Global Warming and Climate Change and its Impact on Asia
Challenges and the response of the Church

CLIMATE CHANGE SEMINAR
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I. FINAL STATEMENT: CHURCH RESPONSE TO THE CHALLENGE OF CLIMATE CHANGE IN ASIA; TOWARDS A NEW CREATION

Introduction

Representing various Bishops’ Conferences in Asia, their Episcopal Commissions for Justice, Peace, Human development and Caritas, and the Central Secretariat and Offices of the Federation of Asian Bishops’ Conferences (FABC), we [55 participants from 16 Episcopal Conferences and 2 Associate Members – 14 Lay Persons, 4 Sisters, 14 Priests, 21 Bishops and 2 Cardinals] have come together to participate in a very significant seminar in Bangkok, 19-20 October 2011. Assisted by international experts, we sharpened our knowledge and shared our experiences on the theme: “Climate Change and its Impact on Asia - Challenges and the Response of the Church in Asia.” We thank the German Catholic Bishops’ Organization for Development Cooperation (MISEREOR) for making the seminar possible. With the greatest concern for the peoples of Asia and for future generations, we have committed ourselves to help defend and promote the integrity of God’s creation in Asia.

A. THE PASTORAL SITUATION OF CLIMATE CHANGE

Our continent of Asia is God’s gift for all. It is incredibly rich in people, in ancient cultures, religious and philosophical traditions. It is here where Jesus our Lord was born, where he lived, proclaimed the Reign of God and went about doing good.

But tragically ours is a continent of massive poverty, where the few enjoy great progress and prosperity while the many suffer in
abject deprivation. And it is the poor and the needy who suffer most from the consequences of climate change.

We are experiencing dramatic changes of season, extreme changes of weather, more frequently recurring and stronger typhoons, destructive flooding, drying up of whole areas, decrease in food production, the spread of climate-change related diseases. We have reports of glacial melting in the Himalayas, of threats to life because of floods in low-lying river basins, even the loss of small islands because of rising sea levels. All these will surely and drastically worsen the lives of the poor. Recurring emergency situations, displacement of populations, increasing number of environmental refugees, the widening scandalous gap between rich and poor, and increasing conflicts regarding resource allocation can lead to grave social, political and economic instabilities.

The mode of production and the ideologies of development that industrial countries have implemented have substantively contributed, many experts say, to global warming and climate change. Yet tragically the mode of production that is a substantial reason for climate change is extended to Asia by the corruptive collusion between local and international developers. They pillage Asia’s virgin forests and operate destructive extractive industries such as various forms of large-scale mining for the sake of short term economic gains while sacrificing the common good of all.

In this continent of contradictions, of richness and deprivation, our demand is for just human living conditions for all of the peoples of Asia and for the survival of species. It is likewise a demand for justice for generations not yet born. This requires the living of solidarity and a fundamental orientation to the common good.
B. FAITH-REFLECTION ON CLIMATE CHANGE

As Church we are deeply concerned for victims and for those who cause their suffering, present and future, of the dire consequences of climate change. For from the optic of faith we see the moral and religious dimensions of this pastoral situation in Asia.

Creation, Sinfulness and Broken Harmony

We believe that at the beginning God created a world of harmony and beauty (Gen.1:1-31). But sinfulness in the form of human pride, selfishness and greed disrupted this harmony (see Gen. 3:1-7; 4:1-16; 6:5-8; 11:1-9). Relationships between humanity, the world, and God were broken. It was God’s plan that at the fullness of time he would restore that pristine harmony and peace that had been there at the beginning.

Jesus, the Reign of God, Healing Brokenness Due to Sin

That appointed time finally came. God sent his Divine Son Jesus to be born of a humble virgin, named Mary (Lk. 2:1-7) It was his mission to heal all broken relationships that are the fruits of sin. He proclaimed the Reign of God (Mk. I:15) and the wholeness and fullness of life that he came to give (Jn 10:10). The power of God’s Reign showed itself in the new relationships and fellowship that Jesus established, with the outcasts of society, the poor and marginalized, the sick -- everyone who needed the compassion of God.

He reminded people of the original harmony and beauty of natural creation by explaining the Reign of God in terms of seeds, vineyards and trees, soil, birds of the sky, lilies of the field, fish, sheep and other animals, signs in the sky, darkness and light (e.g. Lk. 8:4-8; Mt. 13:31-32; Lk8:22-29; Mt. 13:24-30). In all these Jesus demonstrated His and his Father’s love and providence for nature and humanity.
The Cross, Reconciliation, Justice and Peace

The ultimate act of Jesus to fulfill God’s plan was his Passion, Death and Resurrection, the definitive event of salvation and reconciliation by which He drew everything to himself. The glorious Cross is the power and the wisdom of God achieving the reconciliation of total humanity and the whole of the cosmos with God. The extraordinary suffering and death of Jesus remind us of the words of Paul telling us of the groaning of creation while awaiting redemption and reconciliation in Jesus (Rom. 8:19-22).

Jesus and the New Creation

But God reveals to us even more in our Sacred Scriptures -- an even more stupendous and profound mystery. This Jesus who dies in powerlessness and ignominy is the eternal Word of God. From all eternity He is God (Jn. 1:1-2), the only begotten Son of God who in the appointed time was born in the flesh to dwell among us (Jn. 1:14). He is the divine and supreme sovereign of all, through whom and by whom every created being exists (Jn. 1:3; Col. 1:15-19), to whom the whole cosmos is restored and by whose Spirit it is renewed. Seas and skies, rain and sunshine, seasons and climates belong to him.

By the Cross he has made all things new. A creation that was groaning in travail has become a new creation through His blood (2 Cor. 5:17-21). Jesus is our peace, the peace and harmony of the world. He has restored justice and reconciled all things to himself (Col. 1:20).

It is in this understanding of creation, redemption and human history illumined by our faith in Jesus the Lord and Savior that we discern the deeper dimensions of climate change, the sinfulness from which it originates, the religious and ethical dimensions that it involves and the grave threat that it poses to all humanity.
C. PASTORAL IMPERATIVES

Hence we believe that all the peoples of Asia, regardless of culture, religious or philosophical belief and economic status has the mission to defend and promote the integrity of creation. And we as Church stand for global climate justice today and for future generations with preferential option for the poor.

A fundamental task of the Church in Asia is to call for radical conversion, promote an alternative lifestyle, a new culture of respect for nature, of simplicity and sobriety, of hope and joy. Guided by her social teachings as principles and directives of action the Church has to promote technologies with much less gas emissions that damage the environment, promote organic and eco-friendly production, responsible consumption and recycling, thus contributing to intergenerational justice.

Urgent Appeals

In the light of the above we collectively:
Appeal to the FABC to establish an agency/desk on climate protection whose tasks would include:

- Doing theological reflection on the mystery and truth of God’s creation, on our moral and ethical responsibility with regard to the environment;
- Promoting initiatives at the FABC level and assisting the initiatives of local churches for climate protection;
- Establishing practical and effective linkage with SECAM, CELAM, FCBCO, the US and Canadian Bishops’ Conferences, and the CCEE as well as with UN conferences in order to address the global challenge of climate change.

Further we:

- Appeal to Bishops’ Conferences in Asia to develop action plans or intensify programs against climate change;
- Appeal to the FABC to hold in 2013 a second seminar on climate change in order to evaluate the steps already
taken by then as well as to define the FABC commitment for the future.

- Appeal to all local churches and to everyone to live a lifestyle that is in accord with the principle of faithful stewardship of God’s creation such as in the use of transports, the design of church and religious buildings;

We make an urgent:

- Appeal to all who carry political responsibilities to hold climate protection as a core guiding principle in decision decision-making;
- Appeal to all who bear economic responsibilities and to all industrial countries to share with us in Asia the know-how of sustainable technologies for climate protection, mitigation and adaptation as a service for future generations;
- Appeal to all governments to decide in limiting global warming to 1.5 °C;
- Appeal to all governments for a climate friendly model of development and for a binding enlargement of climate protection commitments on emerging countries;
- Appeal to all governments to lead the Kyoto Protocol to a second commitment period as of 2012 and thereby to preserve the only legally binding instrument of the UN for climate protection.
- Appeal to all industrial countries to acknowledge their historical responsibility for climate change and their obligation to protect the people affected by climate change;
- Appeal for a just, fair and transparent governance of the Green Climate Fund and its programs to ensure the decoupling of growth and development from carbon emissions in developing and fast growing economies;
- Appeal to decision makers at all levels to consider the eco-wisdom of local peoples and the right of people to participate actively.
Finally we propose to the FABC to suggest to the appropriate Church agency the holding of a Synod of Bishops on the theme of Creation and Climate Change. Such a Synod would demonstrate the effective concern that Pope Benedict XVI has declared: “The Church has a responsibility towards creation” (Caritas in Veritate, no. 51).

**Conclusion**

Our stance is one of courage and hope. Blessed Pope John Paul once famously said: “Look to the future with hope, and set out with renewed vigor to make this new millennium a time of solidarity and peace, of love for life and respect for God’s creation” (Bl. John Paul II, Pilgrimage to Malta, May 8, 2001).

In this task for the world our inspiration and driving force is the mystery and truth of Jesus in his mission of saving, liberating, healing, and reconciling a broken world. In discipleship of Jesus, this mission to restore all things in Christ is for us a gift and task. We cooperate with the Spirit of Jesus who “renews the face of the earth.”

May God the loving Creator bless our efforts for the integrity and renewal of his creation. May Mary the humble Virgin Mother who conceived Jesus the divine reconciler of all creation accompany us in living his gift and continuing his task.

**List of Participants**

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- Most Rev. Augustine Agus, KWI Justice & Peace, Bishop of Sintang, Indonesia
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Archbishop Louis Chamniern Santisukniran, President of CBCT, Archbishop of Thare and Nonseng, Thailand

Bishop Athanasius Schneider, O.R.C., KKEK, Auxiliary Bishop of Maria Santissima in Astana, Kazakhstan

Bishop Bosco Puthur, The Syro-Malabar Major Archiepiscopal Curia, India

Bishop John Hsane Hgyi, President of CBCM, Bishop of Pathein, Myanmar

Bishop Louis Marie Ling Mangkhanekhoun, President of CELAC, Vicar Apostolic of Paksè, Laos

Bishop Martinus D. Situmorang, O.F.M.Cap., President of KWI, Bishop of Padang, Indonesia
Bishop Nereo P. Odchimar, President of CBCP, Bishop of Tandag, Philippines

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Bishop Stephen Thien Tri Buu, CBCV, Bishop of Can Tho, Viet Nam

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His Eminence Oswald Cardinal Gracias, President of CBCI, Archbishop of Mumbai, India

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II. WELCOME AND INTRODUCTION  

-Monsignor Josef Sayer-

Dear Secretary General of the FABC, Archbishop Quevedo,  
Dear Archbishop Louis Chamniern (of Thailand),  
Dear Eminence and Excellencies,  
Dear Experts, Sisters and Brothers,

1. Here I have a small stone. It is not the stone of little David, the shepherd when he, before becoming king, killed Goliath the Philistine and decided the fight with it. This is a very special stone with a special history. This stone was present when an ecumenical service was celebrated in Copenhagen within the UN climate conference at the end of 2009. People of the whole world, of Asia, of the Pacific region, of Africa, Latin America and North America and also from Europe participated in this service. The stone was presented and its history was told there.

The stone comes from Greenland. For many thousands, even millions of years, it was covered by big glaciers. Due to global warming, the ice shield is melting in Greenland and this little stone appeared. Therefore, this stone is not a simple stone like others. It is a symbol for rapidly melting glaciers in Greenland, but also glaciers melting in the Himalayas, in the Andes of Latin America and in other countries. It is a symbol for the rising sea level which is caused by climate change and which is a threat for floods in Bangladesh and many other coastal areas in Asia.

And here you see a dead coral. It was present in the service in Copenhagen too. A priest of the Pacific region brought this coral. It is a symbol that the oceans themselves are in danger due to
warming and acidity. And with this the basis of life for millions and millions of people is in danger through climate change.

You know corals, but I guess that none of us has held a stone of Greenland in her or his hands before. Let the stone pass through our hands and let us touch this stone and let us be touched by the stone, by this symbol of climate change. With its history, the history of the future generations in Asia is linked.

2. Dear Eminence and Excellencies, I cordially thank you for inviting Misereor to this important meeting of Asian Churches and the FABC about climate change. We are very glad that the Asian bishops’ conferences adopt THE central challenge for the people of the 21st century in this way. It is about the suffering of the nations in Asia, and especially the poor through climate change, already now and in the future. It is about preserving the creation as a gift from God to all, and about the fact that all future generations may have the chance to live in dignity. It is about the social and ecological responsibility of the international community and especially of the Church.

As Director General of Misereor, I know about the huge commitment of the Church in Asia for justice, for human rights and the preservation of creation. Although the Church in Asia nearly everywhere is a minority church, the social pastoral work for the common good of humankind in the respective societies is all the more impressive. For the Church in Asia, the implementation of the social doctrine is an important element to carry out the message of Jesus Christ into today’s world.

I was just talking about Copenhagen. For me, Copenhagen became an anti-sign of a good life, a sign of big disappointment, frustration, a sign of shame. Together with many people, also from Asia, I was in Copenhagen and witnessed in a very concrete way how the industrialized and emerging countries did not take their responsibility with regard to a binding and ambitious follow-up agreement for the Kyoto Protocol. The politicians of this world could neither in Copenhagen nor within
the United Nations overcome their national egoisms. Their actions are not oriented towards the global common good. This would be necessary in order to avert the suffering ahead of the entire human family and the creation. To keep on as we have so far will lead to irreversible consequential damages for many Asian countries. The experts will show us the scientific facts.

3. In the last year, Misereor was more and more committed in the field of climate change. Why? We receive more and more funding requests dealing with the consequences of climate change. Therefore, considering the perspective of sustainability, it is essential to react on whatever the poor have to suffer due to climate change. For humankind as such, climate change is the central, vital issue.

