

A Discussion Paper from The World Council of Churches

Moving Beyond Kyoto *with Equity, Justice and Solidarity*

Rigorous and measurable plans of implementing the Kyoto Protocol and a strong commitment to adaptation measures as a response to the damages to lives, livelihoods and eco-systems that are occurring already as a consequence of human induced climate change – these are agenda items for the international community at the Conference of Parties (COP 10) of the United Nations Framework Convention on Climate Change (UNFCCC), December 6-17, 2004 in Buenos Aires and in the years ahead. Negotiations must also begin for a 'post Kyoto' climate policy framework beyond 2012, the year that marks the end of the first commitment period of the Kyoto Protocol of the UNFCCC.

This discussion document was produced by participants in a consultation on “Climate and Water: Common Gifts, Related Threats” co-sponsored by the World Council of Churches (WCC) and ecumenical relief and development agencies, October 3-8, 2004, Zeist, The Netherlands. It is addressed to the member churches of the WCC, ecumenical organizations and church related relief and development organizations as engage with the threat of climate change.

“Moving Beyond Kyoto” summarises our analysis of the current challenges within an ethical and theological framework and articulates a set of positions for implementing the Kyoto Protocol, negotiating next steps beyond Kyoto, affirming the urgency of adaptation measures, and envisioning the witness and role of the churches .

Only two weeks after the consultation, the Russian Parliament ratified the Kyoto Protocol, assuring that the Protocol will enter into force. The WCC expressed its great appreciation and gratitude for this decision.

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Summary of Position Statements

A. Implementing the Kyoto Protocol

- 1. We affirm the basic thrust of the United Nations Framework Convention on Climate Change (UNFCCC) to provide an instrument for a significant reduction of greenhouse gases in order to mitigate human induced climate change.*
- 2. We are alarmed that emissions of carbon dioxide and other greenhouse gases are still increasing.*
- 3. We emphasize that the Kyoto Protocol is an important first step towards a just and sustainable global climate policy regime. Further radical steps to reduce greenhouse gas emissions are urgently needed.*
- 4. We express our gratitude that the Kyoto Protocol will come into force.*
- 5. The United States of America and Australia have withdrawn from the Kyoto Protocol process. We regard the decision by the United States and Australia as an expression of lack of responsibility and solidarity towards the international community and creation. The position of Australia neglects in an unacceptable way the calls by its neighbours - small Pacific Island countries - for the ratification of the Kyoto Protocol as they fear eventual disappearance from the surface of the Earth as a result of the rise of sea levels.*
- 6. We express our concern that the Kyoto Protocol threatens to change gradually into a totally market based instrument for minimizing economic damage to national economies and business opportunities, without realizing the real - be it small - greenhouse gas emission reductions that were the objective of the Kyoto Protocol.*

B. Beyond 2012, the end of the first commitment period of the Kyoto Protocol

- 7. We are convinced that in contrast with the rather pragmatic way in which emission reduction obligations and other responsibilities have been divided between countries in the Kyoto Protocol, a much more principle-based approach is crucial for reaching an effective, equitable and justifiable global climate policy regime (e.g. principle of equal entitlements, benefits and burdens; precautionary principle; priority for the poorest/weakest; maximum risk reduction).*
- 8. Due to the complexity of the climate issue and the uncertainties that confront us, we need to find the best way to apply these principles in the public debate and the negotiations.*
- 9. Looking towards the upcoming negotiations on the second commitment period, the Contraction and Convergence Model¹ is an important contribution. It corresponds to the initial vision of the Convention that demands the reduction of*

¹ For a description of the model see Appendix.

CO₂ emissions of industrialized countries and leaves space for the development of developing countries. It presents a starting point for deliberations and negotiations directed to finding a justice-based global approach to climate change. However, as we participate in this discussion, we need to recognize that the model does not do justice in its present form to some important dimensions that need to be addressed (e.g. larger historic responsibility of industrialized countries; larger technical and economic capacity of industrialized countries).

10. We are convinced that a deeper transformation of the prevailing economic model with its focus on unqualified economic growth combined with the tendency to neglect and deny the destructive effects on people and the Earth is required to reach these goals.

C. Adaptation to the impact of climate change

11. We observe that the issue of adaptation has been given insufficient attention until now. Partly this may be attributed to unwillingness in industrialized countries to accept real responsibility for climate change, which is already taking place. Partly the lack of attention is due to some lack of clarity about the concept of adaptation.

12. We call for comprehensive policies supporting adaptation programmes in countries severely affected by climate change.

13. Being aware of the increasing risks related to water resources due to a changing climate and of some undesirable feedbacks of the protection of water resources and the provision of fresh water, we emphasize the need to develop policies related to climate and water that are based upon solidarity and provide for risk containment for the vulnerable even under present uncertainties.

D. New horizons for the witness and role of the churches

13. We urge the churches to call publicly for consistent action in implementing the UNFCCC.

14. The need for adaptation constitutes, in particular, a challenge to church related relief and development agencies. They need to develop the linkages between their emergency and disaster relief, mid-term and long-term development goals and climate change. We emphasize that water is an important field on which adaptation measures must be taken and call upon the churches for solidarity with victims of water stress.

16. Churches continue to have a role of education and of setting an example both among their members and in society. Models of an alternative life style are an essential part of this task.

17. We call upon the World Council of Churches to continue the support for these proposals by way of advocacy, stimulating reflection and organizing cooperation.

I. Introduction

“Here on the small island atoll of Kiribati, the impacts of human-induced climate change are already visible. The sea level is rising. People’s homes are vulnerable to the increasingly high tides and storm surges. Shores are eroding and the coral reefs are becoming bleached. The water supplies and soil fertility are being threatened by the intrusion of salt water. Weather patterns are less predictable posing risks for fisher-folk and farmers.”

