Provincial Reports to the ACEN gathering in Peru, August 2011

Anglican Church of Burundi: report from Léonidas Niyongabo

Community-Based Natural Resources Management

His Grace Bernard NTAHORURI joins the Community at grassroots for promoting Agro forestry and Livelihoods

1. INTRODUCTION

Hosting the source of Nile and Congo Rivers, and covering a substantial portion of Lake Tanganyika, the unique ecosystem, Burundi has a huge agricultural potential. However, the severe civil crisis of 1990s stifled the potentials in addition to the increase in land degradation, which left Burundi as one of the most vulnerable countries in food security. According to FAO, at the country level, some of the most serious degradations of the soil are associated with very high densities of the population on sloping lands, in high altitude countries like Burundi in the Great Lakes region. Therefore, one of the most relevant geomorphologic and geo-demographic characteristics of the Great Lakes region is the extreme density of population in the cultivable lands. Therefore, as noted by the Global Environment Fund, the increasing demand of lands which are becoming rare and less fertile led to significant and socio-economic and environmental threats. Deforestation is an environmental issue prevalent in the region that has led to soil erosion and increased siltation of Lake Tanganyika, Congo and Nile rivers.

In Burundi, according to the Report of the HDR 2007/2008, in 2005, only 5.9% of the total land area is covered with forest. That is only 1,624.2 square km of land area was covered with forests in 2005.The HDR also highlights that the average annual rate of deforestation in countries from 1990 to 2005 was 3.2%. This figure is higher than for the Comoros (3.9%) among the 177 countries that were evaluated for the HDR 2007/2008. The causes of deforestation are generally the collection of firewood and service wood, climate changes, bush fires, continuing culture and pasture. The Ministry of Energy and Mines estimates that 96.6% of energy needs in Burundi come from wood and with a growing population, deforestation will continue at an unprecedented rhythm if we do not pay more attention. These links of cause and effect of socio-economic activities of deforestation, together with the topographical structure of the field and soil type have led to a widespread problem of soil degradation and loss of its fertility. In recent years, disasters are increasing in number and damage in the whole world. Burundi is negatively affected by the disasters related to climate changes. In 1998, Nino caused drought in several provinces of the country, worsening the fragile livelihoods of thousands of Burundians. The rainfall has become unpredictable for farmers and sinister events have now become frequent. The project will help communities, especially the poor to be sensitized on the negative effects of climate change and develop adaptation strategies.

Goal:

Poor communities are able to identify, prepare for, reduce and overcome the impact of natural and man-made disasters and shocks.

Objectives:

- To reforest 6,000 ha of land in Burundi within 3 years.
- To stabilise the soil and improve productivity on 3,000 family plots over 3 years.
- To build up the emergency management capacity of the Anglican Church and local communities over a period of 3 years.

Project Activities:

The activities were:

a. Reforestation;
b. Promoting agro forestry and fruit trees;
c. Promoting an integrated food security program at household level;
d. Establishment of water shird management (Trenches);
e. Sensitization through (clubs, schools, Médias, workshops, trainings, etc) on climatic change copping mechanisms and on disaster risk resilience.

Achievement:
With funding from Christian Aid, achievements up to now are of **4 245 523** forest trees planted on a forecast of 5.500.000 plants that is, a planted area is estimated at **3850 Ha**, **2 133 240** agro forestry plants planted on a forecast of **1 095 000** plants , **164 214** fruit plants planted on a forecast of **140 000** plants and a tracing of contour lines over a length of **292 726.25m** on a forecast of **10 800m**. These data are for the years 2008-2009 and 2010. Plantations statistics are compiled for the 3 Years. The year 2011 is a year of exit strategy of which Advocacy would come for the continuity of the program as the needs still large. The total number of direct beneficiaries are **18 945** households and an estimated of **94 725** indirect people benefits from the project.

The others beneficiaries are **54** schools (primary and secondary,), **117** parishes and sub parishes of the Anglican Church, **14** Parishes of the Roman Catholic Church and **4** others denominations (Pentecostal Church, Eusebu, Charismatic Church, Holiness Church).

Those target people are accompanied with the fund of Episcopal Relief and Development for improving their livelihoods and sustain food security program within 14 830 households include 200 pilot beneficiaries for households affected by Drought in the North of the country. The main crops are bananas tubers, Irish potatoes, Sweet potatoes, Cassava tubers, maize, beans, pineapple, and vegetables.

Capacity building for communities, pastors and staff is a main focus of the project.

Involvement of local Population and local Administration:

The failures that have been recorded in the development projects during recent decades have favored the emergence of new planning methods with an emphasis on participatory approach and Humanitarian Accountability Partnership involving all key partners in planning, implementing and monitoring of development programs in rural areas.

Local authorities have been involved at the time of conception through their representatives and are thus called upon to participate in the implementation of the project to promote and run the development from the basic entities.

"LOOK FOR RESPECT OF ALL THE GOD'S CREATION FOR FITURE GENERATION"

Church of England: report from David Shreeve, Environmental Advisor, Archbishops' Council, Church of England

Shrinking the Footprint was established in 2006 following a 2005 General Synod debate on ***Sharing God's Planet*** (a report from the Church's Mission and Public Affairs Council) which called upon the whole Church to engage with the issues of climate change and energy use at every level of the church. Since then *Shrinking the Footprint* has been extended to become the Church of England's national environment campaign involving the promotion of sustainable management of church buildings, land and lifestyle.

Recent research carried out on behalf of the CIWEM's (Chartered Institute of Environmental and Water Management) Faith and Environment Group, found that those involved with environmental issues in other denominations and faiths in the UK consider *Shrinking the Footprint* as the leading programme resulting in considerable envy from those interviewed.