We have conducted dialogue fora (forums) on climate change with partners in Asia, Africa and Latin America. Those fora were one part of a study among others we could implement together with the renowned Potsdam Institute for research on consequences of climate change (Potsdam-Institut für Klimafolgenforschung). The results were published in a study with the title “Global but Fair – Fighting Climate Change, Making Development Possible.” We have also handed over this study to our Holy Father.

The responsible person for the study in the Potsdam Institute was Professor Ottmar Edenhofer who is, at the same time, one of the three co-chairs of the Intergovernmental Panel on Climate Change (IPCC) at the United Nations. I am especially glad that he has accepted the invitation to discuss problems of climate change with the bishops’ conferences in Asia. Unfortunately, on the short term, he has problems with his health, so his doctors advised against longer flights. Since the meeting of the FABC has particular importance to him personally, he at least wanted to participate via video conference and also answer upcoming questions in discussion.
I am just as glad about the presence of other internationally well-known experts. They frequently support Misereor with their great experiences. There is Dr. Saleemul Huq from Bangladesh, working also in London on an international team. He is also cooperating with the Intergovernmental Panel on Climate Change at the UN and was an expert in Copenhagen.

There is also Dr. Martin Khor from Malaysia, an internationally well-known expert and advisor of different governments. He is just in negotiations on the $100 billion fund adopted in South Africa, the so-called “Green Climate Fund.” This fund from 2020 will offer every year $100 billion to the countries and, therefore, these negotiations are very important for us. Tomorrow, I hope that Martin Khor will also report about these negotiations with great importance for the developing countries in the future.

There also is Professor Ernst Ulrich von Weizsaecker, who participated in our symposium on climate change last year at the Vatican. He is a member of the Club of Rome. He wrote the book *Factor 5: Transforming the Global Economy through 80% Increase in Resource Productivity.*

And last but not least there is Father Martin Everi, an expert on climate change in the Pacific region. He can open our eyes for the Pacific region and show us the consequences of climate change that those nations have to suffer from in particular.

4. Dear Eminence, Dear Excellencies, we would not have summoned our workshop seminar on climate change if there had not been a symposium at the Vatican on climate change on the 1st and 2nd of October last year. The special aspect of this symposium was that, for the first time, representatives of FABC of Asia, SECAM of Africa, CELAM of Latin America and representatives of the Pacific region met for the first South-South dialogue. It was organized by Misereor and the Pontifical Council for Justice and Peace with Cardinal Peter Turkson by order of the mentioned continental associations of bishops’
conferences. They brought copies of the declarations and documents of this symposium, and you can get them here.

My special thanks go to the Secretary General of the FABC, Archbishop Orlando Quevedo. He not only secured the success of the first South-South dialogue. He also submitted to Misereor the idea to support a two-day seminar in Bangkok on the occasion of the FABC Central Committee meeting. That way, the negative consequences of climate change should be discussed from the Asian point of view, by the presidents of the Asian bishops’ conferences and the responsible persons of the social commissions. Moreover, during the seminar, we should look for possibilities how to meet the huge challenges of climate change.

5. The vision guiding us in our reflection is a comprehensive one. The preservation of creation is not only an ecological, political, economical and social question. It is also a central theological question concerning the covenant offered by our gracious God to humankind.

In this covenant, He wants to prove that God is the God of life. The steps of death accompanying climate change, for example, destroying the lives of so many simple persons through cyclones, through floods, etc., as people of Thailand at this very moment are suffering from terrible floods. Dear Archbishop Louis (of Thare and Nonseng, Thailand), give our expressions of our sentiments and our solidarity to your people. The steps of death accompanying climate change, for example, aggravating conflicts and leading to wars about distribution of water – all these steps of death are contrary to God´s covenant with humankind and creation that He made with Noah after the Deluge. Our Holy Father John Paul II talked about this “covenant of love” which embraces humankind on the occasion of his visit in Santo Domingo. Our Holy Father Pope Benedict XVI emphasizes in his message for World Peace Day 2010: “If you want to promote peace, you have to preserve creation.”
Asia and the Church in Asia have a great role with regard to this. Asia’s influence is permanently growing. The world is looking with more and more attention towards Asia. But Asia is not just important regarding political and economic power. It is rich in cultures and the people in Asia have a lot of imagination, creativity and courage to tackle the problem of climate change. I am very happy that the FABC is conducting this seminar. Misereor is glad to cooperate with the FABC. The small stone of Greenland and the coral show us that the problem of climate change cannot be delayed.

Asia’s capabilities are in demand and necessary. Only together we have a chance, and the bishops’ conferences in Asia with the FABC have established an excellent instrument to tackle global problems. And I think we should emphasize this. The FABC should be regarded and considered as this instrument for tackling global problems. May the Holy Spirit bless us and guide us through this meeting. Thank you very much!

III. WELCOME AND INTRODUCTION

-Archbishop Orlando Quevedo, OMI

My brothers and sisters in Christ, a few days before I came to Bangkok, there was a tornado in Southern Philippines, near the Archdiocese of Cotabato, which I lead as shepherd. This was one of the several tornadoes this past year that hit the Philippines.

In my memory, this has not happened before. There were big tornadoes that destroyed houses and a village. This brought to the fore of the idea of climate change to many people. The idea of destruction of the environment was not unknown to the Philippines. After all, a great number of typhoons hit the Philippines every year. We begin naming typhoons with the letter A, and they were named after women before. Now they are named after men because the women did not like the idea that they were destructive. Now their names are the names of men. We begin with the letter A and end with the letter Z, and
they go back in the same year to letter A and so on. They finish the whole alphabet. That was what we knew about environmental destruction.

In 1987, the bishops of the Philippines wrote a very historic pastoral letter on ecology, one of the first letters written by episcopal conferences on ecology. The title of that letter was “What is Happening to Our Beautiful Land?” And we said that deforestation, the irresponsible cutting down of trees, was the time bomb for poor Philippines.

Now we know a little bit better and deeper about the environment. At that time, we knew little about climate change, except the literature that was there. And even then, there was a dispute about whether or not there was really climate change.

In some ecclesiastical circles, because some experts connected population explosion to climate change – the more people there are, the more polluted the environment, and the more the ozone layer is opened – there was also a question whether or not this idea of climate change was really a ploy to go against population, the production of people in the world.

Today, that dispute is no longer there. The reality of climate change is there. Two years ago, I stuck my mind to the literature of climate change. I began seriously looking into it, such that the Rome South-South dialogue sponsored by the Pontifical Council for Justice and Peace and Misereor was not really an eye opener to me. It simply confirmed what I had read in the literature, confirmed by experts who did the work on climate change for the world. For this reason, today’s extension of that South-South dialogue in Rome comes to Asia.

It was in an intervention that I gave at the Special Assembly of the Synod of Bishops for Africa that I spoke about a South-South dialogue and a North-South dialogue on issues that are global in nature, that affect the South more, in a worse manner than the North, and that the leadership of the Church in the Universal
Church, including North and South, should come together to focus on these moral, ethical issues that affect the poor in the greatest way. And thank God that the Pontifical Council for Justice and Peace was amenable to that idea and in that Congress, in that Synod, Monsignor Sayer and I spoke about trying to implement it. And it became not about global economization but about climate change.

What a fortuitous and blessed choice it was for the South-South dialogue to take place. Bishops, experts from Africa, Asia and South America came together in Rome. You will find the final statement in your kit, pointed out by Monsignor Sayer.

One of the ideas for the South-South dialogue in Asia is to make sure that we in Asia as a Church would move together in solidarity, focusing our attention on this phenomenon that is destructive not only of Asia but of the whole globe, which is climate change.

To see the ethical, moral dimensions of this phenomenon and see how we as a Church in Asia can come together with bishops and the whole Church in Africa, South America, Europe, the developed world to tackle this issue and see how it was that God’s creation at the beginning of time which He said was good could be destroyed by human greed and human selfishness, by sinfulness, and how we can come together as a Church to respond to this great ethical challenge, religious challenge.

In Durban, Cardinal Wilfred Napier will be the host of the so-called Durban Conference on Climate Change. We hope that the output of this present seminar of the FABC and Misereor together will be brought to that Durban Conference and become a significant input to the Durban Conference.

Another point that I would like to tell you is that we are doing an Instrumentum Laboris for the FABC Plenary Assembly that will take place in Vietnam November 19–25, 2012. The Central
Committee will discuss the outline of the *Instrumentum Laboris* in the next two days, after this seminar.

One thing we discern in Asia is an emerging megatrend. Before, the problem the Church in Asia confronted about environment was, again, irresponsible cutting of logs all over Asia, sacrificing long-term benefits for short-term gain. We now are seeing the effects of that in Indonesia, Malaysia, Philippines where there are occurrences of forest fires because of the cutting down of trees. But that was the old pastoral problem. The new ecological challenge goes beyond just deforestation. It goes into extractive and destructive industries of mining, and so on and so forth. It goes also to pollution of the environment through fossil fuel, and we know the so-called ecological footprint tied to this was felt most in the developed countries where the emission of carbon dioxide per person far exceeds that of the developing countries.

That megatrend that is ecological will surely be reflected on by the FABC Plenary Assembly in Vietnam in 2012. Recently, only a few days ago, my brothers and sisters, the Holy Father Pope Benedict XVI declared the celebration of a Year of Faith which begins on October 11, 2012, and ends on the Feast of Christ the King in November 2013. That Year of Faith also will be the year when we celebrate FABC Plenary Assembly Number 10. For me, it is significant, not only because October 11 was chosen by the Holy Father, consciously and explicitly to celebrate the opening of the Second Vatican Council, but also it ends on the Feast of Christ the King.

The Eucharist this morning was full of reflections reminding us of the cosmic dimensions both of the Eucharist and He Who the Eucharist sacramentally memorializes – the passion, death and resurrection of the Lord. And it is through the passion, death and resurrection of the Lord that the Father glorified Him. And He would say: if I were lifted up, I will draw all things to myself.

The readings this morning and the reflection on the readings by Cardinal Malcolm Ranjith give a telling point, and that point is
we have sinned against God, against His creation. We have through centuries, eons, gradually destroyed the environment and creation. And in the past 100 years, the extent of destruction has raised the temperature of the world to a degree that has not happened in the last thousand years. This is the time bomb, not simply deforestation. The time bomb is everything that has contributed to climate change, the time bomb that is being set off in every part of the world, the causes of tornadoes, droughts and floods, extreme changes of temperature, water sea level.

In Rome, we heard a testimony by our confreres from the South Pacific about the loss of islands and land, the salination of water, drinking water in those islands, because of this global warming, the rise of sea levels. This is a time bomb then, and it is good that the end of the Year of Faith is when we recognize that the cosmos belongs to God, and Christ is the King. And the words come to my mind: To Christ at the end of the Year of Faith, we pray that everything maybe restored to Him.

To all of you, again, my brothers and sisters, I have the pleasure, as Secretary General of the FABC, of welcoming you to this seminar, which I hope will contribute to the reflection in Durban and to the reflection that will take place in the Plenary Assembly and for a more significant celebration of the Year of Faith. Thank you very much.

IV. INTRODUCTION INTO THE COMPLEX PROBLEMS OF CLIMATE CHANGE IN ASIA
   - Dr. Saleemul Huq

I would like to first thank FABC and Misereor for inviting me here. It is a pleasure to be with you.

You have heard of my affiliations but just to give you a sense of what I’ve been doing for the last 10 years, I’m going to give you a little bit of a background, so you see where I am coming from.
And then I’ve been asked to give you an introduction on the complex problems of climate change in Asia. So I’ll try to do that but I won’t be showing any slides or diagrams or photographs. I’ll just be telling you a story of the climate change issue as it has arisen and evolved over the last 20 years, as I see it. It is very much a personal view. I hope it’ll be interesting and I’ll make it relevant for Asia where I can, though it’s a global problem.

Let me start by giving you a little bit about my own background. I am originally from Bangladesh and about 12 years ago, I moved to the UK in London where I set up a climate change program at an international institute there called the International Institute for Environment and Development. I’ve been running that program for the last 12 years, focusing mainly on the linkages between climate change and development. At that time, there weren’t that many linkages. They have emerged over that time. In particular, I was looking at the vulnerability of certain countries, the more vulnerable countries in Asia and Africa in particular, to the impacts of climate change, both the countries as well as the communities within those countries.

So my work has been looking at community-based adaptation in developing countries, particularly the least developed countries. At the same time, as you heard, I have been a member of the Intergovernmental Panel on Climate Change, which is the scientific body that assesses the science of climate change, particularly on the issue of adaptation, which is my area of scientific interest. And at the same time, I’ve also been heavily involved in the policy-making arena in the Framework Convention on Climate Change at the annual conferences of parties, etc., where my colleagues and I have been working very closely with the group of countries called the least developed countries (LDC). These are 48 of the poorest countries, mostly sub-Saharan Africa, some in Asia who are a caucus group within the larger developing countries set, and we support them in the negotiations. In fact, one of my colleagues is in Cape Town right now for the meeting that Josef Sayer just mentioned, of the
transitional committee on the finance to bring the climate fund that’s been talked about, US$100 billion a year from 2020.

In fact, I just got this morning a message from my colleague saying we have some good news from the LDC perspective. We have two representatives of the LDCs on the committee, from Zambia and Bangladesh. One thing I have been lobbying to get for a long time is what is called “direct access.” We have many funds at the global level, but countries can’t access them directly. They have to go through intermediary organizations like the World Bank, or UNDP (United Nations Development Programme), or UNEP (United Nations Environment Programme), and so on. So they’ve been arguing for direct access for a long time. And I understand that the text that has been agreed … they were meeting until quite late last night in Cape Town. I don’t know if the meeting is ended right now. I assume it has. But evidently that part of the negotiation has been completed and they have adapted the concept of direct access, which is one thing that the LDCs have been lobbying for. So that’s some good news from the UNFCCC (United Nations Framework Convention on Climate Change) front.