The Otin Taai Declaration. The Pacific Churches Statement on Climate Change, March 2004

While we gather in The Netherlands, a country very well aware of its vulnerability to rising sea level and increasing precipitation, hundreds of people lost their lives just a week ago in the floods and thunderstorms in Haiti that were caused by one of the violent hurricanes devastating the Caribbean islands. The plight of the people in Haiti has shown the mutually re-enforcing, destructive combination of poverty, conflicts, deforestation and climate change. Climate Change is not an issue that allows the luxury of academic debates and the delay of long overdue action.

Humanity has long been unaware of the fact that it lives in an atmosphere rather than in a vacuum - like a fish is unaware of the water it lives in. While it has come to be understood that we live in and of an atmosphere, this fact could long be neglected, as the atmosphere seemed to be an inexhaustible and unlimited reservoir we needn't bother about. In the 20th century however this vision could no longer be sustained. Episodes of strong air pollution, a period of severe acid rain, convincing signs of destruction of the ozone layer and eventually ever growing evidence of human induced climate change have made us aware that we severely threaten the quality of that thin and vulnerable protecting and sustaining layer around the globe, upon which our lives and those of all organisms depend.

Warnings from the scientific community and the environmental community led nations around the world to agree on the United Nations Framework Convention on Climate Change (UNFCCC, 1992). The World Council of Churches (WCC) took up its work on Climate Change as early as 1988 and continued it through a long series of meetings, declarations, network building, support and lobby activities. The WCC also accompanied the process when the Convention was worked out in a more detailed and practical way in the Kyoto Protocol during the 3rd Conference of Parties of the UNFCCC in 1997 in Kyoto/Japan. Even before this protocol was decided on and long before the protocol is implemented it became clear that this would only be a first step and that a more convincing and radical effort would be needed in order to protect the Earth against climate changes of a dangerous magnitude and speed.

Therefore, in the Kyoto Protocol it was decided that negotiations about further measures would start no later than 2005. In view of the decision to embark on a new round of negotiations in 2005 and growing evidence on the need for a post-Kyoto climate policy framework, several research institutes as well as non-governmental organizations have started developing proposals.

In the meantime, however, when the negative consequences of economic globalization became more and more apparent and the spiral of violence took a dramatic turn in terrorist actions and wars, attention was drawn away from action to curtail the threats of climate change in a common effort of the international community in the United Nations. Unilateral action by powerful nations took centre stage at the expense of multilateral efforts to ensure common security in recognition of mutual vulnerability and interdependence. Instead of numbing and paralyzing engagement and action, this situation made the Kyoto Protocol for many a rallying point in support of the United Nations and the development of human rights and international legally binding frameworks that would restrain misuse of political, economic and military power.

In this context the World Council of Churches’ Working Group on Climate Change and representatives of several church related relief and development organizations from all over the world met at the invitation of Oikos and Kerkinactie, the development organization of the United Protestant Church in The Netherlands. Encouraged by the announcement of the government of the Russian Federation just a few days ago that it supports ratification of the Kyoto Protocol by the Parliament, we

met to discuss our views on a just, responsible and viable policy framework on climate change for the period following the time scope of the Kyoto Protocol (2008-2012). In this document, we present our findings, urging governments, churches, non governmental organizations and individuals to set out on a track to realizing such a framework.

II. The atmosphere: a common gift

Life itself being a gift, the atmosphere as precondition to the coming into existence of life and to the continuation of life can be seen as a heavenly gift of loving grace to all life: a *common* gift to be shared by the whole creation. Thanks to this gift and due to the act of living - which involves inhaling and expiring, or absorbing and exhaling various gases in service of the building and burning of organic material - a subtle balance and interdependence was created between various organisms and a specific composition of the atmosphere. Of course this balance was and is changed from time to time due to other natural, non-organic processes like volcanic outbursts, temperature changes following variations in solar activity and the like.

Thus God created all living beings in inter-dependence with each other and even the nonliving nature, which can be experienced, enjoyed and celebrated as a solidarity, partnership and commitment. In this partnership and respecting the delicate balance, God - as the Bible presents to us and other religions acknowledge likewise - invited humanity to responsibly contribute to the creation of an ever more inhabitable world. Where humans neglect this invitation, forego their responsibility, choose to promote their own, individual interests and thus overburden the delicate balance, they threaten all forms of life on the planet, now and in the future.

In the light of this, protection of the atmosphere is both a *moral responsibility* and a *spiritual answer* to the Divine invitation to humanity. Here spirituality is defined as a practice of living out of *gratitude* and *wonder* for the life-sustaining richness of creation, a feeling of deep *commitment* to all life and to nature as God's creation, and a sincere *indignation* about all threats to this richness. The churches' commitment to the issue of climate change grows out of the *attentive listening* to the most vulnerable and marginalized and responds to the *prophetic call* for justice and transformation. These stories together with the Biblical witness of the God of life urge us to affirm that our moral responsibility must be guided by God's love for life and by principles of *justice, accountability, solidarity* and *sustainability*. Our *ethical considerations* are also informed by a careful analysis of the situation and scientific insights (e.g. through the reports of the Intergovernmental Panel on Climate Change - IPCC), before we engage in *encounter* with policy makers and practitioners from governments, business and NGO's in the political process. Consequently, the WCC made efforts to strengthen its solidarity with Indigenous Peoples and with countries from the Alliance of Small Island States (AOSIS) in the climate change negotiations.

Anticipating the forthcoming 9th General Assembly of the World Council of Churches in 2006 in Porto Alegre, we embrace the theme chosen for this event: "God, in your grace, transform the world". We see our contribution to the work on climate change informed by our faith conviction that life is a gift of God's loving grace and that churches are called to become themselves transformative communities in accompanying those who work for more justice, peace and the integrity of creation.

III. Statements

On the basis of these reflections, values and principles, we, participants of the consultation on "Climate and Water: Common Gifts, Related Threats" of the WCC Working Group on Climate Change, representatives of WCC member churches and ecumenical relief and development agencies, have formulated the following statements and recommendations. After re-affirming our plea for rigorous implementation of the Kyoto Protocol, we concentrate on issues of special importance regarding negotiations on the second commitment period beginning in 2012 and regarding adaptation

to damages and risks caused to peoples' health and livelihoods by (human induced) climate change. Saying this, we are, however, aware that the adaptation agenda could be used to distract from the fact that the industrialized countries are far from meeting their reduction targets.