Objective

Carbon reduction target of **80% by 2050** (in line with Government commitments), with an interim target of 42% by 2020. Increased awareness of the environmental issues are as described by the Archbishop of Canterbury: 'All Christians have an important role to play in developing their own environmental awareness and encouraging it in others'

Audiences

All congregations, clergy, schools, national and diocesan staff.

Messages

Caring for environment is a Christian duty and not an optional extra including support for those in developing world affected by environmental changes.

Strategy

To embed in church structures the ethos and action plans so that environmental action is a fundamental part of our Christian life and mission.

2011 progamme

- Autumn launch of pilot of StF Online Audit System providing all churches with an opportunity to regularly record energy use to provide local, diocesan and national energy use and convey energy saving advice.

- A National Diocesan Environment Officers' autumn conference, London, involving presentations in London churches including St Paul's Cathedral.

- Working with church schools in York, tapping into the diocese's 'year of the environment'

- Production of a national StF brochure for 2012 with themed resources/best practice for distribution at synods and other events.

- Launch of Archdeacons' initiative

- Continuing organisation of national Diocesan Environmental Officers Group and Bishops' Environment Group.

- Regular updating of www.shrinkingthefootprint.org website to include advice re solar panels, green electricity suppliers etc.

- Support for Lambeth Declaration interfaith initiatives. Next day conference –
  The World We Build Together – Managing faith buildings and spaces for sustainability and the Big Society. Lauderdale Synagogue, 31 Oct 2011.

- Support for Caring for God's Acre initiative involving churchyard conservation in 15 dioceses in association with Natural England and the Heritage Lottery Fund.

- Support for St Alban's Cathedral Green Pilgrimage initiative.

Promotion of Clergy Environmental Training Film Series for U-tube featuring a number of environmental issues showing both practical action that churches can take and the theology explaining why they should.

Church of Ireland: report from the Revd Elaine Murray

On behalf of the Church of Ireland province of the Anglican Communion, I would like to thank you for all the hard work that you put into our Network, I'm sure that I am not alone in fully appreciating all that you do for us on top of what is your normal workload.

I am sorry that I can't be with you in Peru next month, but I will be with you in spirit and am looking forward to reading updates and viewing photos of the gathering.

I have compiled the following report which I hope will give you a flavour of the Church of Ireland's endeavours in the area of environmental activity. As I am from the Cashel & Ossory diocese in Ireland, I'm afraid it is top heavy with examples and initiatives from that diocese (Appendix D).

I apologise for that but as I have just recently been appointed as the ACEN representative (Nov 2010), I have yet to become fully aware of what is happening across the twelve dioceses which straddle our two jurisdictions on this Island (The Republic of Ireland and Northern Ireland).

In October 2008, the diocese of Cashel & Ossory unanimously adopted a 'Green Charter' at the Diocesan Synod (Appendix A). This charter has become a guide to living lightly on our planet for each of the 149 church communities in that diocese. Since then, an annual Eco Seminar has taken place in the diocese where various experts are invited to speak of their specialist areas (conservation, water issues, wildlife, energy saving etc.) and an annual Environmental Competition is held with the various church communities entering under various categories such as Environmental Diligence, Capital Projects, Motivation of the young, Church Environs and Global Awareness.

All of these initiatives have had the effect of highlighting the importance of our care for creation at a parish level throughout the diocese and at the Diocesan Synod of 2010, there was a unanimous vote that the diocese should formally endorse the Earth Charter (Appendix B)

In Dublin, in May 2010, a proposal from one of the diocese of Cashel & Ossory's environmental committee , seconded by the Bishop of Derry, was unanimously carried by General Synod, the wording is as follows:

> Motion number 9, proposed by Marianne Young and seconded by the Right Reverend Ken Good, bishop of Derry and Raphoe.
>
> That this synod
>
> (i) Recognizes the need for the Church of Ireland as a whole to have an authoritative code of Environmental Good Practice
> (ii) Commends the existing Green Charter of the diocese of Cashel & Ossory as a possible way forward

(iii) Requests the Church and Society committee to consider this and other appropriate documents and to submit a proposed code to the General Synod of 2011 with a view to its being promulgated with the endorsement of the General Synod.

At the 2011 General Synod held in Armagh in May, no code was forthcoming from the 'Church and Society' committee as this committee had been disbanded and reformed during the previous 12 months. A new committee has been formed and has committed to report to the General Synod in 2012.

Another vital initiative in Ireland is the Eco-Congregation group. This is an organisation which has become increasingly important in the Church of Ireland 'Toolkit'. I have been the Church of Ireland representative on this group since May 2011.

This is an organisation whose vision is to see churches throughout Ireland adopt an eco approach to worship, lifestyle, community outreach and contact with the developing world Ireland by providing an environmental programme for churches, available to all Christian denominations throughout Britain and Ireland. It developed through a partnership between the Churches Together in Britain and Ireland (CTBI) and the environmental awareness charity "Going for Green" (now ENCAMS).

Eco-Congregation Ireland has been developed in co-operation with the four main Christian churches – the Church of Ireland, the Methodist Church in Ireland, the Presbyterian Church in Ireland and the Roman Catholic Church – whose ecological representatives are in touch with the many groups operating in Britain and Europe. The programme is available to all parishes with an interest in environmental issues and offers resources and support to help them to take practical action in the context of their Christian faith.