My view of the origin and the evolution of the climate change problem is what I call a phase, an evolution, through three eras. The first era started off with climate change being very much an environmental problem. It was about emissions of greenhouse gases and how we reduce those emissions of greenhouse gases. The second era moved into development. It started looking at the impacts of climate change, the potential impacts, the real impacts that are already happening, and how you deal with these, particularly in developing countries where it mixes in with development. So many of the actors – the changes have also brought in new actors – have come onboard, the development community by and large has come onboard. Caritas, whom you are very familiar with and support, has been doing a lot of work in this arena, and so has Misereor.
Now, I think we are entering what I call the third era, which is reframing of the problem as a justice problem – or more correctly, an injustice problem. It is a problem created by the rich but the poor are going to suffer the consequences, and that is not right. That is a moral issue.

The other evolution that has taken place is that it started off with the scientists in the IPCC (*Intergovernmental Panel on Climate Change*), then moved into the governmental arena, and the policy making and the Framework Convention on Climate Change. And then it moved, as I said, in the development era to many other actors, NGOs, and many other actors got onboard. I think we are now moving into the stage where it is really up to every single one of us. It’s an individual, moral issue of what are we going to do about the problem. Now that we know something about it, we know we have certain responsibilities, what are we going to do?

That’s my take on how this issue has evolved. Let me go into a little more detail. With regard to the “complex problems” I have been given, I will use certain terminology, jargon and acronyms that are familiar in the climate change arena. Climate change has lots of jargon, so if you start reading it, you have to learn a lot of jargon. You don’t need to know everything but I would argue you need to know a few of our words, our climate change jargon words. Everybody needs to know a few of them. I’ll use and explain a few of them and hope you will take them onboard.

The first one I’ll start with is the science of climate change, which is very well organized through the Intergovernmental Panel on Climate Change. So my first acronym is IPCC, which Joseph Sayer also mentioned. I’ll emphasize the “I” in the IPCC. It is intergovernmental, not international. What that means is that governments are the panel; the entire panel on climate change is governments. It was set up by the United Nations Environment Programme and the World Meteorological Organization (WMO), so all the member governments of UNEP and WMO, which are practically all the countries, are members of the panel.
So when the panel adopts a report of the scientists, the panel gets together scientists and asks them to give them an assessment report of the state of the science. That assessment report is then given to the panel and is adopted by the panel. When the panel adopts it, it is really an intergovernmental report. Countries then cannot challenge it. A very good example of this is when the third assessment report of the IPCC came out. President Bush had been elected for the first time in 2000, and one of the first things he did when he came into the White House was to ask the National Academy of Scientists of the United States to do a separate assessment of the science of climate change and report back to the White House. The U.S. National Academy of Sciences reported within weeks directly back to the White House saying there is no need to do a separate American assessment because we all participated in the IPCC report that has just been completed and we don’t have much to add to it. That’s the state of knowledge. The Bush White House then had to back track because they wanted to challenge the science of climate change. They were not able to challenge the science. They said, “OK, we accept the IPCC but don’t like the Kyoto Protocol. That’s not the right solution to the problem.” But they weren’t able to challenge the science.

The reason I am telling you the story is that the IPCC is a very credible source of scientific knowledge. It started with a few hundreds scientists, but right now it has thousands of scientist from all over the world preparing the Fifth Assessment Report which comes out in 2014. Once it produces a report on the state of science, it is a highly credible report that governments, by and large, accept.

The IPCC is where the science of climate change comes out. I’ll give a little historic background on how the assessments have evolved and how they have influenced policy over time.

The first assessment came out in 1990. It was the first time the scientific community brought together all science, presented it to policy makers, and said, “We have a problem. Based on our
measurements of greenhouse gases in the atmosphere over the last 150 years, they keep going up. On our projections through global circulation, computer models into the future, they continue to go up. We are facing a very catastrophic future in the next 50-100 years unless we do something about it. And it’s a global problem that requires global solutions.”

This message was then taken up by the policy making community, by political leaders at that time, and they negotiated the UN Framework Convention on Climate Change (UNFCCC), which was finalized in Rio de Janeiro at the Earth Summit in 1992. Incidentally, the 20th anniversary of that, Rio+20, is coming up next year. And it includes practically all countries of the world, including the United States. In fact, the U.S. was one of the earliest ratifiers of the UNFCCC, so the U.S. has no problem with the framework convention.

I’ll say two things about the framework convention. First, it’s a global agreement. It’s a treaty in which all countries have agreed to take action. There’s a famous phrase in the framework convention called “Common but Differentiated Responsibility” (CBDR). “Common” means everybody is responsible – we’re all going to take action. “Differentiated” means some countries have a greater responsibility than others. The richer countries who benefited from greenhouse gas emissions and fossil fuel, the industrial revolution over the last 150 years, have contributed more to the atmosphere concentrations of greenhouse gases and have gained wealth from that. Hence, they have a higher responsibility, and they accept that. In fact, they’re named in Annex I of the framework convention, so in UNFCCC jargon, you often hear “Annex I countries.” These are the rich countries named in the framework convention, and they accept that responsibility. They have primary responsibility to move.

The other important feature about the climate change convention is that it has voluntary actions, all countries but differentiated without each one having greater responsibility. At the same time, it also identifies some of the more vulnerable countries, and three groups of these vulnerable countries are identified.
They are the least developed countries I mentioned already, based on poverty. They are the poorest countries in the world. There are 48 of them. Then there are the small-island developing states, many of them in this region in Asia-Pacific, in the Pacific, the Indian Ocean and the Caribbean. There’s about 40+ of them. And there’s the continent of Africa, again 50+ countries. There’s a lot of overlap between these countries. But if you take these three sets of vulnerable countries together and take account of the overlaps, we’re talking roughly about 100 countries with a population of approximately a billion people. These are deemed to be the vulnerable countries.

There are two significant facts about this group. Firstly, 100 countries is actually a majority in the UNFCCC. The UNFCCC has 194 countries, so 100 is a majority there. But they nowhere near reflect their views in the negotiations with the powerful countries. These countries are not at all present in any significant sense in terms of influencing the outcomes.

Within the larger development country group, called the G77 and China, or Group of 77 and China, it is actually 136 countries, not 77 anymore. They are a super majority, 100 countries, all members of G77 and China. They are over two-thirds of G77 and China, but even there, their voices are not heard. China, India, Brazil, these are the big countries whose voices are heard even within the developing country caucus, not the smaller countries. The other significant fact about these 100 vulnerable countries is that, if you take their emissions, the total emissions of all these 100 countries, 1 billion people, they are less than 5% of global emissions, so 100 countries account for less than 5%. They are not causing the problem, but they suffer the consequences. The other countries are producing 95% of greenhouse gases, but these 100 countries will suffer the consequences first, before anybody else. So they are a very important group of countries in the negotiations but really don’t have sufficient voice in the negotiations, and are not able to raise their voices sufficiently. They need assistance to raise their voices, from other people, from outside, including from the Church.
Let me move on with the evolution of the IPCC report. We had the first assessment report resulting in the framework convention. The second assessment report came out in 1995, and the essential message from that was a reiteration of the message of the first assessment, that our computer models are getting better and better, the projections into the future are converging. They all say that if we continue as we are now, we will reach significantly higher temperatures over the next 50 to 100 years, and even though we have a framework agreement in climate change where everybody promises to reduce their emissions on a voluntary basis, it’s not happening. Emissions are still going up. People have promised, but they are not doing anything, so we need something stronger than a promise, stronger than a voluntary action. The result in the UNFCCC process is where the parties to the treaty meet annually... They meet in December every year in a different continent. This year will be in Durban, in a few weeks time. Last year was in Cancun, Mexico, and the year before that was the famous meeting in Copenhagen.

So the conference of parties immediately after the second assessment report came out was the third conference of parties in Kyoto, and that resulted in the famous Kyoto protocol. The Kyoto Protocol is a protocol under the convention where these Annex I countries, which are called Annex B in the Kyoto Protocol, actually take on targets, so each country took on a target for reducing their emissions. They said we will reduce our emission by a certain percentage compared to 1990 as a baseline. So you hear this word “1990” coming up quite often as a baseline year. And by the end of the time period, which is 2012, again you hear a lot about what’s going to happen after 2012 because that’s the end of the first commitment period of the Kyoto Protocol, December 2012 – not Durban but the meeting after that. And they all agreed their emission reductions. Incidentally, the United States at that time had the Democrats in the White House under President Clinton, and Vice President Al Gore headed the delegation in Kyoto and actually agreed a target for the U.S. At the end of Kyoto, the U.S. was part of the agreement. They had a target. They had taken a minus 5% reduction target at that time.
But then, subsequently, while the Democrats are still in power, they did not present it to Congress because they knew the new Congress will not going to ratify it, and when the Republicans came in under President Bush, they actually withdrew from the Kyoto Protocol and said we’re not going to abide by that agreement.

So we have the Kyoto Protocol that basically sets much stronger targets by countries for reducing their emissions for the richer countries.

And then moving on to the third assessment report of the IPCC, which came out in 2001, this was the first time I was a lead author of the IPCC, the first time they had a chapter on adaptation which is where I was a lead author. It’s the first time where the IPCC starts talking about the fact that because we have failed to reduce our emissions, there is now going to be an unavoidable and inevitable level of climate change that we cannot avoid anymore.

One reason for that is the long-lived lifetime of the greenhouse gases in the atmosphere. If we release a ton of carbon dioxide today, it’s not actually going to cause warming for another 10, maybe 20 years. These are very long-lived molecules in the atmosphere. So what we see today happening in terms of atmospheric changes is not because of emissions that happened yesterday or today. It’s because of emissions that occurred 10 years, 20 years ago. There’s a long lag period in the scientific system, which means that if we were to reduce our emissions to zero today, for the next 20 years it makes no difference. The next 20 years worth of global warming is already up there. It’s in the atmosphere. It’s going to happen. It’s inevitable.

Mitigation or reducing emissions isn’t going to help there. We need to cope with that. So we now have an additional strategy called adaptation, and the third assessment report says that we still have to do mitigation because we want to still avoid large scale impact over the long term. But in the near term, the next 10
or 20 years, the only thing we can do is to do adaptation, and we need to support that.

The second message out of the third assessment report was that these impacts of climate change are not going to be uniform everywhere at the same time in the same way. By and large, poorer people, poorer countries and poorer communities even in rich countries are the ones who will suffer first. A very good example was when we saw Hurricane Katrina hit the U.S. The richest, most technologically advanced country in the world watched Hurricane Katrina come for days and couldn’t prevent over 1,000 people dying. Who were these people? They weren’t the rich people in New Orleans. They were the poor people living in the Ninth Ward in New Orleans. So, even in rich countries, it’s the poor people who are the ones who are more vulnerable, but poor countries have many more of them, and therefore poor countries by and large are much more vulnerable.

So that brought the links between climate change impacts and development and poverty and the people who are working in development and on poverty previously did not know much about climate change. They thought it was an environmental problem, now realized that it wasn’t. It was something that they had to deal with as well and they started to engage with it. And Misereor has been one of the pioneers in that sector of engaging with the climate change issue and the links to development, the links to poverty alleviation which is of concern to many of you. That has happened now for the last three years in a very significant way.

Let me move on to the fourth assessment report of the IPCC, which came out in 2007, which is also the time when the IPCC won the Nobel Prize together with former Vice President Al Gore. A lot of publicity was generated. The main message of the fourth assessment was two messages. Firstly, that in the long run, the next 50 to 100 years, we can still prevent significant globally catastrophic impacts of climate change. But we can’t wait 50 years to do that. The time for doing that is the next
decade. We have to act now in order to prevent these very large scale globally catastrophic impacts.

V. WITNESS OF CLIMATE CHANGE - THAILAND PERSPECTIVE
   - Mr. Kanchit Unan

I do not have much experience doing agriculture, but for 12 years I have accompanied and worked with rural people on sustainable agriculture projects. We have been getting support from Misereor for many years, so I cannot forget to say thanks to Misereor, and to APHD (Asia Partnership for Human Development), which merged with Caritas Asia.

Regarding the effects of climate change and greenhouse gas, agriculture is not the one damaging the world today, but it is an area that greatly feels the effects of climate change. Many people point to agriculture as the problem. Actually, the problem is caused not by what agriculture produces but by what is used to create agricultural products. The negative effects are due to the chemical pesticides and fertilizers used in agriculture. The way chemical fertilizers are made creates greenhouse gases.

The truth is that we are trying to promote sustainable agriculture especially in the local area, but we have been affected by globalization. Even now many European countries are still asking us to grow more forests and stop using chemicals. We are trying, but it is very hard to reduce chemicals such as pesticides or fertilizers because the chemical fertilizers that create greenhouse gas are so important in agriculture. We also know that our friends in South and Southeast Asia greatly promote the use of fewer chemicals such as pesticides and fertilizers. Doing that would be very useful for saving the environment in the local area.

Really, the world is negatively affected very little by agriculture. I do not know who – Europeans or the top policy makers – but
more and more people always point at us and put the blame on those of us who create the food for human life.

Today, there is a lot of research on climate change. As we know, many are affected around the world, but we still lack enough people who actually try to reduce climate change. The first one who can reduce climate change or solve this problem is you yourself, everyone here, by consuming less, because we must produce everything we consume, and production needs to spend a lot of energy.

I support the idea of creating a new understanding by educating the coming generation. That is very good because young people need to know the right track to follow. Some of us here are already 60 or 50, and I’m 40 plus. We may feel a bit old, but it is possible to grow another seed in the next generation. People like us have gone a little too far, spoiled ourselves too much for too many years. However, it may not be too late to change our habits if we start with ourselves right now.

We have many good examples of Thai people who reduce climate change and live with nature. One example is Mr. Jon Jandai. Some of you may recognize his name. If you search his name on www.youtube.com, you will find someone who can give you the right answer about how to live in today’s world. He is a very good example of how to get closer to nature and how to use less technology, less transportation, and to be less self-indulgent.

It is important to know how to live without harming nature and create less climate change through an alternative way of living. Our approach is to slow the speed of materialistic growth based on greed, which leads to climate change and the degradation of nature. We need to sit and talk with like-minded people, NGOs, other religious leaders and committed individuals so that we can campaign with them and lobby government officials and ministries.
This also means we need to respect and protect nature, which has its own right to exist, just like us. The more we venerate and respect the rights of nature, the more nature in turn will respect us and make it possible for us to live. Natural calamities happen when we forget to respect nature and its rights. So, we need to respect the philosophy of nature: “Live and let live.”