A. Implementing the Kyoto Protocol

1. We affirm the basic thrust of the United Nations Framework Convention on Climate Change to provide an instrument for a significant reduction of greenhouse gases in order to mitigate human induced climate change.

When delegates to the United Nations Conference on Environment and Development in 1992 in Rio de Janeiro agreed to begin negotiations on the reduction of greenhouse gases through the United Nations Framework Convention on Climate Change (UNFCCC), they responded to the urgency of the matter in designing a multi-lateral framework for legally binding commitments and other measures to stop average surface temperatures from rising.

2. We are alarmed that emissions of carbon dioxide and other greenhouse gases are still increasing.

The IPCC Assessment Reports, in our eyes the best available scientific insight, have become increasingly affirmative about the threats of climate change. Global emissions of greenhouse gases have *grown* about 14% in 2002 compared to 1990, mainly because of a growth of CO₂-emissions (RIVM 2004). Partly this growth can be attributed to developing countries like China, but for a large part industrialized countries continue to be accountable for the rise in emissions, with CO₂-emission changes varying between -0,5% (EU²), via 11% (Japan), 14% (USA), 18% (Australia) to 20% (Canada) (2000 data compared to 1990; UN 2003; Grubb 2003).

3. We emphasize that the Kyoto Protocol is an important first step towards a just and sustainable global climate policy regime. Further radical steps to reduce greenhouse gas emissions are urgently needed.

The Kyoto Protocol that was agreed upon at the 3rd Conference of Parties of the UNFCCC in 1997 in Kyoto, Japan is an important first step to reach the ultimate goal of the Convention. The Kyoto Protocol is a valuable instrument through which - when implemented - industrialized countries can show their acknowledgement of their larger responsibility for climate change to date and their willingness to take the lead on the issue of tackling climate change. Therefore we stress the need for rigorous and measurable implementation plans among industrialised countries for meeting the targets of the Kyoto Protocol within the timeframe of the first commitment period. Setting ambitious quantitative goals for the use of renewable energy would be very helpful and convincing for reaching these targets. Such acknowledgement, willingness, implementation and target setting are essential for reaching international agreement on the necessary further steps in curtailing climate change through more radical reductions of greenhouse gas emissions. More radical steps are urgent in view of the impacts of climate change that are already felt by many vulnerable peoples, such as in the Pacific, and in view of the long time delays of atmospheric processes.

4. We express our gratitude that the Kyoto Protocol will come into force.

With ratification by Russia, the Kyoto Protocol has to date been ratified by 125 countries, from which the industrialized countries account for more than 61% of the global emission of CO₂ (in 1990). The Protocol comes now into force ninety days after the Russian ratification is communicated to the UNFCCC. The United States and Australia however, have chosen a totally different position.

5. The United States of America and Australia have withdrawn from the Kyoto Protocol process. We regard the decision by the United States and Australia as an expression of lack of responsibility and solidarity towards the international community and creation. The position of Australia neglects in an unacceptable way the calls by its neighbours - small Pacific Island countries - for the ratification

² With variations within the EU from -43% (Luxembourg) to +35% (Portugal). For the Netherlands the change was +3% in 2000.

of the Kyoto Protocol as they fear eventual disappearance from the surface of the Earth as a result of the rise of sea levels.

By their positions on the Kyoto Protocol, the United States and Australia have contributed to the obstruction and delay of the implementation of the Kyoto Protocol and to the deterioration of the international atmosphere for negotiation about a climate policy regime.

Their arguments were and are that the Kyoto Protocol is not cost effective and does not address responsibilities in a balanced way, leaving developing countries out of the regime of emission reduction obligations till 2012. However, cost effectiveness is a very disputed area, depending to a large extent on the way future environmental gains are discounted against current costs of environmental protection measures. And by contesting the fact that developing countries have been kept out of the regime of reduction obligations these two countries in effect have denied their irrefutably larger (historic) responsibility for current (per capita) greenhouse gas emissions as well as their larger historic responsibility for climate change that is already occurring.

We want to commend the National Council of Churches of Christ in the USA and its member churches for their committed work in support of the Kyoto Protocol and the Climate Change Convention. We appreciate the recent initiatives of the Australian National Council of Churches and its members and call on them to increase their collaboration with partners and WCC member churches in the Pacific region to advocate against the position of the government of Australia especially given their proximity to the Pacific Islands that are so threatened by climate change.

6. We express our concern that the Kyoto Protocol threatens to change gradually into a totally market based instrument for minimizing economic damage to national economies and business opportunities, without realizing the real - be it small - greenhouse gas emission reductions that were the objective of the Kyoto Protocol.

It appears likely that a considerable part of the reductions will be realized in developing countries through mechanisms in the Kyoto Protocol such as the Clean Development Mechanism (CDM). Linking emission trading schemes within industrialized countries or economic blocks like the European Emission Trading System (ETS) to CDM, makes it possible that European companies could realize their reduction target by implementing CDM projects in developing countries. Thus through buying up of the cheap options in developing countries first, an even larger part of the reduction target of industrialized countries is transferred to developing countries.

It is important that CDM-projects - clean energy, forestry, etc. - contribute to appropriate models of (local) development and that the certified emission reductions that are generated be handed over to industrialized countries only on a temporary basis. Otherwise CDM will be an instrument for the permanent transfer of emission rights, which will hamper the possibilities for development of countries in the south.

Apart from this we must realize that CDM may not be the environmentally effective instrument that many state it to be. Part of the CDM projects will be devoted to the capture of CO₂ in forests or other sinks that are mostly temporary. So without other measures taken, emissions will rise sharply again after some time.

A further problem of the Kyoto Protocol is that some 'reductions' will be realized by buying unused emission credits from the so called countries in transition, thereby exchanging real emission reductions that would stimulate technological innovation and lifestyle changes for reductions that would have come about anyway due to economic decline in these countries in transition³.