A simple environmental audit is provided to help congregations assess what they are already doing and to determine future priorities. They are then encouraged to download the appropriate resource modules which aim to integrate environmental care into different areas of church life. Each church will normally choose three modules on which to concentrate for the year from a list including: Worship and Teaching, Children's and Youth Work, Property and Grounds Management, Finance – Purchasing and Waste, Personal Lifestyles, Working with the Local Community and Thinking Globally.

Eco-Congregation Ireland is an internet initiative and therefore all resources are free and can be downloaded from the website. The modules are designed to enable congregations to become self-sufficient and monitor their own progress. Churches register their interest and are sent a starter pack, which includes a special Eco-Congregation Ireland folder and Module One – an environmental audit. Once this audit is completed, they are on their way to becoming an eco congregation, each step being monitored and assessed for the award of being an Eco Congregation which is designed to recognise the environmental achievements of churches and witness these to their local community. To qualify for the Award, which is

independently assessed, churches undertake projects/initiatives in spiritual, practical and community focused areas.

Eco-Congregation also provides liturgical resources for clergy, for example, Eco-Congregation Ireland (ECI) hope that churches throughout Ireland will observe Creation Time from 1st September to 4th October 2011 by praying for and working for the protection of God's creation and the promotion of sustainable lifestyles.

Churches are invited to adopt the theme 'Our Daily Bread – Food in God's Creation' on either one Sunday during Creation Time, or over the five weeks by focusing on the role of food in God's creation and in our lives. These resources, which ECI helped to prepare, are free to download from the Churches Together in Britain and Ireland website - *www.ctbi.org.uk/creationtime*. The extensive resources include sermon outlines, prayers, a service with accompanying Power Point, group study notes, harvest festival ideas and background information on food and agriculture.

On a personal note, in October 2010 I was nominated as the Church of Ireland representative on the ACEN. Although I was an IT Systems Analyst prior to my ordination in 2005, I have had a lifelong interest in ecological matters in general.

I had also recently completed my dissertation towards a Masters in Philosophy (Ecumenics) with Trinity College Dublin which focused on Climate Change Issues (Appendix C).

I hope this report provided a sufficient overview of our province and again let me wish you and all of the delegates to the Peru Gathering well.

Yours in the service of God and creation!

Elaine Murray

Appendix A

Diocese of Cashel & Ossory: Green Charter

As Christians and members of the Anglican Communion, we have an obligation to protect God's creation, not only nationally but globally. The Diocese of Cashel & Ossory affirms its commitment to Environmental Awareness and Protection by:

- Identifying areas of waste and excess.
- Encouraging environmental consciousness in every parish.
- Promoting environmental responsibility in the broader community.
- Spiritually and financially supporting third world development, supporting fair trade and addressing the effects of climate change.
- Advocating policy change at local and national level that is environmentally beneficial.

Identifying Waste and Excess

- Turn off unnecessary lighting.
- Use heating only when essential.
- Draught proof windows and doors.
- Provide Recycling facilities in all churches.
- Identify and deal with inefficient equipment.

Encourage environmental consciousness

- Infuse the Churches worship with references to God's creation.
- Avail of alternative energies or fuel efficient systems.
- Impress upon Select Vestries the environmental consequences of their decisions.
- Include environmental issues in the Churches education programmes at every level.
- Maintain Church environs sympathetically and cherish trees and wildlife.

Promote Environmental responsibility

- Lead by courageous and articulate example
- Cooperate with other people of faith who share these aims.
- Educate members of the public to the moral and economic consequences of inaction.
- Dialogue creatively on these issues with members of the agricultural community.
- Encourage cleaner and more environmentally responsible urban living.

Support Third World Development

- Raise awareness of the effect of climate change on the developing world.
- Support projects that assist those who suffer most from Climate Change.
- Campaign alongside Bishops' Appeal and similar agencies who work for change.
- Think seriously about how our lifestyle and carbon footprint affect the poor.
- Break the bread in solidarity with those whose future is crushed by our lifestyles.

Policy Change in Church and State

- Use the Churches councils and synods as places of environmental debate and agents of change.
- Raise expectations concerning environmental protection facilities provided by Local Authorities.
- Demonstrate to public representatives that their environmental policies matter by how we vote, lobby and act.
- Draw inspiration from the achievements and experiences of other nations and churches within the European family and seek to contribute ourselves.
- Offer informed and understanding prayers for those who carry great responsibilities in these matters.

Appendix B

Diocese of Cashel & Ossory

Environment Committee
The Right Revd Michael Burrows
The Revd Elaine Murray
Ms Marianne Young
The Revd Andrew Orr

St Canice's Library
Kilkenny,
Ireland

30th October, 2010

At our Diocesan Synod of 20th October 2010, held in Wexford, the motion was unanimously passed

'That these United Dioceses endorse the Earth Charter as a logical consequence to our commitment to our diocesan Green Charter'

And so we, the Diocese of Cashel & Ossory in the Church of Ireland, a province of the Anglican Communion, endorse the Earth Charter. We embrace the spirit and aims of the document. We pledge to join the global partnership for a just, sustainable, and peaceful world and to work for the realization of the values and principles of the Earth Charter.

Yours sincerely

Elaine Murray (The Revd)
Diocesan Registrar

Appendix C

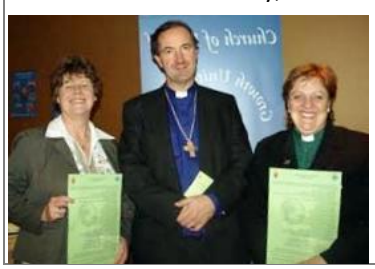
Abstract
Author: Elaine Murray
Title: Living Hopefully in a Time of Climate Change

This study deals with the problematic environmental situation facing the world at this time and explores the idea that lack of hope may be one of the most difficult obstacles to be overcome. It examines two Christian community initiatives in contemporary Ireland, one from the Roman Catholic tradition, one from the Anglican tradition, both of which acknowledge in the first instance that there is an environ-mental problem and both of which have attempted to become, as communities, part of the solution.