Right now, our people especially in central Thailand are really suffering much damage from the flooding. You cannot deny that this is another case of climate change effects. But no matter what country you are from, you also will experience the negative effects.

We have to pay more attention to encouraging and supporting people who suffer from the effects of climate change. We need to give them our love and care for them. Let us help them get back their smiles, make their smiles even bigger and laugh again with a louder voice. We share our love and care by being with them. We have to give them a change of living, and support them so that they become more and more like the image of the Creator, more like God.

The best way to solve climate change is to encourage and support the people involved in actions to develop sustainable agriculture. We can see the steps taken by His Majesty King Rama IX of Thailand, and follow his philosophy and his self-sufficiency farming system.

So we need to develop really concrete action plans, as well as a healing project to support the ones who suffer the effects of climate change.
VI. CHALLENGESPOSED BY CLIMATE CHANGE TO ECO-SPIRITUALITY IN THE PACIFIC
- Fr. Martin Everi, MSC

In response to the climate change issue, eco-spirituality must be guided by the following Biblical theologies of creation, and the general ethical and theological environmental principles that must be integrated in the living out of eco-spirituality in the Pacific:

• To undergo “ecological conversion” before we are engaged in “climate change awareness”;
• To consider climate change as a “moral and spiritual” concern, that should motivate us to be more caring to our environment;
• To regard climate change as a modern “evil” sign of the time;
• To respect the “intrinsic value” and “goodness” of creation, not based on its utilitarian value;
• To have an “ecological awareness”, one that will emerge, develop, and lead to concrete actions;
• To emphasize wise and responsible stewardship of creation as an inseparable aspect of people’s proper dominion over creation;
• Responsible stewardship implies a careful responsible management of the environment (cf. Gen 2:15);
• Dominion over creation is not “absolute”, but must be carried out in accordance to the plan and design of God for creation;
• Dominion over creation (cf. Gen 1:26-28), is not a license to destroy creation, but rather, a duty to limit violence, destruction, and degradation to the environment;
• To acknowledge the fact that we are part of creation, neither apart nor above creation;
• To acknowledge our dependence on the rest of creation for food, drink, and shelter, etc; that we cannot survive on our own without creation;
• To be aware that some of our human actions such as deforestation has both social and ecological consequences;
• Environmental justice has two foundations: 1) love for God - by obeying and cooperating with the Creator’s plan, design, and will for creation; 2) love for others - by safeguarding the environment, and not destroying it, as an indirect manifestation of one’s love for his/her neighbour.
• To regard the “climate system” as a “common good” to be protected and maintained.
• To be prophetic by condemning climate change because it contributes to global injustice: social, environmental, and inter-generational injustice.
  - Social injustice: Industrial and developed nations are the most responsible for climate change, however, it is the people in poor nations, the least responsible for climate change, who will suffer the most from future consequences of climate change.
  - Environmental injustice: Impacts of climate change may benefit few developed nations, but may have more destructive and devastating consequences on the natural environment of poor nations.
  - Intergenerational injustice: Predicted climate change consequences may also have adverse consequences on future generations: for example, the submersion of low-lying islands in Kiribati may eventually force people to vacate their islands and thus, depriving future generations from inheriting and living on their very own home islands.
• Climate change is a moral issue that must be integrated into theology and spirituality;
• It calls for an “ecological concern” and “ecological conversion”, especially individuals and industrial nations, which are more responsible for climate change.\(^1\)

Climate change is a modern “evil” signs of the time, which requires individual’s response and actions.

Commitment to “justice and peace and the integrity of creation” must be considered an integral part of eco-spirituality in addressing climate change. Social injustice is intimately linked with environmental injustice.

Re-imaging of religious and consecrated life entails a living witness, proclamation, and concrete actions for the promotion of “justice and peace and the integrity of creation” (JPIC).

To promote “environmental sustainability” alongside economical development.

To adopt an ethic of care and respect for the whole of creation.

To consider environmental exploitation, destruction, and degradation, not only as destructive, but also “moral evils”.

To be critical about an “anthropocentric view” of creation that is “selfish” and “self-centered”, and does not respect the environment, and adopt a “theo-centric” perspective.

To adopt a theo-centric perspective, that is, to view and treat others and creation according to God’s perspective and plan for creation;

The need for paradigm shifts:
- From a narrow anthropocentric view to one that includes the “intrinsic value” and “moral consideration” of the rest of creation;
- From a mechanical and utilitarian view of nature to a more relational, reverential attitude which allows for wise and responsible use stewardship of creation.
- From a narrow perspective to a broader view regarding the adverse consequences (immediate and long-term impacts) of one’s behavior on the environment.

Eco-spirituality in the Pacific must include the following:

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To promote Pacific cultural values that respect the inter-relationship, inter-connection, and inter-dependence among creation in the web of life;

To adopt an ecological consciousness that will enabled us to be more caring to the environment;

To be in solidarity with the poor and most vulnerable victims of climate change;

To be considerate for the next generation by reducing human activities that may contribute to further climate change;

To regard impacts of climate change that cause environmental and social injustices as “evils” of our time;

To be prophetic by challenging those responsible for climate change;

To demand for justice and respect for the people of the Pacific and their environment;

To be engaged in ecumenical dialogue with other Christians to promote climate change awareness;

To promote Pacific simple lifestyles that may help to reduce over-consumption and thus reducing further carbon dioxides emissions.

To respect human dignity and human life, especially victims of climate change;

To exercise wise and responsible stewardship by respecting and maintaining order and harmony in the climate system, and thus promoting the common good;

All the above should help us to commit ourselves in addressing climate change as an inseparable aspect of our eco-spirituality to maintain order, harmony, balance, and right relationships with God, the creator, other human beings and the whole of creation.

**Question for reflection:** Does your diocese show concern with the climate change issue? What would you like your diocese to do in light of the climate change issue?
VII. GOVERNMENT PROGRAMS ON CLIMATE CHANGE: CHANCES AND IN-BUILT LIMITATIONS

- Dr. Martin Khor

I am very privileged and proud to be with such distinguished participants, the leadership of the Church in Asia. I myself am a product of the Church and of the education. I saw the motto “Labor Omnia Vincit” for this university. It is the same motto for my school, St. Xavier’s Institution in Penang, “Labor Conquers All.” I did not know it is also the motto for every Catholic school in the world. I thought it was only for my school. Now I find we also have the same for Assumption University.

I have been an activist for a long time, ever since I left university where I was teaching in a university in Malaysia, Penang, and then I joined the Consumer Association of Penang, the Friends of the Earth, the Third World Network, and now I am with South Centre, an organization of 52 governments of the developing countries. It’s a kind of United Nations for developing countries.

I look back at how I got into this activism, in which our motto is “justice for the poor and justice for the world and for the environment,” and see that the roots of my activism came through my education in St. Xavier’s Institution, in the Catholic education system where we had a society known as the “Young Christian Students.” It used to be extremely active and is still active in some areas but it has gone down, I think, compared to the old days. When I interact with a lot of activists around the world on many issues, I find many of them used to be leaders in the “Young Christian Students” as well, where our motto was “See, Judge and Act.” If you see something, you have to judge and then you have to act, so it was an activist mode.

In our younger days, we had this whole debate whether being a good Christian and Catholic means that you pray or do good work. Some say you pray, and some say you pray and do good work. And of course, we always looked at Jesus Christ. He had a lot of good works. Once in a while, He prayed in public, so we
knew that He prayed, especially on the cross, and He died. I am sure He prayed every day. But it was His good works that distinguished Him, I think. We can’t quite remember what He prayed to His Holy Father, but we remember the good works that He did. “Good works” is, of course, the greatest understatement in the world. We just say good works.

This tradition is with the Catholic Church, with Christians in general, and is extremely relevant, especially when we analyze the climate dilemma we now have. It is a big crisis. What to do about it? It is very inconvenient that we are in Bangkok, but it is very relevant because the floods we are now seeing in Thailand, China, Sri Lanka, India, Pakistan, and all over the world have something to do with climate change.

I was very happy that Ernst-Ulrich von Weizsäcker showed Pakistan in his slides. This means he thinks that somehow those floods had an origin in climate change. Or at least the scientists who are very cautious – they don’t want to be blamed for saying something wrong – would say that climate change exacerbates the kind of rainfall pattern and flooding we now see. And mind you, we are only 0.75 or 0.8 degrees above the pre-industrial period in terms of global warming. When it reaches 1 or 1.5 or 2 degrees, we say the absolute limit is 2 degrees. But at 2 degrees, I don’t know what kind of flooding we are going to see in Bangkok.

When I came from the airport today, we had a stretch of about 100-200 meters where the little stream already over flooded, and the water has not yet reached Bangkok. It’s about to reach sometime this afternoon or tonight. You might not be worried but I am. I don’t think we can make it to the airport if our region of Bangkok is going to be affected. The government had to make a choice on which canals to open and which canals not to open. They decided to save central Bangkok at the expense of eastern and western Bangkok in considering which canals to open and so on. But central Bangkok also has the Menam Chao Phraya (river).
This is a dilemma. Which child are you going to save so that another child can survive? In the floods, the waters will go down after some time, but in real life it is the children – meaning ourselves, too – we have to make choices about who are we going to save because there is not enough for everybody.

I start by saying there are four relationships that are important – the relationship of man to man, man to nature, man to God and man to himself, his own peace with himself – and we want harmony and peace in all these four relationships. If a person has a good relationship and harmony with his fellowmen, with nature and with God, then he is at peace with himself, that final relationship with himself. At the end of what I am going to say, I will come back to this point.

What we are seeing in the climate crisis of course is the greatest disharmony between man and nature. There is an optimal point at which man has to control nature, but not to the point of exploiting it to the extent that his own survival is now at stake. Of course nature itself is a victim – all the forests that are chopped, the air that is polluted, the animals that are killed, and so on. This man-nature crisis we are seeing exemplified outstandingly by climate change is going to make the conflict between man and man more acute because they are going to scramble for less and less resources, whether it’s water, oil, energy or atmospheric space. That last term has now come into the language.

The atmosphere can only take a certain amount of pollution before all hell breaks loose on earth. How much more pollution, emissions, can that atmospheric space absorb before the world collapses, and who shares the remaining atmospheric space we have? This is the big conflict we are now seeing in the climate negotiations and so on, explicitly and implicitly, in the world.

The science says about 1,300 gigatons were emitted between 1850 and 2009 – one gigaton is 1,000 million tons, or 1 billion tons – and we have only about 600-700 gigatons left of
atmospheric space to emit between now and 2050 and until the end of time if we are to limit temperature rise to 2 degrees. There also is a big debate that 2 degrees is too much. It should be 1.5 degrees, and some even say 1 degree. We are now at 0.8 degrees above the start of the industrial revolution.

Of total emissions between 1850 and today, 72% were put up by developed countries, the presently rich countries, even though their population size was only 25%. The developing countries with 75% of the population emitted only about one-third or maybe less than that, 28%. So there is a historical debt that you may call climate debt, as it is now being called. The developed countries owe all the developing countries a huge climate debt and that debt actually can be calculated. In our calculations, that debt is about 568 gigatons. In other words, this is what they have overused of their fair share of the atmosphere as compared to their population.

So if we are to have, as Ernst-Ulrich von Weizsäcker just now was telling us, a carbon budget approach, it can ask: what is the total carbon dioxide or greenhouse gases we can emit between now and 2050, and which countries should have what share of that budget? This would be a more equitable approach to the question.

Our answer is that since the developed countries have already used up so much of the space and have a carbon debt of 568 gigatons, they should be allowed to emit zero (0) of the 750 left in the atmosphere between now and 2050 and then have negative emission of 448 gigatons. Negative emission means pulling down the emission from the atmosphere. The developing countries’ fair share of 750 gigatons should be 630 gigatons according to their population between now and 2050. But they have underused 568 in the past, so their allocation today should be 1,198 gigatons between now and 2050. This is what justice prescribes. In reality, of course, it cannot be done. The developed countries cannot pull down so much carbon dioxide from the
atmosphere. If they did, we would not have so much of a climate crisis.

One solution, as Ernst-Ulrich von Weizsäcker was showing in one of his slides, is that the developed countries will have to pay developing countries to do their share of reducing their carbon emissions. They should not get away scot-free. Only through this method can we solve the climate crisis without creating a new crisis of poverty and development.

Solving the climate crisis technically is very easy. You just don’t emit any emissions, you don’t produce anything, you don’t produce any food, you don’t produce any industrial products; everyone just lies in bed. If each of us lies in bed for one year, the climate crisis is solved, because if you don’t have human beings in the world, there won’t be emissions that could destroy nature. But that would be the worst solution to the climate crisis.

So, the way to solve it would be for rich countries that are overdeveloped to cut down and transfer the possibility of production to developing countries. One way to do this is the transfer of finance, the transfer of technology and the transfer of knowledge.

It is calculated that developing countries should do three things:
1. Mitigations – reduce their emissions.
2. Adaptation – whatever you do to reduce your emission, you will still suffer consequences, like Bangkok today. I read in the *Bangkok Post* that the government of Thailand already has calculated it needs about US$3-4 billion just to rehabilitate what they now anticipate as the problem, but this can become even greater. Pakistan, for example, estimated needing US$20-30 billion for the floods that took place last year – and by the way, they have new floods this year.
3. Money – for technology and capacity building, the institutions we have to build up, the new technologies we need. The kind of “Factor 5 technologies” that Ernst-Ulrich von Weizsäcker was telling us about is something the developing countries not only have to buy, but they also
have to learn to produce themselves. They can then produce their own “Factor 5” and tell Ernst-Ulrich von Weizsäcker, “Hey, I have my own 600 technologies that we have discovered and they can be added to yours.” He will be the first to say, “Bravo! I don’t want you to buy my technologies. I want you to create your own, and one day we will buy from you as well.”