B. Beyond 2012, the end of the first commitment period of the Kyoto Protocol

³ However, this problem may turn out to be small, because economies and thus emissions of eastern European countries and Russia are growing again in the last few years, which limits the possibilities for trading unused emission rights.

The end of the first commitment period in 2012 is the decisive date for the implementation of more efficient measures to curb and decrease greenhouse gas emissions. Since negotiations to achieve this goal must begin in 2005 according to the Kyoto Protocol, it is now time to consider the implications and concentrate on the situation of communities affected.

7. We are convinced that in contrast with the rather pragmatic way in which emission reduction obligations and other responsibilities have been divided between countries in the Kyoto Protocol, a much more principle-based approach is crucial for reaching an effective, equitable and justifiable global climate policy regime.

The climate issue comprises several domains in which a more principle approach should be defined:

- sharing of the atmosphere as a *common space* for living for all organisms including human beings and as a space for economic activities of all people, now and in the future
- distribution of the *benefits* of climate affecting activities, taking into regard the costs and the amount of effort everyone invests into these activities
- distribution of possibilities for further *development* and wealth creation, that is, quality of life
- distribution of *mitigation* obligations, respective of the aforementioned just sharing of the atmosphere and of differentiated technological and economic capacities to implement these mitigation obligations. Here it must be recognized that the different technological and economic capacities are to a considerable extent the fruit of climate affecting activities in the past that have led to differences in wealth; this fact is highlighted by the Southern Peoples' Creditor Alliance and its call for reparation and compensation of ecological debts that accumulated, for instance, with increasing Carbon Dioxide emissions
- distribution of the (costs of) necessary measures of *adaptation*, respective of the differentiated economic and technical capacities to implement these adaptation measures
- distribution of costs *and* - sometimes - benefits of the effects of climate change which manifest themselves notwithstanding mitigation and adaptation measures that are taken, respective of the differentiated capacities to cope with these effects
- balancing mitigation and adaptation measures with a view on maximum risk reduction
- the procedures of participating in the process of deciding on all elements of a just and viable policy framework and its implementation.

Principles that should be taken into account are the principle of *equal entitlements, benefits and burdens*, the *polluter pays* principle (historic responsibility) and the *precautionary principle* (prospective responsibility or responsibility of care; 'the polluter changes', 'the powerful intervenes to his ability'), the principle of *priority for the poorest/weakest* and the principle of *maximum risk reduction*.

Within this framework it should be noticed that the amount of responsibility depends on the amount of knowledge, power or causal influence and freedom to act that some actor has to his availability. Considering maximum risk reduction it should be noticed that risks for humanity do not always coincide with risks for other organisms, that risks for current generations do not coincide with risks for coming generations, that risks for one do not coincide with risks for the other and that different kinds of risks cannot always be compared to each other.

8. Due to the complexity of the climate issue and the uncertainties that confront us, we need to find the best way to apply these principles in the public debate and the negotiations.

Because of the fact that the different moral principles do not always point in the same direction and due to the complexity of the climate issue and the uncertainties that confront us it is not possible to delineate the one and only just approach to climate change. Instead the best thing we can do is:

- to delineate and limit a *field of options* that can legitimately claim to be just on the basis of the principles just mentioned, which unavoidably leaves some room for dispute and negotiation
- to develop a process of discussion and negotiation about the options within the field thus delineated, that meet criteria of *just participation and representation* of all concerned parties.

Some general outlines of the field of justifiable options are:

- industrialized countries should continue to recognize their special responsibility and take action;
- the Kyoto Protocol should be ratified, implemented and show concrete results (on mitigation *and* adaptation) in the near future
- USA and Australia should participate again in international climate policy making and implementation in a convincing way, thereby recognizing their responsibility
- all countries should contribute to mitigation *and adaptation* in agreement with their historic and current contribution to climate change (i.e. recognizing their accumulated ecological debt) and their level of technological and economic development)
- climate policy should leave enough space for (sustainable) development in developing countries.

Some elements of a just and participatory process of discussion and negotiation could be:

- codification of just rules of debate, participation, transparency and decision making
- supportive measures for delegations from developing countries addressing the asymmetries in numbers and qualification of advisors compared to the large delegations of the rich countries

9. Looking towards the upcoming negotiations on the second commitment period, the Contraction and Convergence Model⁴ is an important contribution. It corresponds to the initial vision of the Convention that demands the reduction of CO₂ emissions of industrialized countries and leaves space for the development of developing countries. It presents a starting point for deliberations and negotiations directed to finding a justice-based global approach to climate change. However, as we participate in this discussion, we need to recognize that the model does not do justice in its present form to some important dimensions that need to be addressed.

The model:

- does not account for the larger historic responsibility of industrialized countries; this responsibility however is not so much linked to the distribution of emission rights and mitigation commitments, which is the focus of the C&C-model, but to the needs of adaptation to climate change that will inevitably take place due to the emissions in the past (and the unavoidable emissions in the near future)
- does not account for the larger technical and economic capacity of industrialized countries to implement and finance mitigation and adaptation measures, a capacity they have acquired on the basis of exactly the fossil fuel based development that is the main cause of climate change.

Consequently any model that can legitimately claim to be just must include in principle:

- a balanced distribution of a contracting *emission budget*, following characteristics like the ones of the C&C model (see appendix). In practice, a differentiated regime could be developed within a well defined and fixed *global* emission reduction contour, in which absolute emission reduction goals are appointed to industrialized countries like in the Kyoto Protocol, but where the least developed countries are spared for some time with respect to mitigation obligations in order to give more room for sustainable development
- acknowledgement of current and future needs of adaptation to climate change - both natural and human induced - that already has taken place or inevitably will take place in the near future
- (for the coming decades or century) allocation to *industrialized* countries of approximately all the *costs of adaptation* to human induced climate change that have to be made in developing countries, according to the industrialised countries' specific historic contribution to greenhouse gas emissions and on the basis of an inventory of real adaptation needs in developing countries
- next to allocating the *costs of all other measures* (i.e. mitigation and adaptation to natural climate change) to all countries according to their level of wealth (according to UNDP development indicator).