After the Introduction, the second chapter examines a Dominican Community response where the community is in the process of engaging its Christian theology with current ecological concerns by living sustainably and at the same time educating others on the value of creation. In the third chapter the experience of an Anglican diocesan response is detailed, examining how its own tradition has impacted on its response and how attempts have been made to enable the wider diocesan community reform its way of living within the framework of a Green Charter. The fourth chapter briefly examines two community based initiatives from the extra-ecclesiastical world; an Eco Village scheme and a Transition Town initiative. The fifth chapter analyses the elements that were observed in the two main case studies, discusses the models or ethical stances that exist already, examines the possibility for an ecumenical approach applicable into this area and asks how this continuing discussion might be resourced theologically. The sixth and final chapter concludes with the contention that the communities described in the study are acting from a position of hopefulness, believing that their way of living and witnessing can make a difference to the ecological situation that is a challenge to all creation. The communities believe that there is hope for change in our attitudes to climate change. On the denial-despair continuum, moving from a position of denial has tended to allow despair to overwhelm individuals and communities. It is only hope that allows these communities to remain in the centre of this denial-despair continuum and it is only from there that actions are possible.

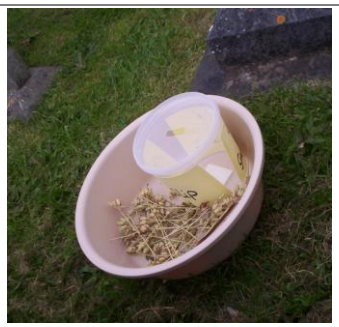
Appendix D

The Revd Elaine Murray, the Rt Revd Michael Burrows, Bishop of Cashel & Ossory, Ms Marianne Young

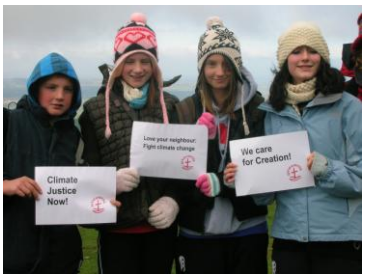


Solar Panels on a Rectory in County Waterford. Winner of Capital Award in the Diocesan Environmental Competition 2010

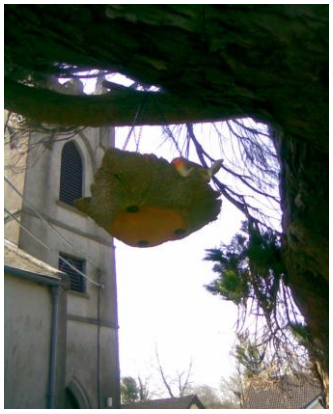
Rare Cowslips in a graveyard in Co. Laois, Seeds were saved and distributed across the dioceses. Winner of the Church Environs category 2009



Motivation of the Young Category winners in 2009



Some of the KIT Club Youth Group from Kilkenny on the top of Mount Leinster, County Carlow taking part in the World Council of Churches photo petition ahead of the United Nations climate talks in Durban, South Africa, in December 2011

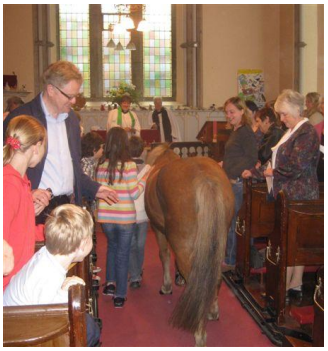


Tree Planting in St Canice's Cathedral, Kilkenny

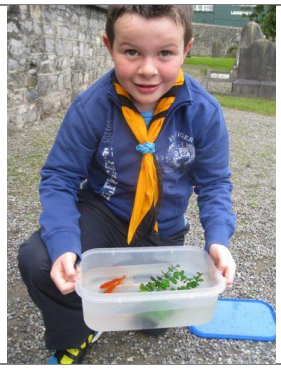
The Revd Elaine Murray, the Rt Revd Michael Burrows, the Very Revd Norman Lynas, Dean of Ossory, accepting a Capital Project Award in October 2009

School Assembly on the environ-ment

Sunday School children listen to a talk on Beekeeping with a Demonstration Hive to celebrate the year of the Honeybee, May 2011



Photos of the Annual Blessing of the Animals in Kilkenny



The whole community celebrate the totality of life – human and non-human

The Anglican Church of Kenya: report from Eliud Njeru

Anglican Church of Kenya Interventions in Environmental Stewardship and Climate Change

- Pastoral Letters
- Sand Dams
- Food Security
- Tree Planting
- Coping Mechanisms- Irrigation
- Training

Background

"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," remarked the Archbishop of Kenya, Dr. Eliud Wabukala in a pastoral letter on the environment.

The reality of the effects of lack of environmental stewardship is dawning to masses in various parts of the world necessitating responses to mitigate to prevent further degradation.

The Anglican Church of Kenya (ACK) has continually advocated for environmental stewardship from the home level to the national level to propagate the well being of the earth and leave it a better place for future generations.

Some of the interventions in environmental stewardship and climate change include sand dams, tree planting exercises, pastoral letters and small scale irrigation in direly dry areas to cope with the challenge of food insecurity affected by poor rainfall.

ACK Interventions 2009

Pastoral Letter on the Environment to all Dioceses, Parishes and Congregations

This was disseminated on 5th August 2009 by the Archbishop of the Anglican Church of Kenya. Dr. Eliud Wabukala.