All of that needs money – for science, universities, technologies, and so on. The estimates coming from the World Bank, which we don’t really trust but never mind, are:

- For mitigation alone, developing countries need US$170 billion a year, plus associated costs of US$300-500 billion
- For adaptation, the World Bank estimates US$100 billion, but its methodology is very flawed. If you take a comprehensive view of adaptation, IIED (International Institute for Environment and Development) with Emperor College in London estimates that developing countries require US$400-500 billion a year
- For technology transfer, the global budget needed is US$300-1,000 billion a year. If you cut that in half, the developing countries need up to US$300-400 billion a year
- To get rid of the more than 500 gigatons of carbon debt we talked about, US$23 trillion is needed. If you divide that into 40 years, it will be US$600 billion a year. In other words, if we are really seriously going to solve this crisis, the developed countries have to transfer US$1-2 trillion dollars a year to developing countries, about 3-4% of their GNP. That is not very much. It is less than the amount of money they were giving to banks in the past for the financial crisis of 2008. And today’s newspaper says Europe needs at least 1-2 trillion Euros to save their banks in the new, just emerging crisis. We are in the midst of a new economic and financial crisis that will last much longer than the last one in 2008.

As for technology transfer, because many new technologies have patents, we need a new system of technology cooperation in which new technologies should not be patented in relation to
developing countries. Developed countries can patent and recover their innovation cost by having a monopoly price when they sell their technologies among themselves. But developing countries, if they so choose, should be allowed to exempt intellectual property from climate change technologies so that they can get these technologies cheaper and do their work of adaptation and mitigation faster.

The analogy of course is in relation to medicines. To buy medicine to treat one AIDS patient in the U.S.A., it used to cost US$15,000 a year, but an Indian company could produce it for just US$500 a year. In fact, the price now has gone down to US$50 per patient per year. How many patients can you save if you are not allowed to produce it because it is patented and you have to buy it from the original company? If some philanthropist comes around and gives you US$1 million, you can save a few patients. But if US$150 instead of US$15,000 is needed to treat a patient suffering from HIV-AIDS, a hundred times more patients can be saved with the same amount of money.

With this same analogy, if you patent something but do not allow developing countries to produce their own or use the existing technology and knowledge, the technology chains in developing countries will be much more expensive, and they will do less to discover new technologies. For example, if you can buy only 1 machine instead of 10 machines, the rate of mitigation in your country would be one-tenth of what could be done.

Now, the question is whether climate change is really a serious issue. I don’t think any of us in this room is a climate “denialist.” We know it is happening, but is it as serious as some of the scientists tell us? Of course, there is a long range of scientists. Some say it is serious, some say it is crisis. For some, it is so devastating that they cannot sleep at night. And if it is something so devastating that you cannot sleep at night, then the world is at stake, and not only nature but humanity’s future is at stake. So we cannot have business as usual in our behavior.
toward one another. We cannot say, as the developed countries are now telling developing countries, “You have to cut your emissions as well, we don’t care whether you are poor.” Then we say: “Okay, can you help us?” Yes, provided you totally recognize and pay us for the intellectual property. In other words, you cannot have business as usual in your own economic model but we will have business as usual in our commercial relationship with one another. The two do not add up. It is not fair. In a war situation (when England was trying to fight Germany), I don’t think they charge you to fully recognize your intellectual property and you can sell those tanks 10 times the price so you could make a profit. Nobody even thinks about intellectual property. Everybody has to do this and you don’t get a profit.

With climate change, we are in a war situation, so humanity has to unite and get rid of those relationships based purely on profit, commerce and monopoly so that we can do the job together.

At the national level, the government, companies, consumers and the Church all have to play their role. I think we saw some glimpses of what needs to be done. A few very concrete examples ... In the area of buildings, because our buildings are constructed in an energy inefficient manner at least in my country with high-rise buildings, every floor is air-conditioned, so it is very cold and we have to bring sweaters to work. When the temperature outside is 90 degrees but inside we make the temperature 55 degrees and then have to wear a sweater, this is totally ridiculous! The buildings have to change. New ones have to be different. And houses also, each household also has to change. The government has to come up with a new building code. For houses, we have to think of how to reform ourselves.

In transportation, you can go the whole range. The motorcar can be made more efficient by “Factor 5” – use less fuel, less oil, less electric and so on. But also we can think of not having three motorcars per family but one motorcar per family, and maybe one motorcar per road so that you can pool the car. It belongs to
20 households and you can use it when you need to. We can make use of public transportation, which is very badly developed in our countries in Asia. We have such poor public transportation we feel we need a motorcar. How about bicycles? The use of canals and all these alternative ways of transportation have to be thought about. We ourselves have to think of not owning and using the motorcar, if we can.

It goes beyond “Factor 5” because Factor 5 is to retain your present lifestyle. If you change your lifestyle, nobody is going to read the book, in the West at least. Here we are saying change your lifestyle because you have to complement technology and products and energy efficiency with less use of things. We have a very big problem with energy because we have oil and coal, the alternative is nuclear. We don’t want that alternative, and we don’t want oil and coal. We have heard Ernst-Ulrich von Weizsäcker say, and I think it is correct, hydroelectric dams are good if they are small and localized and done in a proper environmental way.

Similarly with wind and solar, they should be smaller and community-based. They cannot be huge gigantic things that limit our ability to generate new energy. In rural areas, we can use biogas. In other words, this points toward a lifestyle of small communities doing things in a small manner, rather than huge companies dominating at the national and regional level.

In agriculture, which directly creates 15% of climate emissions, our societies in Asia used to have traditional agricultural methods that were ecologically sound, based on traditional knowledge. But the bank came along and said this is primitive, so please use chemicals, hybrid seeds with intense use of water and we have the green revolution. But now we have found that that is 14% of climate change, so can we now get out of chemical and water intensity and go back to traditional agriculture with the best scientific methods, so that we can have dynamic productivity gains even in organic farming. Sustainable agriculture with organic farming has never been given a proper
chance because most of the world’s agricultural research money went into chemical agriculture or genetic engineering, which cause a lot of problems by themselves. We need an organic farming revolution in Asia.

And finally, perhaps the most important of all for Asia is the forest. We have contributed to the destruction of the forest, and the destruction of the rights of indigenous people and local communities who depend on the forest. By destroying the forest we have also destroyed our water supply system particularly in watershed areas, and this has contributed to floods as well. We need to live with our forest rather than chopping it down.

These things sound very simple and make so much common sense that you would do it if you were the government. But why is it that good governments don’t do it? Even good governments come in promising to do it but very soon they do not, because vested interests tied to economic profit form the biggest lobby groups that control the government of the day. When you are in the opposition, you will say this is very bad, but if you are in power you would do the same.

We have to cut this nexus of economic vested interests and political leadership. This is something very important and of course the way to do it is citizen power. That is the most difficult thing of all but it is happening in Asia. We can compare Asia today with 5, 10 or 30 years ago when we almost had no citizen’s power. Today, citizens have a greater and greater voice, but still the voice is not as powerful as the voice of big business interests and the developers who want to chop the trees and make money from more buildings. The timber tycoons that want to chop the trees, the motorcar industries that want to profit from selling more motorcars, the food industry that sells sugar to children, drinks and everything else have prevented the WHO from coming up with more actions. Consumer activism, environmental activism and social justice activism are very important. Otherwise, the simple technical solutions that we have will not come into being.
Finally, what has the Church got to do with this? I think this is what we are interested in. When I said there is a relation between man and man, man and nature, man and God, man to himself, I don’t think you take that relationship of man to God as the only one of relevance to the Church. All four relationships are relevant to the Church. When we talk about harmony between man and nature, it is part of the Church philosophy and theology. It is not just a relationship between man and God because God is also nature. If I am not mistaken, God is also man because we had the Son of God becoming man, bridging the gap between man and God. All four of these relationships are very important. In that relationship of harmony with nature and the environment, that relationship is something the Church could formulate in Asia in concrete ways and do through activities such as Church policy at the regional level through the FABC. You are here, the leadership is here.

It can be translated at the national level as well if the Church at national level can take up this issue – not only climate change but all the relationships with the environment crisis that we have. This can be given to the community at Sunday Mass through the lecture of the priest. Most churches have groups, especially youth groups which are very important and influential. If those youth groups in the churches and in the schools can take this up, it would be very good. In universities, like the one we are now in, this can be integrated into the curriculum. We could have workshops for academics and researchers who can then propagate it to the students. And every Catholic school can have an environment and consumer society, as we did in Malaysia. We went to almost all Catholic and non-Catholic schools and put in environment and consumer societies. Then we can give them hand-outs, notes so that the students will have this kind of consciousness and action as well. For example they can go around the school neighborhood, look at the environment and do some actions in relation to the environment. This breeds into them a kind of activism which they can begin in school and later on they can do it in whichever job they are in or political party they belong to.
The Church can also take part in changing society through its various groups and its own actions. The Church can come out and say it is promoting this kind of climate policy for our country, and ask political parties and politicians as well as the public to please take note. That interaction of the Church with the larger society in advocacy is also very useful.

Besides nature and harmony and the environment, the Church can also take up climate justice or environmental justice, both international and national. By justice we mean take the side of the poor and the ordinary. At the international level, developing countries are struggling to retain whatever share of atmospheric/environmental space they have left. This is happening in many conventions, many conferences and many fora. The Church can join in as part of the climate justice movement. Some of you may know about APRODEV (Association of World Council of Churches related Development Organisations in Europe). They recently met at their headquarters in Brussels, and Misereor also took part. APRODEV’s theme was “the environment and justice,” and this can be done at the Asian level. You have the Asian Partnership for Human Development, the Office of Human Development, the Churches, and so on.

At the national level, we can also be pro-poor in the sense that the poor must have their fair share of the limited environmental resources we have left. Whether it is water, energy or carbon space that we are talking about, we need to change our development model in Asia. It is a model that has succeeded to some degree in the materialistic way and that is not bad, but it has not succeeded in the distributional way that goes to the poor and has not succeeded in the environmental way and therefore we have reached limits.

In China, they now realize at the political level that they face a severe water crisis and they have to do something about it. Of course, they also realize what the climate crisis is and they have a very advanced system of trying to tackle the climate crisis from
national government down to municipal level, but in this area we can advocate and be quite common sensible about it as we have done. But at the end of the day you realize that putting this into effect is a political process. The Church may not want to go directly into politics, but when we say we are pro-poor, there are other people who are anti-poor and they are going to struggle against it. Look at all the environmental fights we are having in relation to forests, indigenous people, farmers who don’t have land, and so on.

My final point is the “civilizational” change we are talking about. That is, all these four relationships in the end can succeed in a harmonious way only if we abandon materialism as the god that we now have and return to these four harmonies that guide our life and give us the meaning of life. Someone just asked Ernst-Ulrich von Weizsäcker a question about wealth. Do we have to redefine wealth? Indeed, we have to redefine wealth. The problem in the world today is that the meaning of life is now being identified with material wealth, symbols of success and products you want to own.

When Steve Jobs died everybody was crying, the greatest man in the world of this century died. Was it because he gave you an iPhone? I also have an iPhone. You look at the iPhone and Apple has a silver look. You press its button and you feel very happy. A new generation of iPhones … this is where the top brains in the world are going today, making minute changes in electronic gadgets, and people are associating their whole personality with these electronic gadgets. That is not really what we need, and that is not what really gives us harmony in the four senses.

There are two sayings of Gandhi:

1. “Live simply so that others can simply live.” We can add: “Live simply because that is what is going to give you wealth in the real sense.” You can build your wealth by improving your relationship with nature, fellow human beings, with God and yourself. We are distracted away from this main meaning of life
by putting our meaning of life into owning products that we don’t need or want, but the advertising agency said we need one so that they can sell us more products.

2. “The world has enough for everyman’s needs but not for everyone’s greed.” This is surely a very important principle for international relations in this present period of resource scarcity and climate change which leads to atmospheric space scarcity as well. If we don’t take heed of this, our world will have a new war between countries. We already see signs of it as the economic crisis takes place and people in the West desperately feel they are going to lose their wealth and see other developing countries coming up strongly. There is a sense of insecurity, fear and jealousy now erupting in trade wars and other areas. Tomorrow there will be war over oil, water, trade, intellectual property, atmospheric space. In other words, “I want you to cut your emissions even though I don’t cut my emissions, and if you don’t do it, I consider it a security issue as in the Security Council, and I have the right to preemptively strike on you because when you pollute, it affects my child’s security.” That is going to come, climate change as a military security issue and we don’t want to go that route, because it is going to damage all the four relationships that we are talking about.

The Church has a very important role to play. When I started this presentation, I gave my own history on how I came about my own activism. It was rooted in the Catholic education I received and in the extra-curricular activities of the Young Christian Students. The Church may not know how powerful it is. It has a lot of power. It may be a minority in many countries. Perhaps in the Philippines it is a majority, in my country it is a minority and in Thailand it is a minority. But that minority is a powerful one in terms of ideas, in terms of the influence of people who are in it and in terms of the methods that it can use for social change.

I hope this meeting that we have on climate change will contribute to this role of the Church, which is not only important
but also essential if Asia is going to survive, even if it is not going to be rich.

VIII. ANSWERS TO CLIMATE CHANGE: THE ETHICAL CONTRIBUTION OF THE CHURCH
- Fr. John Brinkman, MM

It is good to be with you for this FABC and Misereor sponsored seminar on climate change in which we have heard a number of expert resource people present themes on the science of climate change, the actual and current evidence of global warming and the dynamics of the climate change negotiations with particular reference to the last United Nations Framework Convention on Climate Change (UN FCCC) November 29 - December 10, 2010 Sixteenth Session of the Conference of the Parties (COP 16) held in Cancun, Mexico.

Within this helpful context, my task will be to present the ethical dimensions of the climate change discourse under the title: "Answers to Climate Change: The Ethical Contribution of the Church." I have circulated three papers which offer a background and provide extended references for this presentation. These papers are “Ecology and Mission,”3 “The Cancun Crossroads” 4 and “Climate Change Impacts and

3 “Mission and Ecology” defines ecological concern as coincident with themes at the heart of our faith and central to its essential teachings and mission. Hence, care for creation is not only to be considered an extension of the social doctrine of the Church, i.e., an application of principles derived from Church teachings presented to the wider human social forum. A Church statement of its environmental concern must be seen as coming from the very depths of our faith tradition which commits itself to the Book of Scriptures and the Book of Nature as primary modes of revelation.