In practice it is difficult to discriminate between (adaptation to) 'natural' climate change and climate variability and (adaptation to) human induced accelerated climate change and climate variability. In principle the later should be paid for by industrialized countries on the basis of their responsibility for climate change, as indicated above. The former could be paid for by industrialized countries on the

⁴ For a description of the model see Appendix.

basis of current Overseas Development Assistance (ODA). Indeed, adaptation measures are to a large extent development measures.

We urge the countries of the world to develop and agree on such a differentiated climate policy regime reflecting these requirements. The regime that has recently been developed by the Climate Action Network (CAN) could be a useful reference for this.

10. We are convinced that a deeper transformation of the prevailing economic model with its focus on unqualified economic growth combined with the tendency to neglect and deny the destructive effects on people and the Earth is required to reach these goals.

Unsustainable production and consumption patterns that are encouraged by the dominant development paradigm and the economic model under-girding it are root causes of climate change. But still the same macro-economic framework with a strong emphasis on economic growth continues to guide the decisions by governments and international organizations, e.g. the World Bank and the International Monetary Fund. It is not by accident that the World Bank was not ready to apply the recommendations made by the Extractive Energy Report (2004), which criticized the over-emphasis on dinosaur technology compared to the rather insignificant engagement for renewable energies. Profound changes are needed for creating a more conducive and supportive environment for just, participatory and sustainable communities that will be the subjects of transformation.

C. Adaptation to the impact of climate change

COP 10 in Buenos Aires will include a special focus on adaptation. An exclusive emphasis on mitigation does not address the fact that already the right to life and a healthy environment of an increasing number of people is violated: their food security or access to clean freshwater and sanitation is at stake. Especially the poor are extremely vulnerable to droughts, floods, violent storms etc. Storms, floods and droughts have devastating impact on nations' economic and human development. These disasters cost governments, relief agencies and insurance companies more than US\$ 50 billion a year and these costs are rising rapidly. This amount is approaching the sum of US\$58 billion a year, the total overseas development assistance (ODA) from OECD countries. The WCC and church related relief and development agencies have linked mitigation and adaptation in a call to solidarity with those most affected by climate change that was issued in 2002.⁵

We insist on a narrow definition of adaptation. There is the danger that the adaptation agenda is misused and played against the mitigation agenda with the focus on emission reductions for different interests and reasons.

11. We observe that the issue of adaptation has been given insufficient attention until now. Partly this may be attributed to unwillingness in industrialized countries to accept real responsibility for climate change, which is already taking place. Partly the lack of attention is due to some lack of clarity about the concept of adaptation.

Adaptation includes the compensation for damages caused by (human induced) climate change, rehabilitation and prevention of further damages that otherwise may result from climate change that is inevitable or has taken place already. Prevention could be any social, financial, economic or technological measure to make communities and people more resistant to negative impacts of climate change. While prevention comes first, adaptation also includes compensation for present and reparation for historic damages, the accumulated ecological debts of those who have exploited people and Earth in different parts of the world. Carbon debts, which represent a considerable part of the ecological debts are calculated on the basis of per capita entitlements and the average costs of CO₂ emissions. Ecological debts can be assessed, applying the model of the ecological footprint. Although replacement of people and communities may be inevitable in some cases, we think this must not be seen as a reasonable adaptation measure, but rather as a last resort that could be avoided by adequate mitigation and adaptation measures.

⁵ WCC, *Solidarity with Victims of Climate Change*

Guided by solidarity, adaptation must focus on the poor and vulnerable. The 20% of the world's population that consumes 80% of the world's resources and contributes 80% to the historic CO₂ emissions also owns 80% of the wealth. But the majority of the poor and marginalized is most likely to suffer the severest consequences of climate change related disasters. Those who contribute the least to the risks are most likely to be harder hit and more vulnerable in case of an emergency. Climate change exposes and aggravates unjust relationships. The neglect of the poor and powerless is a consistent characteristic of present unjust structures of the global economy and international, political system.

We once more underline the moral obligation to the allocation of the *costs of adaptation* to human induced climate change that have to be made in developing countries (for the coming decades or century) to *industrialized* countries, according to their country specific historic contribution to greenhouse gas emissions and on the basis of a serious inventory of real adaptation needs in developing countries. All other costs of adaptation should be allocated to all countries on the basis of global solidarity and economic and technological carrying capacity.

12. We call for comprehensive policies supporting adaptation programmes in countries severely affected by climate change.

Adaptation requires an emphasis on risk assessment, disaster prevention and solidarity.

Adaptation programmes should include:

- strategic emergency preparations on a local, national, regional and global level
- community based vulnerability assessments and disaster prevention programmes
- prioritizing programmes in long term development which are part of adaptation measures, including, if necessary, a change in priorities, e.g.
 - emergency-prevention projects
 - alternative energy in all development programmes
 - water programmes
 - rehabilitation projects
- re-forestation to protect the soil, to improve the capacity to store water and to provide protection against land-slides and avalanches
- advocacy, specifically in OECD-countries for increased funding for adaptation programmes

We urge governments, non-governmental environment and development organizations and research centres to cooperate in clarifying the issue and concept of adaptation and to collect data on the local and regional aspects of adaptation. This information could be made available to governments and non governmental organizations in developing countries in the form of a web-based 'Climate Change Tool', which could be used for evaluating possible climate change impacts on local development processes and for developing local adaptation programs.

13. Being aware of the increasing risks related to water resources due to a changing climate and of some undesirable feedbacks of the protection of water resources and the provision of fresh water, we emphasize the need to develop policies related to climate and water that are based upon solidarity and provide for risk containment for the vulnerable even under present uncertainties.