The pastoral letter noted the environment as an urgent concern whose effects have been evidenced through erratic weather patterns and more severe droughts leading to poor crop production and livestock farming.

It's worrying that the experts have warned that these experiences will continue thus the challenge to us to take responsibility for our environment, in order to mitigate for ourselves, other people, other creatures and future generations.

He pointed out examples where the environment has been destroyed through deforestation, soil erosion, overgrazing and farming without using manure. They reminded the church that it is man's responsibility to restore our degraded environment, beginning with our homesteads, our church compounds, our schools and our other centres.

In the light of the above considerations he challenged all to respond in the following ways:

- Promote the harvesting of rain water, especially at home and in small community projects in all areas – on roofs, river valleys, streams, gulleys, farms and grazing grounds and stored for our future use.
- Ensure food security for all, especially through indigenous means of food production, and to avoid dependence on external means of agricultural production;
- Promote practices that enhance the fertility of the soil, especially soil conservation through contoured terracing; natural compost; fallow farming, vegetation and mixed cropping with staple foods appropriate for each specific zone to mitigate soil erosion to dams and enhance food security.
- Resist all forms of deforestation and to promote tree-planting with indigenous plants for food, timber, fuel, shade, water catchment and beauty.
- Protect all our wetlands, especially the natural springs, river courses, steep slopes and hill-tops.
- To seek appropriate forms of waste management and to resist the careless disposal of toxic and other forms of waste and keep our environments clean.
- To promote the use of new and renewable sources of energy.

Finally leaders and members of Christian churches, of other faith communities and in various levels of government in the world were urged to promote the well-being of the land and all its creatures; and to resist the temptation of pursuing self-interest at the expense of the poor and the powerless.

2010 SAND DAM: Water Conservation Initiative

In Kenya, Ukambani and its environs are known for drought and famine which have been a recurrent experience.

One of the areas, Mukaa, which is situated in a rather deserted area is the home of Wambua Muteo. At 22, he is the sole breadwinner for his two brothers after their parents passed on. Foregoing

schooling to work in the inherited farm for a livelihood, agriculture was Wambua's only option despite the prolonged drought. Though relying on agriculture, the produce has been negligible due to erratic rainfall. Water conservation is rare thus exposing the locals to the same severity in the eventuality of another drought. "A lot of water flows through here going towards the ocean and even though there was a lot of rain in the last season's 3 months, we have not conserved any for future use," said Wambua, one of the residents of Mukaa area.

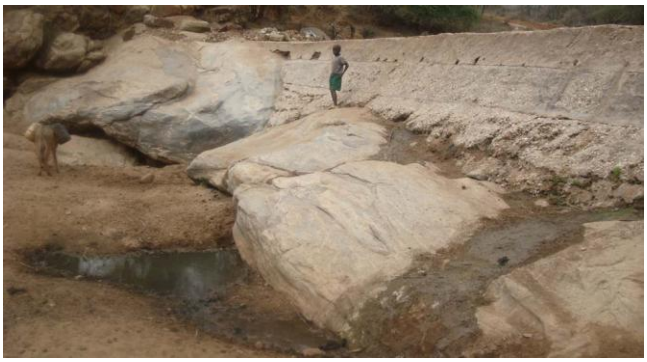


Photo: A young boy fetches water at the sand dam using a donkey

On realizing this, the Mukaa community based organization (CBO) 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, Directorate of Social Services (ACK-DOSS) through the Disaster Management programme and Ukamba Christian Community Services (UCCS) donated relief food to the area and further supported the Mukaa community based organization in buying more than two hundred bags of cement to build a sand dam. With the sand dam they are assured of harvesting water during the short rains for domestic use, livestock consumption and small scale irrigation.

FOOD SECURITY: Maasai Community Integrates Agriculture

Photo: Community members at their farm in Emarti-Kajiado, Kenya

In 2009, Kenya experienced one of the most prolonged drought seasons, with 1/3 of the population facing starvation occasioned by massive food shortage. Formerly reliable rainfall had erratic patterns causing a drastic drop in food production thus increased 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, agropastoral 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 the opportunities for territorial expansion no more, 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 subsistence scale, food production of maize, potatoes and kales was embraced as a new practice.

Other activities adopted are beekeeping and rehabilitation of water structures to conserve water for dry seasons. Harvested honey was used both for medicinal value due to its geographical positioning near the Chyulu hills. Trainings were held on traditional beekeeping and management as a way of diversification. Selection criterion for the response areas was based 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 need for restocking for continued source of milk, meat and also trading with other items. In Kajiado, 71 households in Oloilalei, Olorukoti and Emarti areas were identified, each receiving 2 sheep and 1 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 the locals such as lack of food and water in case of another bout of drought.

2011

TREE PLANTING

In the recent past, the conversion of forest land to agricultural and urbanization 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% of deforestation while commercial agriculture accounts for 32%. In addition, the depletion of natural forests has been found to contribute to global warming, the process whereby climates around the world become warmer as more harmful rays of the sun comes in through the atmosphere. Acknowledging the church's responsibility on environmental stewardship, The Anglican Church of Kenya (ACK) has encouraged tree planting exercises to restore the environmental degradation that has been caused by deforestation, soil erosion, and overgrazing. The congregation has responded by planting trees to mark key events such as baptism, wedding, and official opening of projects.

The church urges all people to uphold the well-being of the environment by promoting initiatives that replenish natural resources and protect wetlands, especially the natural springs and river courses.