4 “The Cancun Crossroads” paper was composed during the last framework conference on climate change which took place in Cancun, Mexico. It presents as “crossroads” four overarching themes that continue to be central areas to be resolved in the on-going negotiations to take place in Durham. These foci are: the Global Warming Limit, the area of Emissions Reductions, the problem of Sustainable Development and the need for Sustained Multilateral Negotiations.
Responses in Asia—An Overview.” 5 These writings will be referenced in this address.

The Ethical Focus

Climate change as defined in the UN FCCC discourse and in the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (4AR) is unequivocal and unavoidable. In effect, it is an event that has occurred but its effects have yet to be fully felt for the inertia of the atmospheric processes. It has become clear that to achieve a global warming limit of two degrees Celsius above pre-industrial levels in the effort to avoid the most dangerous effects of climate change will still entail significant consequences for the earth and for the human community. 6

The Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (4AR): “Climate Change Impacts, Adaptation and Vulnerability” informs us that “Unmitigated climate change would, in the long run be likely to exceed the capacity of natural, managed and human systems to adapt.” Current documented actualities of the decreased capacities of the earth to naturally sequester carbon and of the present increase of Green House Gas (GHG) emissions at the higher end of the 2007 IPCC AR4 projections state the conundrum and the challenge of climate change mitigation.

5 “Climate Change Impacts and Responses in Asia—An Overview” is a revised information note (September 2011) by Vanya Walker-Leigh TSSF. It sketches in a rather comprehensive manner some of the most compelling and current effects of climate change in Asia. It references some of the major reports such the UN Food and Agriculture Organization’s report assessing the expected climate change impacts on Asian food security and agriculture. Adaptation and Mitigation measures are noted in the Asian Development Bank reports. This work grounds our discussion in the actualities faced in Asia and the Pacific.

6 Should humanity manage to stay below +2 C, there will still be significant suffering for the poorest regions of our world. There is therefore a growing consensus that the effort to keep global warming below +1.5 C is an ethical imperative.
We are cautioned that: “If humanity wishes to preserve a planet similar to that on which civilization developed and to which life on Earth has adapted, paleoclimate evidence and on-going climate change suggest that CO2 will need to be reduced from its current 385 ppm to at most 350 ppm.”  
7 The measurement as of March 2011 is 392.4 ppm.  
8 It is currently 394 ppm at the time of the editing of this paper. We are also informed by most current literature such as the UNEP Emissions Gap Reports that the world community has the technology and the means to accomplish the necessary mitigation measures albeit within a rapidly closing window of opportunity.

This endeavor of the convention to avoid the most dangerous effects of climate change must be driven assuredly by facts and by values. Indeed it may be argued cogently that values are emerging as a central focus in the articulation of a timely and effective resolution to the climate change crisis. From the view of “the ethical contribution of the Church,” the focus on values provides an opportunity for the Church to present tenets explicit in the perennial teachings of the Church and coincident with the deepest aspirations of humanity.

Before addressing climate change issues that would invite and even compel Church response, it would be best to present the sense of cosmological commitment that is a hallmark of our tradition of thought and faith and its assured regard for the integrity of the earth. Such a theological disposition coherent with the ethical stance indispensable for environmental resolution is best presented under the rubric of Earth Ethics.

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8 The most reputable source for current atmospheric CO2 concentration comes from the National Oceanic and Atmospheric Administration in the U.S. NOAA has been recording monthly atmospheric CO2 as measured at Mauna Loa Observatory, Hawaii since 1959 and all their data and analyses are available here: http://www.esrl.noaa.gov/gmd/ccgg/trends/
Earth Ethics

This focus on the need for an ethical stance toward the earth as the fundamental context for the resolution of our environmental crises was conceptually refined at the March 16-23, 2003 3rd World Water Forum (WWF) in Kyoto, Japan. Those focused solely on technological and economic response as primary in solving ecological challenges contended --in the course of a roundtable discussion-- that economic efficiency, social equity and environmental sustainability were to be considered equal considerations in confronting the global environmental crises. In this plenary round table they were roundly informed that politics, economics and earth sustainability were not equal. Attention to earth sustainability was paramount and the essential substratum for all social and financial solutions. In effect, economics and politics were beyond the economical and political in their dynamism for they were rooted in the earth. In the same conference, at a UNEP and WWF sponsored panel, “Water, Nature and the Environment,” Delmar Blasco, Secretary General of RAMSA, the Wetlands Convention concluded his remarks with a memorable insight. He stated that “unless and until humanity achieves an ethical stance that recognizes the intrinsic value of nature, all of our efforts may well end in failure.”

This ethical stance in which nature or the natural course of things is considered the central term of reference and the criterion for human action finds more than a resonance with the thought of St. Thomas Aquinas.

In the *Summa Contra Gentiles*, Aquinas reflects on creation’s seven day sequence in which each instance of creation is recognized as good. When all things were completed, created reality is noted to be very good. By virtue of the complete order of things, the integral functioning that manifests the universe as universe, we participate in and are encompassed by what is most noble. Aquinas states in the *Summa Contra Gentiles* “…but all things together are very good, by reason of the order of the
universe, which is the ultimate and noblest perfection in things.”9 This integral functioning of the course of the cosmos comprises not merely one perfection among others but the ultimate and noblest perfection in all things. We may well add the monitum: “unless and until humanity achieves an ethical stance that recognizes the intrinsic value of nature/the order of the universe, all of our efforts may well end in failure.” It becomes increasingly apparent and urgent that the human community begin to function with something akin to a shared and integrated vision of the natural world. We may well note that the ethical norms being sought as guiding principles emerge out of the on-going environmental discourse and the negotiations themselves.

For his own time, Aquinas presented a comprehensive vision of the phenomenal order of things, the interrelatedness of all things and the role of the human within it. In his metaphysical vision, the datum of the cosmos, “the whole universe together” manifests the primary meaning and mystery of things.

For Thomas, the universe images forth in its multiplicity and diversity the simple goodness of God. No single creature or creation, not the majesty of a mountain found in the earth’s impulse to leap skyward, nor the mind of man found in creation’s impulse to leap into consciousness can participate perfectly in or adequately represent the datum of divine goodness imaged forth by the universe in its totality of beings. Everything needs every other thing to manifest this divine attribute. In this, the cosmos itself constitutes the primary mode of revelation.

“For goodness, which in God is simple and uniform, in creatures is manifold and divided; and hence the whole universe together

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participates in the divine goodness more perfectly and represents it better than any single creature whatever.” 10

In this scheme of things, the universe is primary and the human is derivative. Humanity is not required in itself but by the differentiation of all things. Indeed, it is the “greatest perfection of the universe” that required that there be creatures of intellect and will. Hence it is by human capacity to know and the ability to will that humanity finds its designated place and designed capacity for reciprocity and fulfillment in the wider contexts of things.

“Hence, the complete perfection of the universe required the existence of some creatures which return to God not only as regards likeness of nature, but also by their action….The greatest perfection of the universe therefore demanded the existence of some intellectual creatures.” 11

In this dynamic cosmic order which constitutes a journey of return for all beings, there is simply no place for an anthropocentrism in a modern sense of human action privileged over-against the course of the universe. It is by participating in a coherent and enhancing manner in this “return” by the unique capacities of seeking the truth and willing the good that the human finds its noble and privileged status.

“In the emergence of creatures from their first source is revealed a kind of circular movement (circulation vel regratio), in which all things return, to their end, back to the very place from which they had their origin in the first place.” 12

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12 Expositio in Libros Sententiarum, Book I, Dist. 14, q. 2, art 2.
The concluding chapter of the W. Norris Clarke’s work, *The One and the Many* is entitled: “The Great Circle of Being and our Place in It, The Universe as Meaningful Journey.” In this chapter Clarke outlines the ancient concept of the Universe as a Journey which St. Thomas more directly took from Plotinus. Here the Exitus—the Many pour out from the One. In the process of going out they find their differentia, they unfold their potentialities and fulfill their capacities as best they can in the course of life and in that very process are attracted to and are drawn back by the pull of the Good, toward the Source from which they came. Hence the journey is both an existing from and a returning to. i.e., Reditus, the road back.

If there is a particular ecological turn, the time when a certain clarity of thought is reached wherein the collaboration of a tradition’s sense of transcendence and immanence form an essential and intimate rapprochement with the natural world; it would be found in Thomism. From the perspective of “Earth Ethics,” such a conceptual turn of events can best be attributed to Thomas Aquinas. His synthesis of prior thought and his refined sense of creation in large measure accepted the cosmology inherited from the Greek Platonist, Dionysius. He does so with refined articulation of and a shared sense of the numinous quality of natural world.

“The visions of Dionysius and Aquinas alike are infused from the start and sustained throughout by a sense of sacred marvel before the divine origin of the world. Their works are characterized by an openness to what is unknown and undiscovered, inspired by the desire to comprehend, not necessarily to fully explain, but to contemplate and ponder, to accept and appreciate and to articulate as best possible according to the deficient modes at their disposal.” 13

However, Thomas radically transforms the Platonic texts and transcends its thought in the process. Succinctly put: “Thus, whereas for Dionysius it is a hindrance to our discovery of God that human knowledge is oriented towards finite beings, this for Aquinas is the very foundation of our natural disclosure of God.” 14 This is a radical disclosure.

Humanity in this perspective is rooted in the earth and intimately and properly a part of the universe. Man is not ordained toward ecstatic escape from this realm. It is here by the very structure of his being that his orientation to God and his knowledge of the divine is founded in finite reality. In Thomist epistemology, the phantasm of sensory perception, the proximate impress of this finite world is the point of initiation for all concepts of the mind and the channel through which ultimate reality and truth are perceived. “Thomas asserted that all our knowledge, including the spiritual, and also our knowledge of God, took its starting point (and therefore always remained somehow dependent upon) sense perception. [Summa Theologica I, 12, 12; Commentaria in Librum Boethii DeTrinitate, 6,3.” 15

Although this is a radical disclosure, it is far from a radical departure in a tradition where nature is revelatory. There are certain themes in thought traditions and cultures that comprise so central and defining an attribute that if lost or diminished, they are reconstituted again in novel and renovated forms so as to preserve an identifiable continuum of cultural history or a recognizable continuity of thought. The remarkable renovation and reconstitution of Platonic cosmology in this Thomist revision does imply an “ecological turn” in the sense that it preserves and indeed recapitulate in an enhanced manner, the intimacy of the sacred to phenomena. This is an instance of exigent exposition driven by the sheer necessity to retain and

14 Fran O'Rourke, Op. Cit., p. 56.
deepen essential truths in the light of intellectual challenge and spiritual redress. It is important that we recognize this reaffirmation as part of the tradition that retained divine and phenomenal intimacy within the categories of thought and in accord with the philosophical concepts available through epochs of monumental change. Thomas drew transcendent presence and finite reality closer together.

**Intimacy of the Sacred and Phenomena**

Other traditions of thought, religious insights and schools of philosophy would find extraordinary if not incomprehensible the earlier affirmation of creation and incarnation extolled in the statement of the De Ressurrect. Caris 6 of Tertullian:

“Think again about God, so concerned with and devoted to Adam’s body: with his hand, his senses, his activity, his counsel, his wisdom, his providence, and above all his affection that guided his formation of the features. In fact, in everything that came to be expressed in the human body, there was the light of Christ, the future man, shining through. For he too was to be clay and flesh and word, and then was earth.”

This is but a glimpse of Patristic sensitivity to human life as designed for an intimate relation to the phenomenal order of things in the very process of its divinization. It is significant that the varied and culturally diverse Fathers of the Church were determined in their efforts to discount dichotomies which

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16 Ibid., p.77
17 For our purpose, there are five polemics that have particular importance. Each combats a misunderstanding of corporeity either in man or in Christ with reference to the way of salvation willed by God. 1. The polemic of the Fathers against dualism, either in its Docetist form as with Ignatius of Antioch, its developed Gnostic form as with Irenaeus or Tertullian, or in an Encratist form as with Clement of Alexandria. 2. The polemic against those who denied the resurrection which we find in the Apologetes and the anti-Gnostic Fathers...All the Fathers who sought to defend the Christian position on this point developed the theme that man is
would have fractured spirit from matter, divinity from humanity, and Word from cosmos. It is enough for our purposes to confirm that our tradition is one which consistently confirms Divine intimacy to the natural world, human integration in that world and above all the integrity of the order of creation as revelatory of God.

In this regard, it is important that we ourselves “think again” and recognize how germane is our tradition of thought and how unique is its potential to contribute to environmental reflection and resolve. It may well be said that the problematique of climate change, the alienation of the human community from the earth community poses unprecedented challenges for the revision of thought in an age similar to the Patristic period plagued with dichotomies that distort the meaning and purpose of the universe and the role of the human within it.

Never before has the human community been so alienated from the Earth community. It may be cogently argued that the resultant divisions within the human community itself offer the spectrum of a widening divide over the most fundamental issues of life and survival. These are most difficult times. Difference is not met by deference. Economic efficiency often disparages social equity. The artifice of mono-culture militates against the rich diversity of the earth and its differentiated cultures. These divisions contradict our Catholic credence at its core.

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neither solely a soul nor solely a body...3. The anti-Arian polemic. When the Fathers found themselves obliged to explain the relations between the divinity and humanity in Christ they clarified the notion that in the work of salvation, Christ’s humanity including his body was the instrument through which divinity operated. 4. The polemic against Aspollinarianism. To show that Christ is perfect man and that he assumed an integral human nature, the Fathers explained what an integral human nature was. In this context, particularly, we see the relevance of the axiom: the Word did not save what it did not assume. 5. The polemic on the hypostatic union, especially that of Cyril of Alexandria against Nestorius. See Cipriano Vagaggini, O.S.B., The Flesh Instrument of Salvation, pp. 66-67.
The most fundamental contradiction resides in the alienation of the human community from the earth community evidenced in the climate change crisis. Hence, the current and compelling context of climate change needs to be reviewed.