The connection between the issue of climate change and water issues is strong:

- Climate change is a central threat to freshwater, next to issues like privatization of freshwater services. Climate change impacts include increased evaporation during droughts and due to a rise of the mean temperature, contamination as a result of flooding and heavy precipitation, lower quality as a result of higher water temperature and biological activity (less oxygen), melting of ice caps / glaciers, rising need for drinking, agriculture, cooling etc. The human cost of hydro-meteorological disasters is also appalling. Half a million people lost their lives to these events in the 1990s, and more than two billion were affected in some way. By 2025 over 2 billion people will be affected by water-related disasters annually. In the developing world, deaths, disease and displacement of disadvantaged communities occur on vast scales. Events like Hurricane Mitch, floods in Bangladesh and Mozambique, or droughts in Ethiopia and Kenya are known to have set back national development for decades. Extreme weather events each year decimate the well-

intentioned development efforts of community-based organizations and exacerbate the poverty of marginal communities.

- Besides the effects of climate change on water systems and hydrology, relationships in the reverse direction exist through a number of feedback mechanisms. An example is the rapid increase of pollution discharges affecting surface water quality in most parts of the world, leading to an increase in some greenhouse gases like methane. Other examples are changes in regional moisture recycling due to large-scale irrigation schemes or the cultivation of wetlands.
- Water is a central adaptation theme because water is a central to life (drinking and cooking, hygiene, agriculture and (industrial) food production, cooling). Therefore provision in freshwater is one of the UN's Millennium Development Goals (MDGs) - halving the number of people without an adequate water supply and access to sanitation by 2015. The increasing vulnerabilities due to climate variability and change upon water resources will negatively affect progress towards achieving the MDGs for water. Implementation plans to achieve the MDG targets for water should take account of the increasing risks due to climate, through the development of structural adaptation measures (dams and dikes etc.), as well as risk management strategies by way of insurance, solidarity or liability mechanisms from the local level up to the global level. But so far, the implications of climate variability and change have not been fully considered in most nations' existing water policy and decision-making frameworks. This is particularly true in developing countries, where the financial, human and ecological impacts are greatest and water resources may be already highly stressed, but the capacity to cope and adapt is weakest. For water managers at the national and local level, the impacts of climate change necessitate a change in planning, design and operations of existing water systems. Doing business as usual, that is making decisions based upon historic data, is not enough any more. Water management will have to be able to manage water for different possible futures which are likely to see more extremes weather - floods or droughts or storms - and greater risks to human beings, the economy and the environment.
- Climate change and water problems have common causes like economic and industrial growth, and to some extent population growth, and show some problematic development feedback's (improving the water situation may lead to growth of wealth and population - due to a better health situation - which in the end negatively affects climate change and the water situation again)
- Climate change and water problems show some common characteristics: both concern common goods - be it on global and regional levels respectively - but are approached in terms of individual rights (emission rights, the right to freshwater)
- Climate change and water problems, both concerning common goods, face common questions, like the question of the desirability of market based approaches, or the question of the appropriate scale of projects to solve the problems.
- In the field of water issues a direct relationship can be found between climate adaptation in the south and in the north. The production of several (agricultural) consumer goods for the north requires large quantities of freshwater (indirect water use) in the south. This suggests that adapting to climate change in the field of water issues should not only concentrate on the supply side of freshwater but also on the limitation of (direct and indirect) freshwater use. Reduction of freshwater use in the south for production of consumer goods for the north should not, however, impair the economic possibilities of developing countries.

D. New horizons for the witness and role of the Churches

The new perspectives emerging in connection with climate change have also implications for the witness of the churches. In the course of the last two decades the awareness of the threat of climate change to the future of life and survival has steadily increased among the churches. As weather anomalies multiplied, churches more and more insistently called on governments to take the measures required to mitigate the impact of global warming. At the same time, they began to suggest ways and means for voluntary reductions of greenhouse gas emissions. In developing countries, churches and Christian groups began to engage in community projects geared to the responsible use of resources, especially energy. Much remains to be done to strengthen the witness of the churches. The potential of their role, especially in industrialized, historically Christian countries is far from being exhausted. As

the evidence of climate change becomes more manifest and the number of people affected by it increases, an even stronger commitment is called for.

We want to encourage the WCC's member churches in the Pacific to present their experience and concerns regarding the effects of climate change and their lives and survival forcefully at the Pacific Plenary during the next Central Committee meeting of the WCC and call upon all WCC member churches to respond - individually through advocacy and action in their own countries and together globally through the WCC. The emphasis on adaptation requires special attention to the situation of local communities and their efforts to protect themselves against the threats of climate change and to develop ways of life and work that no longer destroy and undermine the web of life in their given place, but rather support it. These are communities of hope and transformation that need to be strengthened and find ways to communicate and network with each other.

In the light of the above reflections we would like to offer the following considerations:

Up to and beyond 2012

13. We urge the churches to call publicly for consistent action in implementing the UNFCCC.

This includes as a first step to monitor and support rigorous implementation of the Kyoto Protocol and to prepare for a new round of negotiations. We suggest that the churches advocate for a model that moves progressively towards equal per capita emissions and stabilizes the rise in global surface temperatures as soon as possible and as low as possible. Churches should encourage the governments and political authorities at all levels to promote the debate on such a model.

Reduction of greenhouse gas emissions have become a primary task in all nations, first and foremost in the industrialised countries. No further steps can be taken without curbing and gradually reducing the increase of emissions. Churches should support consistently all public measures likely to accelerate the process of reduction.

14. The need for adaptation constitutes, in particular, a challenge to church related relief and development agencies. They need to develop the linkages between their emergency and disaster relief, mid-term and long-term development goals and climate change. We emphasize that water is an important field on which adaptation measures must be taken and call upon the churches for solidarity with victims of water stress.

Weather anomalies are bound to increase even if consistent action is taken and the number of people exposed to risks will rise. Churches should support international efforts to create the best possible conditions for a secure environment. We appeal especially to all church related development agencies to fully engage in tackling the issue of climate change, both on the mitigation and the adaptation side, as these issues hamper or improve the development opportunities of developing countries.

Until now climate change policy has been dominated by environmental aspects, whereas climate change itself and climate change policy - if not designed in a just way - could affect development opportunities in a serious way. Church related relief and development agencies are challenged to include climate change at least as a cross cutting policy issue. In face of climate change, priorities shift. Though the eradication of poverty remains the primary goal, much more attention will have to be given to preserving the living conditions of communities: securing water supply, building dams, re-forestation etc. More often, emergency relief will be needed when floods, drought etc. occur.⁶ An increasing number of weather related disasters tends to overstretch the resources available already now.