EMPOWERMENT FOR ENVIRONMENTAL ACCOUNTABILITY: Training

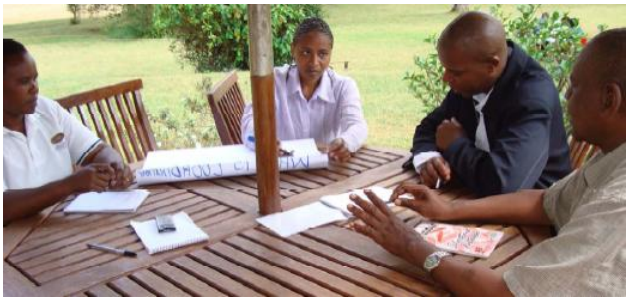


Photo: Disaster Response Team at a training on Climate Science

In an effort to strengthen the capacity of disaster response teams (DRT), the disaster management desk of the Anglican Church of Kenya Directorate of Social Services (ACK–DOSS) trains program managers and DRT

members on integrating climate science into sustainable development planning. The training focused on integrating adaptation approaches to sustainable community projects.

The training on emergency needs assessment was conducted to prepare the DRT to work jointly with other organizations such as Red Cross for emergency response. The objective is to train disaster response team members on Action by Churches Together (ACT) policies and procedures and other International humanitarian policies and procedures. Applying the knowledge acquired, some communities are integrating the climate change initiatives into their program.

The DRT is a humanitarian response structure which has staff and community members based at regional level who are assigned disaster response tasks when disasters occur in their specific regions.ACK disaster management desk coordinates capacity building projects for the church development staff and church leaders on identified issues. In future, the disaster management desk plans to train more people and end up with congregational emergency needs assessment teams.

COPING WITH CLIMATE CHANGE: Drip Irrigation in a Dry Area

An estimated 17.5 million people in the Greater Horn of Africa currently face food shortages caused by erratic rainfall in Eastern Africa linked to global warming.

In Ukamba Christian Community services, the area is characterized by long dry spells and insufficient water exposing the area to recurrent droughts every year.

The Wanzauni Livelihood Improvement Project was initiated in the area with the aim of improving the livelihoods through water harvesting by construction of sand dams, drip irrigation and organic farming.

Through the construction of Kwa Muaa sand dam along Ngwani river, water has been harvested 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 from 5 kilometres to 4kms and the waiting time at the source due to an increase in the number of water catchment points.

Five demonstration farms have been established to train farmers on the importance of drip irrigation and efficiently utilizing 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 locally. “Last month we sold vegetables at a profit of Kshs. 2,000 this technology is helping us,” said one of the community project members. The farmer groups have also been trained on good agricultural practices such as integrated pest management and use of organic fertilizers. For ownership and sustainability, the local project management committee has been trained on organizational development and is able to conduct monthly review meetings.

Photo: Project staff from various regions visit the Ukamba CCS drip irrigation project

Other groups have established tree nurseries after having been trained on tree nursery management.

All the tree nurseries have a total of over 25,000 assorted seedlings which will be planted at the onset of rains. The same is also an income generating activity for the members as the seedlings are sold to non-group members and institutions. Awareness creation on the importance of terracing, road water harvesting, and importance of good farming practices is being integrated. Biodiversity conservation is ongoing through tree planting and terracing in individual farms; with over 5,000 meters of bench terraces and cut off drains dug so far. Diversification and microenterprise development is being promoted among the groups to increase food accessibility at household level due to alleviate the impact of increased crop failure. Staff from various parts of Kenya visited the sites to learn from the projects which are aimed at being replicated in other areas. This is in response to an earlier held training on climate change.

The community based organization is made up of 13 groups and a total membership of 304 people registered under the Ministry of Gender Children and Social Development.

INVOLVEMENT IN INTERNATIONAL COMMEMORATION: Pastoral Letter on the Environment on World Environmental Day 2011

The theme, "Forests: nature at your service", was a clear representation of nature's role in humanity i.e. providing food, shelter and soil enrichment. The pastoral letter is disseminated from the Archbishop of the Anglican Church of Kenya, Dr. Eliud Wabukala to all the dioceses, parishes and congregations thus has a national outlook in its advocacy strategy.

With the World Environmental Day being on Sunday, June 5th 2011, he directed the reflections on the practical cases on how climate change has impacted on the lives of the people. Among them are rising temperatures affecting rain seasons, frequent droughts, famines, floods, rivers drying up earlier than expected etc. "Since this day falls on a Sunday, it's my prayer that the message may enhance our worship of God, deepen our appreciation of God as Creator, and broaden our understanding of our calling to be faithful stewards of creation," said Archbishop Wabukala in his address.

As stewards of God's creation, he called upon the church to identify environmental steward's champions who will coordinate and implement environmental policies of the church. Creative ways were proposed to mark the day such us decorating the church with indigenous plants or harvests from the farm during the service and prayers for the plants and soil.

A sample prayer:

Tree leaves and stems "Lord we praise you for the trees in the woods and forests. We recognize their beauty, their service to human kind 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."

Proposed long term engagements are forming environmental conservation groups to be involved in activities like clean up and tree planting in churches, dispensaries/health centers, schools on agreed dates of the week etc, form drama, songs and poem groups to be used to educate, lobby and advocate on environmental stewardship, promoting planting of indigenous trees and water harvesting from roof catchments starting with the individual homes, parishes etc.

Finally in a collect which is a common prayer recited in various parts, the congregants committed to foster conservation and the preservation of the variety of God- given life by 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. Amen"**

+ Eliud Wabukala, Nairobi, 20th May 2011

CLIMATE JUSTICE FOR SUSTAINABLE PEACE IN AFRICA

The All Africa Conference of Churches (AACC) in partnership with Programme for Christian Muslim Relations in Africa (PROCMURA), and joined by the South African Faith Communities' Environment Institute (SAFCEI) organized a Pan-African Interfaith Conference on Climate Justice and Sustainable Peace in Africa, which took place from 6th to 9th June 2011 in Nairobi, Kenya.

