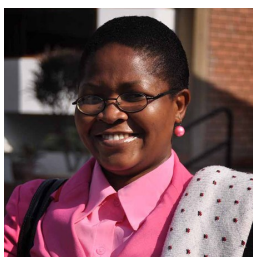
Mrs Anne Mayagoitia, Representative, Anglican Church of Mexico

Anne Mayagoitia is a professional translator and has lived in Mexico for 52 years, five of these in Mexico City, one of most heavily polluted cities in the world. She serves on various diocesan and provincial councils where she advises on environmental matters.



Professor Dr David Morales, Representative, Igreja Episcopal Anglicana do Brasil

David Morales is from Columbia but now lives and works in Brazil. He teaches international relations at the Estadual da Paraíba University in São Paulo. His research includes international initiatives relating to the environment and also to non-proliferation of nuclear weapons.



Mrs Judith Masumba, Representative, Anglican Church of Tanzania

Judith Masumba is provincial development officer for the Anglican Church of Tanzania and also the Mothers' Union provincial officer.



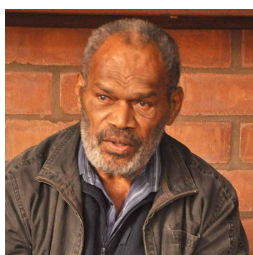
Mr Nagulan Nesiah, Observer, Program Officer for International Development, Episcopal Relief and Development

Nagulan Nesiah is Sri Lankan by birth, working in New York for Episcopal Relief and Development (ERD) which has a growing environmental portfolio. He will assist ACEN in making links with regional development projects.



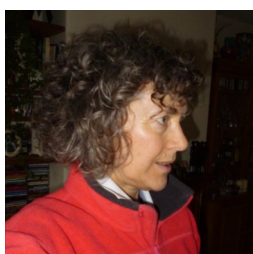
The Very Revd John H Park, Host, the Diocese of Peru, Iglesia Anglicana del Cono Sur de America

John Park is Dean of the Cathedral of the Good Shepherd in Lima. Most of his ordained ministry has been spent in Honduras, but in recent years he has been a South American Mission Society (SAMS) missionary in Lima. He provided translation and logistical support to ACEN's conference and was invaluable to the planning team.



Bishop Apimeleki Qiliho, Representative, Anglican Church in Aotearoa, New Zealand and Polynesia

Apimeleki Qiliho is bishop of one of seven Episcopal units in Fiji. He encourages people to value life among the natural environment. As a young priest he worked among people traumatised by the impacts of nuclear experiments near Tahiti. He is especially concerned by the effects of climate change on ocean-side communities.



The Revd Terrie Robinson, Anglican Communion Office, London, UK

Terrie Robinson is the Anglican Communion Networks' Coordinator and Women's Desk Officer. She is a non stipendiary priest in the Diocese of Oxford, Church of England. Her assistance before, during and after ACEN's conference cannot be exaggerated.



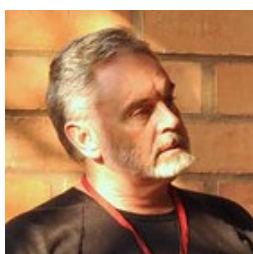
Mr Michael Schut, Representative, The Episcopal Church

Michael Schut is based in Seattle, Washington. He is Economic and Environmental Affairs Officer for The Episcopal Church. He worked previously for Earth Ministry, a Christian organisation in the USA.



Bishop Jean Paul Solo, Representative, Church of the Province of the Indian Ocean

Jean Paul Solo is bishop of Toamasina, Madagascar, responsible for development in the Church of the Province of the Indian Ocean which covers three countries – Madagascar, Mauritius and Seychelles.



Bishop Tom Wilmot, Representative, Anglican Church of Australia

Tom Wilmot is assistant bishop in the Diocese of Perth, a member of the national environment network of General Synod, and chair of the Anglican diocesan Eco-care commission. He will give leadership in ACEN in developing environmental theological curricula.

The Anglican Communion Environmental Network
www.anglicancommunion.org

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