THE THREE MAPS CHANGE

The compelling context of climate change and the need for response are presented by the Three Maps first proposed by Hans-Martin Fussel in his “Climate Change Vulnerability and Responsibility” at the 10 December 2007 UN FCCC COP 13 Climate Change and Justice Panel. They provide a schema to appraise our present situation and the critical need for response.

- The Map of Carbon Intensive Development is a world altering map.
- The Map of the Most Vulnerable to Climate Change is the Map of Developing countries.
- The Map of Resource Competition in a Carbon Constrained World is an Outline for the Sundering of the Human Social Regime throughout the World.

1. The Map of Carbon Emissions is a World-altering Map. The decreased capacities of the earth to naturally sequester carbon and the increase of GHG emissions at the higher end of the IPCC projections state the challenge of earth alterations. Arctic ice retreat and sea level rise are observed as escalated in their rate of change. Rising ocean acidification caused by seas absorbing more carbon dioxide is disrupting the ability of corals to build their calcium

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18 Hans-Martin Fussel is affiliated with the Center for Environmental Science and Policy, Stanford University, Stanford, CA 94306, U.S.A., and the Potsdam Institute for Climate Impact Research, Telegrafenberg, 14473 Potsdam, Germany. He is co-author of “Climate Change Vulnerability Assessments: An Evolution of Conceptual Thinking.”
carbonate structures. Warmer seas stress corals still further. These living sea walls are the sites of nutrition essential for marine ecosystems. Global warming is a factor in changes in terrestrial habitat and the plight of species migrating to higher altitudes and contributes to the current high rate of species extinction. The warming of the oceans and its atmospheric effects are being linked to extreme events. Although weather variability has its cause-effect uncertainties, climate change scientists have drawn lines of probability between climate change and “extreme events” with observations published as early as 2005. Hurricanes have been cited as an example of weather intensity linked to climate change.

The earth and its life sustaining processes are in danger of perhaps irreversible alteration. In light of this, humanity is being

19 According to a report issued by the International Union for Conservation of Nature at the October 2012 Convention on Biological Diversity (CBD), 33 percent of reef-building corals are now at risk of extinction. “Researchers from the Australian Institute of Marine Science (AIMS)...say the Great Barrier Reef has lost half of its coral in little more than a generation. And the pace of damage has picked up since 2006.”

20 A quarter of the world’s mammals, 13 percent of birds, 41 percent of amphibians and 33 percent of reef-building corals are now at risk of extinction, according to the International Union for Conservation of Nature. “Biodiversity Funds to Double,” The Japan Times October 21, 2012, p. 3.


22 WASHINGTON (October 30, 2012)—“As Hurricane Sandy dissipates and recovery efforts begin, people are asking what role climate change plays in influencing such storms. Oceans have absorbed much more of the excess heat from global warming than land and scientists understand that when hurricanes form, higher water temperatures can energize them and make them more powerful. Warming is also causing the atmosphere to hold more moisture and concentrate precipitation in stronger storms, including hurricanes. In the case of Hurricane Sandy, it retained much of its strength as it tracked across ocean water that was 9 degrees (F) warmer than average for this time of year. ...More broadly climate change is increasing sea levels globally, which affects all coastal storms, including hurricanes. Locally, sea level rise along the Mid-Atlantic and New England coasts has been among the highest in the world.” Hurricane Sandy Underscores Climate Change Threat to Coasts. UCS October. 30, 2012 Press Release
challenged to live life on the bases on which life has been granted to it.

2. The Map of the Most Vulnerable to Climate Change is the Map of the Developing World. This map charts the global regions most open to climate-impact threats to basic human needs. In the IPCC AR4 extreme flood-risks to densely populated megadeltas are cited with particular reference to the Ganges-Brahmaputra and the Mekong. Water scarcities due to melting glaciers include the regions fed by Himalayan ranges and the corridor for the extreme events of tropical cyclones spans the latitudes from the Philippines to Bangladesh due in part to sea-surface temperature rise. Diminished fresh water availability, coastal area vulnerability and crop fluctuations are but a few of the projections cited in regard to Asia. The assessment report emphasized the vulnerability of Africa to the impacts of climate change even at the lowest concentrations of greenhouse gasses that have been modeled. An increase in average global temperature of two degrees Celsius is likely to raise the annual average in some Africans areas by four degrees or more and result in increased water stress for approximately a third of the continent’s population. Drought-increases are charted and future drought projections are outstanding in Southeast Asia, Africa and Latin America. These continents now encompass the areas of the highest agro-economic vulnerability.

In seeing the intricate interrelated intricacies of the natural world as a web of life and the dynamic that engenders and cradles life itself, we are mindful that in the Right to Life discourse within the Church, the rights of innocent life and the rights of the most vulnerable have taken on refined articulation. Within this second map, the least among us are the most vulnerable. It is quite clear that those least responsible for climate change are the most threatened by its consequences.
3. The Map of Resource Competition in a Climate Constrained World is an Outline for the Unraveling of the Fabric of Human Society. The alternative to cooperative action would be to invest more heavily in national interests in the wake of which local and regional conflicts would be exasperated in the competitive demand for decreasing natural resources. This would raise the specter of an age of technologically refined competition and conflict. Remote sensing indicates the vastness of the natural gas reservoir in the China-Japan disputed area of East China Sea. There is competition for land in developing countries to secure water resources and food supplies against the event of shortages caused by climate change. According to recent reports the annual defense spending of Asian powers has grown to $224 billion in 2011. Navigable waters made accessible by Arctic melt have opened competitive claims to explore mineral resources in the disputed maritime regions.

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23 China claims indisputable sovereign rights on South China Sea Islands and their adjacent waters. ( “China tells U.S. to stay out of South China Sea dispute.” The Daily Yomiuri, Beijing (AFP-Jiji) September 22, 2010)

24 Arable land leased for agricultural production and export without proper social safeguards has been labeled “Neo-colonialism” by Jacques Diouf, the director-general of the Food and Agriculture Organization (FAO). Mizuho Kajiwara, “Critics cry foul over ‘neocolonialism’ disguised as investments,” The Asahi Shimbun GLOBE, September 27, 2010 p. 25.

25 “While troop numbers have remained constant, overall annual spending has grown to $224 billion in 2011, according to a report released Monday [15 October 2012] by the Center for Strategic and International Studies think tank. Spending particularly accelerated in the second half of the decade. ...The levels of increases and concentration of spending is nothing like we saw in the 1950’s and 1960’s, or even the 1970’s and 1980’s, between East and West, he [David Berteau, director of the Washington-based center’s international security program] said at the report launch.” “China spurs Asia defense spending,” The Japan Times Wednesday, October 17, 2012, pg. 1.

26 At the September 2010 Arctic Forum meeting, Arctic Council member states presented competing territorial claims for the control polar fossil fuel reserves. (The Daily Yomiuri, September 26, 2010, p. 10.)
The meaning of peace and the principles for attaining and sustaining peace have voluminous exposition in our social doctrine writings. Most recently the demise of peace and the culture of death have been insightfully linked. Yet references which have well served the discussion of homicide and genocide and human conflict as such are less effective for a consideration of biocide and genocide. There are theological references which focus on Divine Peace as the source of the integrity of each entity in the universe and the integration of the cosmos.

Some would look upon these three mappings as present indices of future inevitabilities. Such positions see current business-as-usual trends to be insurmountable for their grounding in a belief in unlimited growth and the “progress” and developmental benefits it offers. In contrast determined efforts to stabilized GHG in the atmosphere and thereby preserve the planet as we have come to know are supported by more comprehensive concerns and by principles inscribed in the Convention.

THE THREE PRINCIPLES

The precautionary principle, the principle of sustainability and the principle of equity are convention references which have the potential to offer pathways that could reach out beyond relative perspectives that serve the interests of the few over the many. In effect, they are ethical principles in progress.

Sustainability Principle: The 1987 publication of the Brundtland Commission’s Report, Our Common Future, defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” Sustainability defines an equation when social development and environmental protection are seen as integral parts of human development.

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27 This formulation stated in the 5 June 1997 Newcastle, Australia UNEP conference presentation: “How We are Travelling Along the Road to Sustainability”
The Precautionary Principle takes on great importance not only because it admonishes us to do no further harm but also because it cautions us to be aware that present action may if left untended, determine negative effects not amendable at a later time when scientific data is completely conclusive.28

The Principle of Equity forms a “basis” for action.29 Equity finds a primary reference in the disposition of reasonableness and moderation in the exercise of one’s rights. It may be interpreted that equity calls us to a more ultimate term of reference in light of which legitimate rights are modified so that more fundamental rights are preserved. During the Bonn 16 May intercession workshop: “Equitable Access to Sustainable Development,” there were moments of exchange that aimed to define equity in terms of essential needs, e.g., “basic right to food, water and home” or the “fundamental right for life and development.” The overall imperative is to start reducing emissions significantly and not to create new ways to increase them under an appeal to “rights” formulated for national advantage. Clearly it is inequitable to refrain from adequate emission reductions which threaten the very life, well-being and cultures of peoples. One intervention that stood out in its balance and equitable intention was that of Chile’s Minister Counselor, Waldemar Coutts Smart:

by K.A. Edwards of UNEP Nairobi conference presaged what has become in the ongoing discourse, the three pillars of sustainability: economic feasibility, social equity and environmental integrity.

28 “The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost.” Art. 3, para 3.

29 “The Parties should protect the climate system for the benefit of present and future generations of humankind on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.” Article 3 Para 1.
“As emissions increase both in developed and developing countries, no progress will be made unless we all increase, in differentiated but real ways, our responsibility and capacity to act. …We believe that the right to develop by some larger economies should not threaten the right to exist of the most vulnerable, particularly the small island developing states. Should not we rather promote a proactive case of development and climate protection, such as complementary objectives with an explicit narrative for cooperation that challenges the obvious North against South, or large against small rationales, that usually tends to antagonize and hinder global consensus?”

In the search for values that would inform action, conceptual advance in defining equity and sustainability and the precautionary is being sought to refine core principles, i.e., indicators to which one might appeal for guidance. Such norms are best compared to the Confucian sense of moral principle imaged by the polar star. It does not tell one where one must be but from where ever one finds oneself, it guides one. This outline of reflective effort points to the ethical dimension structured in the Convention process.

Ethics, Morals and the Spiritual

We must recognize that climate change is an issue that raises questions of values and questions of a properly considered ethical and moral and spiritual nature. Economic or scientific analysis cannot tell us what value to place on the lives of future generations, or how far the developed world should help the poorest nations to adapt to the effects of climate change, and develop low-carbon energy. We recognize that climate change raises profound moral and ethical questions and present essentially a spiritual challenge.

In the academic discourse concerning the environment and climate change, the terms “ethical” and “moral” have been used interchangeably and without any nuance or differentiation. In order to add some clarity to the matter, I propose that for our
purposes, ethics will be defined by reason, morality by fulfillment and the sacred by transcendence.

The ethical might well find an expression in social justice. However, guided by our theologically informed sense of Earth Ethic, the society of reference is the earth itself. Justice or the act of justification takes on the print analogy of type-setting, i.e., the task of justifying the text so the composition says what it was meant to say from the beginning of its composition. Here, our text is the composition of the cosmos and its most proximate articulation, the earth. Our redaction type-setting is to have this text say what it was meant to say from the beginning of time. The basic ethical norm is the well-being of the comprehensive community and the attainment of human well-being within that community.

The moral mind stands in relation to and is directed toward and in some sense by inclination and tendency determined by fulfillment. There is fulfillment within time and there is a trans-temporal mode of fulfillment. For our present focus, the moral sphere of action might be recognized in the instance of stewardship which attends to and protects the matrix of all life. Everything needs every other thing in the universe to emerge with its own defined spontaneities in accord with which all entities find their fulfillment.

Beyond the imperatives of the ethical and moral and the strivings for social justice and in engaged stewardship, there is the spiritual or more properly the sacred, the impulse toward the transcendent. The sacred as an ultimate term of reference and the ground of meaning and purpose finds particular reference to the order of creation itself with particular explication in the various traditions of faith. It is the contention of this writing that in the ecological challenge of climate change, only the sacred with save us.

In the preface to Kathleen Deignan’s work on Thomas Merton, *When the Trees Say Nothing: Writings on Nature*, we are informed:
“An absence of a sense of the sacred is the basic flaw in many of our efforts at ecologically or environmentally adjusting our human presence to the natural world. …There is a certain futility in the efforts being made—truly sincere, dedicated, and intelligent efforts—to remedy our environmental devastation simply by activating renewable sources of energy and by reducing the deleterious impact of the industrial world. The difficulty is that the natural world is seen primarily for human use, not as a mode of sacred presence primarily to be communed with in wonder and beauty and intimacy. …The deep psychic change needed to withdraw us from the fascination of the industrial world, and the deceptive gifts that it gives us, is too difficult for simply the avoidance of its difficulties or the attractions of its benefits. Eventually only our sense of the sacred will save us.”

Today the primary task of the human is to become once again integral with the natural world in such way as to sustain the interrelated functioning of the natural order of things.

Traditions of the sacred note that if we denigrate the earth, we not only diminish an external reality but we reduce our inner self and our human capacities to respond at their root. In the historic record, it has been the sense of the sacred that has guided the human venture and has healed the deepest disorientations of the human mind and heart. Perhaps in the final analysis the critical “human capacity to respond” will hinge less on our political will and economic prowess and national determination and more on our recovery of a sense of the sacred that affirms the meaning of the universe and the role of the human within it.

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Contribution of the Church

At this critical junction, the voice of the Church could well be a most timely and significant factor in focusing world leaders’ and the public’s attention on the sacred dimension of our imperiled environment, on the spiritual challenge and moral issues underlying the need to successfully combat climate change and thereby protect the world’s most vulnerable from its otherwise devastating impacts.