United Nations Environmental Programme (UNEP) hosted the conference in the United Nations Offices in Nairobi, Kenya. The Conference benefited from the support of the Government of Kenya through the input of H. E. Hon Kalonzo Musyoka EGH – the Vice President and Minister for Home Affairs of the Republic of Kenya who addressed and officially opened the Conference. The meeting had two representatives from the Anglican Church of Kenya, Directorate of Social Services.

The Conference agreed on a plan of action to engage all Faith organizations who will in turn mobilize all believers in the continent for practical involvement in bringing about climate justice and sustainable peace. The AACC called upon high level emissaries to share the concerns, convictions and commitments of the Faith leaders, calling on negotiators to take decisive measures to reverse the current trend of climate change. The meeting was held in preparation for international negotiations meeting on Climate Change United Nations Framework Convention on Climate Change (UNFCC) Conferences of the Parties (COP17) to be held in Durban, South Africa from 29th November to 9th December 2011. The parties to the convention have met annually from 1995 in to assess progress in dealing with climate change.

Progress on responding to climate change has been made through establishing international agreements and increasing public awareness. Climate justice views climate change as an ethical issue and considers how its causes and effects relate to concepts of justice, particularly social justice and environmental justice and examines issues such as equality, human rights and historical responsibility in relation to climate change.

PICTORIAL OVERVIEW

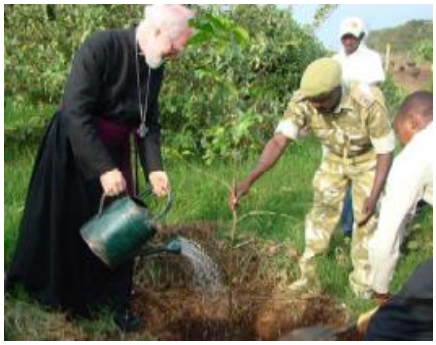


Photo: Archbishop of Kenya, Dr. Eliud Wabukala and Archbishop of Canterbury, Dr. Rowan Williams plant trees at Treetops Hotel in Nyeri, Kenya

Photo: A community tree nursery- trees are sold for planting in other areas

Photo: Restocking project among the Maasai community- many livestock died during the drought

Photo: Drawing water from one of the sub-surface dams

Church of the Province of South East Asia: report by the Very Rev Jason Selvaraj

Primate: Most Reverend John Chew Hiang Chea, *Bishop of Singapore*
Territory: Malaysia, Singapore, Thailand, Indonesia, Cambodia, Laos, Vietnam and Nepal

The Anglican Church in South East Asia, perhaps the smallest province in the Anglican Communion was originally under the jurisdiction of the Bishop of Calcutta, India. The first chaplaincy was formed in West Malaysia in 1805; the first bishop was consecrated in 1855. The Diocese of Labuan, Sarawak, and Singapore was formed in 1881, dividing in 1909, 1962, and 1970. Until the inauguration of the Church of the Province of South East Asia, the four dioceses (Kutching, Sabah, Singapore, and West Malaysia) were under the jurisdiction of the Archbishop of Canterbury. Although the Province exists under the restrictions of a Muslim

government, the Church has experienced spiritual renewal and has sent out its own mission partners to various parts of the world.

Latest membership numbers are:

Diocese of Singapore	20,562 members
Diocese of Kuching	110,000 members
Diocese of West M'Sia	24,000 members
Diocese of Sabah	50,000 members
Total (approx.)	204,562 members

Since the Province covers quite a number of countries, this report will be brief in nature highlighting environmental issues facing each nation. As I am in Malaysia, I have been able to cover more specific issues.

A. Malaysia

In Malaysia, a country with amazing biodiversity and rich natural resources the highlights are the following:

These give us an indication not only of how the environment continues to be under threat in Malaysia, but also how efforts are being made to combat that threat.

1. Nuclear power plants

The federal government decided to go nuclear, announcing in May 2010 that Malaysia would build a nuclear power plant 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.

2. Sabah coal plant

Meanwhile, the federal government is planning to build a 300-megawatt coal plant on Sabah's pristine east coast. 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. The plant's detailed environmental impact assessment was rejected by the Environment Department. However, the EGTW minister said last December the proposed coal plant would go ahead, claiming it was the best option to ensure uninterrupted power supply.

3. Bakun Dam

The flooding of the Bakun Dam began in October 2010. The flooding of the 69,000ha 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 peoples displaced from their land remain unresolved. The construction of the dam began in 1996, and its cost was reported to have ballooned from RM4.5bil to RM7.5bil due to overrun and compensation for delays.

Despite that, Bakun is just the beginning. The 944-megawatt Murum damis currently being constructed, and it was announced in February last year that five more dams with a combined capacity of 3,000-megawatts are in the pipeline.

4. GM mosquitoes

Dengue, carried 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. Despite these concerns, the Health Ministry intended to release GM mosquitoes in Bentong, Pahang and Alor Gajah, Malacca. Protests from local and international groups resulted in a cancellation of the program.

5. Selangor State Park

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 categorized as an Environmentally Sensitive Area (Rank 1) under the National Physical Plan-2. 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 persuade the developer to re-route KLORR away from the state park, too. Public outcry, not just from environmental groups but also concerned residents, continue. It remains to be seen whether the federal government will scrap its plans.