Life styles

16. Churches continue to have a role of education and of setting an example both among their members and in society. Models of an alternative life style are an essential part of this task.

⁶ WCC, *Solidarity with Victims of Climate Change and Otin Taai Declaration*

The urgency of the threat of climate change requires churches to go beyond declarations and statements. New alternative models of life are called for. We challenge all Christians and all other people recognizing their responsibility for the other and for creation to move towards a style of life that is less dependent on the extensive use of material and consumption of (fossil) energy, but rather places increased emphasis on renewable energies, “greening” of church owned buildings, careful land-use, etc.

Alternative life-styles derive their quality from the attentive enjoyment of nature and human relationships, from mutual care, dependence, trust and solidarity instead of the illusions of individual autonomy, from spirituality and feelings of community, connectedness and intimacy instead of one-dimensional self-centredness. We recommend the creation of 'just, participatory, sustainable and sustaining communities' for mutual support and call upon the churches and authorities to support them on this journey.

We also suggest to churches in societies that continue to live in communal life-styles to explore opportunities to identify the essence and values of such a way of life and to commit financial and human resources into educating the youth, families, and church communities on the values that undergird such a society and the importance in maintaining such values.

IV. Conclusion

17. We call upon the World Council of Churches to continue the support for these proposals by way of advocacy, stimulating reflection and organizing cooperation.

More specifically we would like to ask the WCC to organize a meeting:

- on the possibilities for an effective juridical approach to climate change by which unwilling parties in the field of climate change can be forced to live up to their global responsibilities;
- on the possibilities of and objections to a global common tax. The Climate Fund has been identified by the WCC as a possible option in the statement, *The Earth's Atmosphere* (WCC, 2000).

18. We commit ourselves to supporting and contributing to these proposals and challenges.

Appreciation

We warmly thank Church of Sweden Aid, Brot für die Welt, Church World Service, Norwegian Church Aid, the United Church of Canada and the United Protestant Church in The Netherlands for their support to this consultation that was generously hosted by Oikos and Kerkinactie in The Netherlands.

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Note: A background paper with more of the ethical and technical detail on which this discussion paper is based is available by contacting David Hallman, WCC Climate Change Programme Coordinator at dhallman@sympatico.ca We are grateful to Christiaan Hogenhuis of Oikos/Kerkinactie (The Netherlands) who prepared the background paper and the original draft for this discussion paper.

Appendix

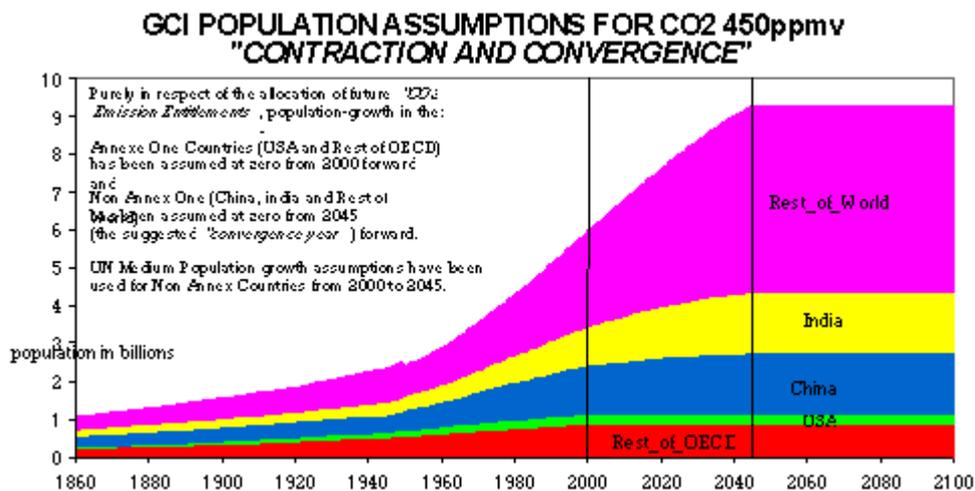
Contraction and Convergence: a short introduction of the model and its moral base⁷

Contraction and Convergence is a policy scenario for stabilisation of greenhouse gases in the atmosphere, formulated by the Global Common Institute (London), on the basis of the principles of:

- differential responsibility of developing and developed countries (due to higher historic and actual emissions in industrialised countries),
- equity (equal per capita emissions of greenhouse gases) and
- sustainability

The model takes into account:

- the justified claims of developing countries that they need 'environmental utilisation space' for further (sustainable) development (economic, social, cultural, technological etc.),
- the different population growth rates in developed and developing countries that are to be expected for the current century (see figure) and
- the consideration that developed countries are to a high extent trapped in a carbon based society and economy, so that they need some time to make the actual change of their CO₂-emissions to a drastically lower level, although the rights of developing countries to a per capita equal share of the atmospheric emission should be acknowledged right away.



Source: Global Common Institute (www.gci.org.uk)

Technically the model defines a path for the reduction of the global total CO₂-emissions to a sustainable level within a certain time frame. This is called contraction. Level and time frame have to be decided on the basis of scientific evidence and political decision making about:

- the maximum temperature rise of the atmosphere that is acceptable
- the maximum acceptable rate of rising of the atmospheric temperature
- the maximum (rate of) emission reduction that is both technically and politically, economically and socially feasible.