There is a recognized need for a Voices of Conscience in the process of the UNFCCC discourse. The closing remarks of Mr. Yvo de Boer, Executive Secretary of the UN Framework Convention/Conference on Climate Change at the 13 December Forest Day 3 in Copenhagen were most significant. He pointed to the need for a continued articulation and guidance of concerned parties in the issues of climate change in the near future. His actual wording appealed to those who must continue to be the “conscience” of this on-going process “to ensure the social and environmental integrity of the architecture of the Copenhagen outcome”. 31

There is a need for multiple voices of conscience to emerge from within these proceedings. There is also a need for religious

31 Yvo de Boer, UNFCCC Executive Secretary, called for capitalizing on the present historical moment, with 43,000 participants registered at COP 15 and 120 Heads of State and government scheduled to attend the high-level segment. He noted that with the adoption of the Kyoto Protocol, attention to climate change had shifted away from a broader agenda on sustainable development, biodiversity and food security, and added that the Bali Roadmap provides an opportunity to address other issues than industrialized country emission reduction targets. He suggested that, while politicians will focus on targets, finance and MRV, other relevant constituencies should ensure that attention is not diverted from the four building blocks (mitigation, adaptation, technology and finance), capacity building and REDD+, even ‘when the spotlight shifts elsewhere.’ He thus called on Forest Day 3 participants to contribute to ensuring the social and environmental integrity of the architecture of the Copenhagen outcome.” IISD Forest Day Bulletin, Vol. 148, No.3, Tuesday 15 December 2009, p.8.
articulation to be present to and be informed by the dynamics of the framework processes themselves. It is within this process and in the details of the negotiation that the necessity for a spiritual vision for humankind will become most evident. When in negotiations, a “tree” or a “forest” is reduced to the status of a sink or carbon-sequester apart from any consideration of habitat, bio-diversity, indigenous land tenure, aesthetic place or sacred presence which evoke the ecstatic and confirm the true role of the human in the wider community of being; the religious voice must affirm a more integral view of reality. In the editing brackets and in the margins of protocol formulations where modes of assistance to developing nations become loopholes in emission reductions, where mechanism intended to assist become incentives for mere profit; there is a need for a presence engaged in the interpretation of such occurrences as diminishments of the universe and as denigration of the sacred as sacred.

The engaged Church must be a “concerned party” that views it “option for the poor” coherent with climate change convention goals. The particular bishops’ conference and the area and local church are in unique positions to aid the voice of the most vulnerable to be heard throughout its region and through the network of established conferences of bishops in the Church universal. To make known the suffering of the marginal and their specific adaptation needs is a function best presented from the experience of the local church and amplified through wider conferences of concern which would include ecumenical and inter-religious outreach.

Conclusion

Care for the phenomenal order of things is an emerging context for the mutually enhancing presence of each faith tradition to every other faith tradition. In this very process of articulation and reflection, traditions of faith grasp anew their essential teaching and reaffirm their perennial message in terms inclusive of the effort to restore the integrity of the Earth. In this effort
each tradition recognizes itself within a new context of inter-communion. The spiritual challenge of the environmental crisis draws each tradition to reflect on the natural world in its most profound sense of mystery.

“As part of the long cosmic process it can be said that the varied spiritual traditions scattered across the globe are not of yesterday, nor are they simply of the earth. In some manner they were born when the galaxies appeared in the limitless swirl of space; the dynamic at work in all this has found unique expression in the formation of the green earth with it myriad forms of life and their completion in man. In man the galaxies reach their high transformation in those interior spiritual experiences wherein the human comes to itself in both its personal identity and identity with the universe. This process takes place in the presence of that divine mystery in which everything finds its peace and its perfection.” 32

IX. “OVERCOMING INJUSTICE IN CLIMATE CHANGE” LINKING CLIMATE AND DEVELOPMENT POLICY

- Dr. Ottmar Edenhofer

Editorial note: Dr. Edenhofer made his presentation by video conference from the Potsdam Institute in Germany, entitled “Climate Change and International Justice: On the Universal Destiny a Created Goods”. However, we regret that the text is unavailable but you may access the graphics that accompanied the presentation at www.fabc.org/offices/csec/ocsec_climate_change.html. We are re-printing here the text of a similar presentation made by him at the Symposium on “Climate Change and Justice” organized by the Pontifical Council for Justice and Peace and Misereor, October 2010, Vatican City.

The risk of dangerous climate change

Climate change will cause shifts in regional climatic conditions and, in their wake, a series of grievous impacts. The

consequences of a global rise in temperature exceeding 2°C (compared with the pre-industrial level) will in all probability have massive consequences. In poorer regions of the world especially, this could make it impossible to adapt to the changes successfully. Therefore, the target of limiting warming of the climate to no more than 2°C is a persuasive orientation point for future climate policy. The well-known projections by the Intergovernmental Panel on Climate Change are based on the assumption of a rather linear change. But we should also consider the possibility that the climate will cross a tipping point after which changes will be amplified. Positive feedback mechanisms lead to self-propelling change. The emission reduction targets pledged by countries so far are far not enough to ensure that mean global surface temperature will be kept below 2°C. Although, the costs of unabated climate change up to the end of this century alone would be several times higher than the mitigation costs of keeping within the 2°C temperature target.

Tipping Points in the Earth System
The risk of dangerous emissions reduction/mitigation

Avoiding dangerous climate change by means of effective climate change mitigation is in the interest of all countries. But the climatic benefits of emissions savings are only felt decades later, whereas the priority for such countries is to drive forward the necessary economic development as quickly as possible. Many countries fear that a drastic climate policy would constrain their scope for economic growth. Considered in historical terms, growing affluence has always been very closely linked with high CO\textsubscript{2} emissions and the burning of fossil fuels has been embedded in our collective historical memory. This is evidenced by world maps which show the distribution of total emissions from the burning of fossil fuels from 1950 to 2003 and the capital stock for 2000.

Thus, all countries must step up their energy efficiency and switch to low-carbon energy generation as quickly as possible ensuring at the same time development.

Climate change mitigation and development are feasible – a Global Deal with five pillars

The financial and technical challenges of climate change mitigation, adaptation and development can be overcome collectively. The fundamental prerequisite for these measures is cooperation in spirit of partnership between industrialised, newly-industrialised and developing countries. We propose a Global Deal of five pillars.

Capping, allocation and trading of CO\textsubscript{2} emissions allowances

First, a limit must be placed on the total volume of greenhouse gases that may still be emitted. The discharge of emissions into the atmosphere must no longer be permitted free of charge, but must be priced on an international basis. Trading in these restricted emissions allowances then provides a possible means of reducing emissions, accurately and efficiently, to the
necessary targets. The allocation scheme should be structured such that, it achieves an equitable per-capita distribution of emissions allowances. In addition, it opens up the options for a global redistribution of income, which could also have positive effects on the situation of poor sections of the population in developing countries. To ensure that the additional money can really promote climate-smart and broad-scale development processes, there must be full disclosure of the funding streams both on the income and expenditure side. Civil society involvement and inspection have an important role to play. Emissions Trading is not about the commercialization of the atmosphere but about protecting the global commons (e.g. reduction of emissions) and assigning responsibilities to stewards.

**Sustainable use of forests**

The deforestation of tropical forest contributes about a 20% share of total global emissions. Forests have an important climate protection function because they act as CO\textsubscript{2} sinks. At the same time, they are a life-sustaining resource base for people, plants and animals. The industrialised nations should support newly-industrialised and developing countries in this effort, technically and financially, so that further deforestation and overexploitation of forests can be prevented. Particular attention must be paid to the needs of the local population, especially indigenous groups. Two financial options are being discussed: The integration of forests into emissions trading schemes or to finance forest protection via an international fund. Proposed fund solutions would have to stabilize prices on a high level, what is politically unlikely. But including forests into fragmented emission trading systems can lead to higher deforestation rates than a comprehensive fund approach.

**Promotion and transfer of climate-smart technologies**

The reduction of global emissions calls for new, climate-smart technologies. Only wide-ranging options in this field permit an
ambitious level of climate change mitigation. Energy efficiency, renewable energies and the use of biomass have a key role to play. But new technologies such as underground carbon sequestration (carbon capture and storage, CCS) may also make an important contribution. The risks of such new technologies must, however, be evaluated, minimised and weighed up in an open public debate.

It is necessary to promote appropriate technologies directly worldwide and drive forward the international transfer of such technologies. Here the industrialised countries hold a particular position of responsibility because of their greater technological and economic capacity. This must be supplemented with initiatives to strengthen research and development activities in developing countries.

**International support for adaptation**

Even if emissions are reduced immediately, adverse impacts on the climate are no longer avoidable. Poorer people and countries must be supported in adapting to these negative consequences of climate change. To do so, a variety of measures are needed, from information on regional impacts of climate change, to vulnerability analyses and ultimately financial assistance. An indispensable tool for this purpose is a sufficiently well-endowed, international adaptation fund – in addition to official development assistance. The scale of payments into such a fund should be determined predominantly by each country’s economic capacity.

**Strengthening of development policy**

Climate change mitigation and adaptation must not lead us to lose sight of the aims of development policy. Its primary aim remains to promote autonomous development and to strengthen capacity for action. This requires far-reaching reforms, both in the developing countries themselves and in international structures, which cannot be achieved without global cooperation. The prerequisite for this is a globally binding
regulatory framework which promotes and supports the economic, political and social processes in the countries concerned. Furthermore, the international community is under an obligation to honour its financial commitments.

The Global Deal is in line with the Catholic Social Teaching:

- **Stewardship** refers to a responsibility to take care of something owned by someone else. In that sense, future generations and the Unborn has to be represented within decision making processes.

- **Universal Destiny of the Goods of Creation**: The Global Commons like the atmosphere, the forests, and oceans are at risk to be destroyed when common property rights cannot be established due to an extremely unequal distribution of wealth.

- **Solidarity**: Without a vision of a unified humankind, global cooperation remains infeasible; the *preferential option for the poor* offers a new perspective in evaluating governance and policies.

- **Subsidiarity** is a fundamental principle of good governance: the central authority should perform only those tasks which cannot be performed effectively at a local level. In addition, the central authority should entitle the local level to carry out its own tasks.

X. ETHICAL CHALLENGES FROM CLIMATE CHANGE AND GLOBALIZATION  
- Dr. Ernst-Ulrich von Weizsäcker

**Editorial note:** Please find a PDF presentation, entitled “Technological, Political and Ethical Answers to Climate Change” by Dr. Ernst-Ulrich von Weizsäcker at [www.fabc.org/offices/csec/ocsec_climate_change.html](http://www.fabc.org/offices/csec/ocsec_climate_change.html). We regret that we do not have available the full text of his presentation. We are re-printing here a similar presentation he made at the Symposium on “Climate Change and Justice” in Rome, October 2010.
The Kuznet’s curve of pollution shows the common relation between prosperity and pollution over time. Only if prosperity is reached, people will care about their environment. This is true in a way, but not when it comes to carbon emissions; the “rich and clean” countries churn out much more CO₂ per capita than the poor. So our first task will be creating the “Kuznet’s Curve of decarbonization”. And the second task is helping developing countries to short-cut the dirty hill! The time for change is short, as climate change impacts are visible and predictions are worrying. But what can we do to decouple prosperity from CO₂ emissions? The conventional answer looks like this: 80% less carbon per unit of energy, 10% less energy per GDP, 10% less wealth. But is that economically reasonable? The graph on slide 14 (cf. graph at FABC website cited above, p.12) shows that abatement costs per tonnes CO₂. Lines below Zero show profitability of the emission reductions. Efficiency is profitable now. But this cannot be said of renewables. Hence my own suggestion to the question “how to decouple growth from emissions is: 30% less carbon per unit of energy, 65% less energy per GDP, and perhaps 5% less GDP.
The only solution to reach this is the per capita equal CO\textsubscript{2} emission rights. And, as Ottman Edenhofer has said, we should go a step further and acknowledge that the rich countries have already used up much of their “carbon budget”. This “carbon justice” approach would mean the North would have to go shopping for emission rights in the South. Instantaneously, that would make it profitable \textit{in developing countries} to become very energy efficient and to turn to renewable energies. Efficiency technology would rapidly migrate to the South. And hundreds of plans for new coal power plants could be scrapped.

In our publication “Factor Five”, we are proposing a “permanent ecological tax reform” by which energy prices are moved upwards annually \textit{in line with document efficiency gains}, thus avoiding social hardship.

High energy prices need not hurt the economy. Japan blossomed during the 15 years of highest energy prices. The lesson from this is: pioneers need not wait for the slow ones. Also developing countries can benefit from gradually increasing domestic energy prices, but of course, there will be both: winners and losers: Winning sectors include IT, generally high tech, crafts, science, education, green businesses, railroads, consultants and culture. Losing sectors are (in the North): Lorries, aircraft industry, heavy industry, development of urban sprawl and others. Losers in the South are the wasteful consumers. Winning countries are: Europe, East Asia, developing countries poor in natural resources whereas USA, Canada, Australia, Russia and commodity exporting developing countries are losing.

Europe, Asia, Oceania and much of Africa and Latin America should build alliances to overcome the typical Anglo-American view of humans and of markets and the state.

This system relies on weak governments and strong markets. Until the end of the cold war, markets were asked to prove that marked based economies are better than communism. Since the
end of the cold war, business started globalizing their activities. Globalization means that markets are global while the law stayed national. This favours the strong and punishes the weak. This also leads to a widening gap between rich and poor. We now know from statistics, that mental illnesses grow with inequality in countries, as well as the numbers of prisoners. Even children’s well-being with raising inequalities.

Conclusion

Decoupling prosperity from carbon intensity is doable, both in the North and the South. North-South “carbon justice” is indispensable. Prices for carbon should make the transition profitable. Against the Anglo-American paradigm we should rebalance public values with private profits.

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134. Mary Truly A Woman of Our Times, East Asia Bishops’ Institute on Lay Apostolate (BILA) on Women II by FABC Office of Laity and Family

135. Youth in Asia: Challenges of Fundamentalism and Relativism, Fourth Bishops’ Institution for Theological Animation [BITA-IV], by Fr. Vimal Tirimanna, CSsR, FABC Office of Theological Concerns, 2012

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