6. Kuala Langat South peat swamp forest

The Selangor Agricultural Development Corporation, a federal agency proposed in 2010 to convert the 7,000ha Kuala Langat forest reserve into oil palm plantations. The clearing of the forest could reportedly generate RM1bil 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. The audit report has yet to be presented to the chief minister of the state, but I'm hopeful he will make the right decision.

7. No Plastic Day

The no plastic bags campaign, pioneered in Penang in 2009, is now nationwide. Plastic bags are no longer free on Saturdays except in Penang, where they're not free every day.

Manufacturers of plastic indignant reactions amuse me. Although the campaign may reduce our reliance on plastic bags, it is mainly symbolic. The campaign helps us rethink the impact of our use-and-throwaway consumption on the environment, but is unlikely to eliminate all use of plastics bags, or plastics, in our lives. Perhaps the manufacturers need to start listening and evolve in accordance with consumer demand for more sustainable products.

Although I initially found the above list a bit depressing, I realised that the story of public resistance against potential ecological destruction echoed throughout. And there are many more environmental heroes that did not make it into the list.

B. Indonesia

1. Forests and Fisheries

A number of environmental problems are threatening the country's environmental sustainability, foremost among them being a rapid and generally unsustainable rate of natural resource exploitation. 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. Urban pollution (of both air and water) is also a serious and worsening problem.

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 percent of Indonesia’s poor live in rural areas, and about half of these are affected by the degradation of forestlands, which make up 60 percent of the country’s land area. High rates of deforestation are a result of poor governance and failure to properly regulate forest access and use. The situation has been further compounded by excessive capacity in the wood processing industry, which is artificially stimulating 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 stabilization, watershed protection and carbon sequestration.

2. Air Pollution (Haze)

Indonesia has made some progress in improving urban environmental services and pollution management including limited access to clean water and sanitation facilities and limited collection and processing household waste, but many challenges remain. Air quality is also poor and deteriorating due to increasing motorization and environmentally unsound industrial development. Frequent forest fires intensify air pollution, occasionally with a regional impact.

3. Sewage Service

The level of sewerage service is one of the lowest in Asia (46 percent in rural and 69 percent in urban areas), causing widespread contamination of surface and groundwater in urbanized areas, leading to epidemics of gastrointestinal infections and high incidence of typhoid.

C. Thailand

1. Deforestation

Efforts to convert forested land for agriculture, such as slash-and-burn agriculture, as it is in Malaysia and Indonesia have greatly reduced forest cover in Thailand in the past. For example, forest cover fell drastically from 53% in 1961 to 25% in 1998. With a government measure in place to prohibit logging, deforestation rates have dropped. However, the impacts of deforestation, such as erosion, are still being felt.

2. Overfishing

Excessive fishing has reduced fish catches by as much as 90%. Fishermen have had to spend more time at sea to catch the same amount of fish as before, while the amount of "trash fish"—commercially unimportant fish, including juveniles—per catch is also increasing. For small-scale fisher folk, decreasing catches are leading to conflicts with commercial operators.

3. Pollution

Thailand's rapid industrial expansion and population growth have caused increased pollution levels. A decrease in air quality is also causing major health impacts. Overall, it was estimated in 2004 that air and water pollution costs the country 1.6% - 2.6% of GDP per year.

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

Pollution also affects the marine environment. Red tides, caused by excessive algal growth and a result of pollution, oil spills, and invasive species are some of the factors that are affecting Thailand's marine biodiversity.

4. Coral reefs, etc

Along coastal areas, popular locations for tourism and urban and industrial development, populations have grown, putting coastal wetlands, cora 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.

D. Cambodia, Laos, Vietnam and Nepal

These undeveloped countries have almost similar environmental issues especially in the areas of energy efficiency and technology which contributes to waste water and sanitation problems. Then, there's the question of accessibility to clean water leading to rise in diseases.

E. Singapore

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 had taken a terrible

toll on its natural environment. Singapore's rapid development has seen it 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. The Republic 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 US government, factoring in data such as carbon emissions from bunker fuel, aviation and refining processes. EIA data taken in 2006 indicated that Singapore emitted 141 million tonnes of carbon emissions, ranking it as the 33rd-highest emitter of greenhouse gases among 215 countries. In this year's Environmental Performance Index (EPI), which ranks 163 countries on both environmental public health and ecosystem vitality, Singapore did better, coming in 28th with 69.6 points. Iceland fared the best with a score of 93.5 and Sierra Leone came in last with 32.1. According to the Environmental Sustainability Index or ESI, devised by the forum's Global Leaders of Tomorrow environment task force, Singapore is lumped together with Bangladesh, Iran, Algeria, Vietnam, Nigeria, Madagascar, Uganda, Malawi and Senegal - the 10 worst-performing countries in the environmental-sustainability index. In terms of priority accorded to compliance with international environmental agreements, Singapore was ranked ninth; in the category of overall stringency of pollution regulations, Singapore came in 10th. Last May, the Political and Economic Risk Consultancy published a report on the results of a survey on 'Pollution and other Environmental Problems' in Asian countries. The report was intended to provide an assessment of the relevance of environmental considerations to a company's decision to invest in a particular country.

The survey covered 12 Asian territories - China, Hong Kong, India, Indonesia, Japan, Malaysia, the Philippines, South Korea, Taiwan, Thailand and Vietnam.

Singapore was given the top rating for the overall quality of its environment. It also topped the list in managing air pollution, traffic congestion and for its attractiveness for foreign direct investment. For water pollution, Singapore was a close third behind Malaysia and Japan and for noise pollution; Singapore was a joint second with Japan, behind Malaysia.