Mostly the emission level is set to about 2.5 billion ton carbon (2.5 GtC) per year, to be reached in 2100, consistent with an atmospheric CO₂ concentration of 450 ppm (parts per million) or an atmospheric concentration of greenhouse gases of 550 ppm. The IPCC considers this to be a concentration level at which severe damage to nature and the most threatening risks to human society can be avoided. Alternatively it can be stated that temperature rise should be limited to, say, 2^oC, this

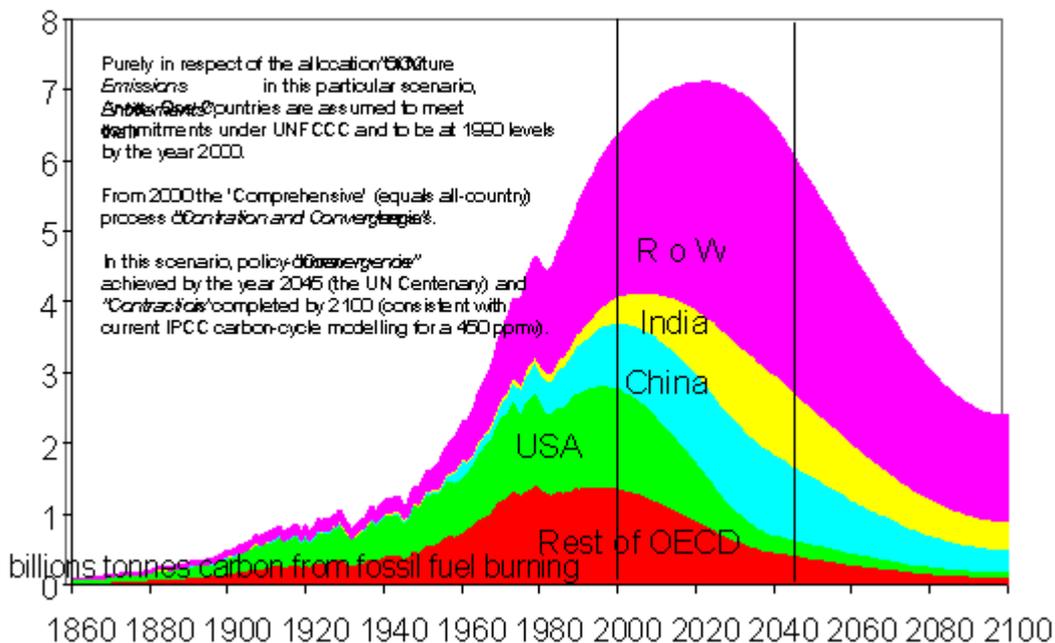
⁷ By Christiaan Hogenhuis, Oikos/Kerkinactie, The Netherlands, 2004

being the level at which severe damage to nature and the most threatening risks to human society are thought to be avoidable, as the IPCC states. This maximum temperature rise would then to some extent define the maximum allowable atmospheric concentration of CO₂ or greenhouse gases, although the many uncertainties in climate science make it difficult to define the exact allowable level. All this means emissions of global greenhouse gases have to go down by approximately 50% compared to the emission level of 1990 and by about 70% compared to the current level.

Within this sustainable global 'envelop' allowed emission paths are defined for all the countries of the world in such a way that:

- at a certain date the *per capita* emissions of all countries are equal (which is called convergence); in the figure this convergence year is chosen to be 2045 but this has to be negotiated politically
- at a certain starting year the allowed emission levels are set to the actual levels of that year; say 1990, the reference year of the Kyoto Protocol
- the allowed emission paths for developing countries leave room for a temporary growth of emissions till about 2035. After this year emission levels have to be reduced in developing countries as well, on the basis of technological innovation and transfer of technology. In this way room is made for economic development. At the same time this economic development can provide the technological innovation in developing countries that is needed for the emission reductions that they have to realise after, say, 2035. This does not relieve developed countries of their responsibility, though, to invest in transfer of technology to developing countries.

HISTORY & GCI CO₂ SCENARIO for 450 ppmv under "CONTRACTION & CONVERGENCE"



Source: Global Common Institute (www.gci.org.uk)

Thus the Contraction and Convergence model in a reasonable, ethically justifiable way takes into account:

- (long term) equity of all people, both in developing and developed countries
- the interests and right to development of developing countries
- the larger prospective responsibility of developing countries for creating a sustainable global society and economy, on the basis of their larger financial, economic and technical capacity
- the interests of future generations, by approaching to sustainability

However the model does not in a satisfying way take into account the *historic* responsibility of developed countries for the amount of CO₂ they have emitted to the atmosphere in the past, say two, centuries. Clearly this is an accountability for the rise of CO₂ concentrations in the atmosphere that already have occurred and consequently for the current temperature rise, sea level rise, rise in the amounts of disasters etc., as well as the rises that will occur in the near future, due to time lags in the atmospheric processes. This *historic* responsibility not necessarily obliges developed countries to reduce their *future* emissions faster or to a lower level, but does oblige them to bear most if not all of the costs of adaptation to the consequences of human induced climate change that are already suffered by developing countries in the first place as well as the costs of adaptation to human induced climate change that will take place in the coming century. The fact that emissions will continue to be too high in industrialised countries for some time adds to this responsibility. So acceptance of the Contraction and Convergence model should be accompanied by the willingness of industrialised countries to bear these costs, for instance by creating adaptation funds with sufficient capacity.

Furthermore the model does not account for the fact that many developing countries will be affected by climate change more than industrialized countries, which means that without other measures taken they will have to bear a greater burden of adaptation.

In the third place the C&C model does not account for the larger technical and economic capacity of industrialized countries to implement and finance mitigation and adaptation measures, a capacity they have acquired on the basis of exactly the fossil fuel based economic development that is the main cause of climate change.

These defects make it necessary to complement the C&C-model, thereby drafting something like a *C&C plus regime* consisting of:

- a balanced distribution of a contracting *emission budget*, following the characteristics of the C&C model
- an agreement on allocation (for the coming decades to century) of most or all the *costs of adaptation* to human induced climate change that have to be made in developing countries to *industrialized* countries, according to their country specific historic contribution to greenhouse gas emissions and on the basis of an inventory of real adaptation needs in developing countries
- on top of that, an agreement on allocating the *total global costs of all other measures* (*i.e. mitigation and adaptation to natural climate change in all the countries of the world*) to all countries according to their level of GNP, or some other measure of economic wealth e.g. UNDP human development index.

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For further information on the Climate Change Programme of
The World Council of Churches:

Web-site: <http://www.wcc-coe.org/wcc/what/jpc/ecology.html>

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