

World Vision Position on Climate Change Response

Christopher Shore and Joe Muwonge

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Introduction

Humankind faces a number of pressing challenges during the 21st century. One of the most significant is Climate Change – defined as a variation either in the mean state of climate or in its variability, persisting for an extended period of time, typically decades or longer. The purpose of this paper is to provide a brief overview of the problem of Climate Change, its significance for the wellbeing of children and the poor, and its linkage to World Vision's ongoing work. World Vision's position on Climate Change is outlined as well as policy positions deemed necessary for ensuring the well being of children and the poor.

Background

The World Vision International Partnership

World Vision International is a Christian relief, development, and advocacy organisation working to create lasting change in the lives of children, families, and communities living in poverty and injustice. As followers of Jesus, we work with the world's most vulnerable people, serving all regardless of religion, race, ethnicity or gender through sustainable development, disaster relief, and public awareness and advocating for justice. World Vision works in nearly 100 nations, deploys nearly 25,000 staff, and globally raises over \$2 billion per annum from a variety of donors. As a result of this support, World Vision offers physical, social, emotional and spiritual support to approximately 100 million people.

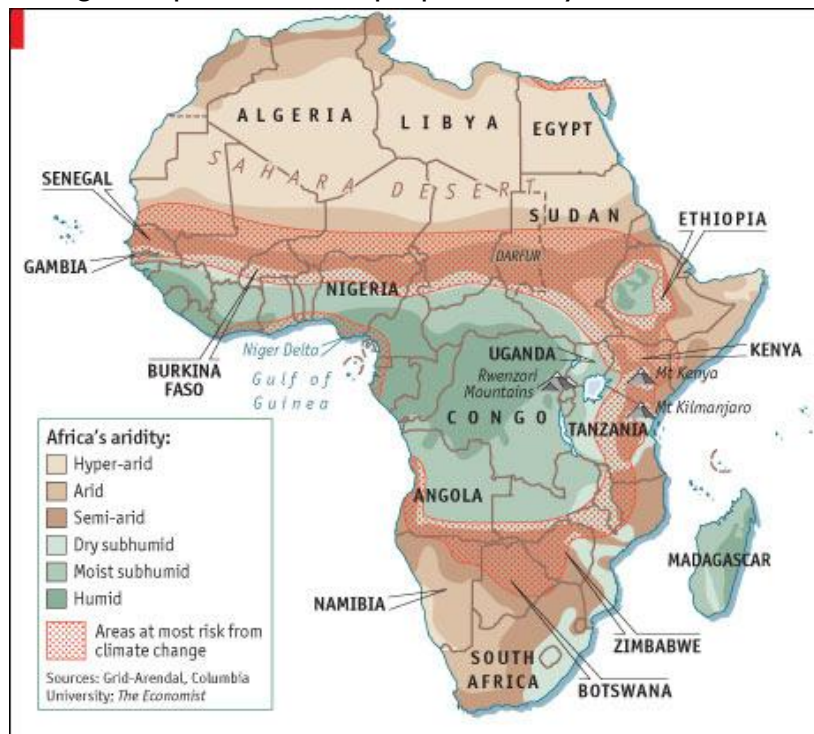
The Problem of Climate Change

There is growing global consensus that Climate Change is real. The natural level of atmospheric gases, such as water vapor, carbon dioxide, methane and nitrous oxide, which ordinarily act as a greenhouse by trapping heat and warming the planet, are being supplemented by emissions resulting from human activities, such as burning fossil fuels, farming activities and land use changes. As a result, the earth's surface and lower atmosphere are warming faster than the natural rate, and this rise in temperature is accompanied by many other changes. The 2007 report of the Intergovernmental Panel on Climate Change (IPCC) from Working Group I (WG1) establishes the linkage between observed global warming, the human use of fossil fuels since 1750, and the increase in atmospheric greenhouse gases. From 1850 to 2005, the average global temperature increased by 0.76 degrees C and global mean sea level rose 12-22 cm during the last century. These changes are affecting the whole world from low-lying islands in the tropics to vast Polar Regions. Climate Change predictions indicate a further increase in temperature of 1.4 degrees C to 5.8 degrees C within this century. There remains little scientific debate about the central issues raised in this IPCC report. World Vision acknowledges and accepts the clear and present danger of anthropogenic Climate Change as detailed in this (2007) IPCC Report.

World Vision calls for increased efforts to educate governments, public and private actors, donors and the World Vision International Partnership in their understandings of Climate Change and its effects on the poor.

The Predicted Effects of Climate Change

The predicted impacts associated with Climate Change are many and varied, the IPCC report warns. Drought-prone areas will increase in extent. Heavy precipitation events will increase in frequency, exposing more area to the risk of floods. Rising temperatures will increase the rate of glacial melt, causing serious water shortages over areas currently fed by mountain glaciers and in which one-sixth of the world's population live. In Africa, by 2020, between 75 and 250 million people will need to cope with increased aridity, a circumstance that is bound to have serious food security implications. The Greenland Ice Sheet is melting faster than expected. Past ice sheet melting has caused rises in sea level of as much as several meters, and small island countries may see drastic reduction of usable land. The 2007 report of the IPCC from Working Group 2 (WG2) highlighted the prognosis that while there will be both winners and losers from Climate Change, the poor will be disproportionately affected in adverse ways. This is both



because some of the poor countries (specifically those in Africa) are expected to be most adversely affected (see map I), and because the poor regardless of the country in which they live have the fewest resources to adapt to Climate Change. World Vision believes global action is needed to devise appropriate mitigation and adaptation measures and thereby reduce vulnerability for the poor.

Map I

Linkage Between World Vision's Work and Climate Change

World Vision's Core Values states, "We are stewards of God's creation. We care for the earth and act in ways that will restore and protect the environment. We ensure that our development activities are ecologically sound." Children and families suffer most in disasters. Therefore, we commit ourselves to mobilize resources efficiently when disaster strikes. We seek to transform suffering into well-being while protecting

the rights, dignity and livelihoods of all people. Working with other organizations, we use diverse means to reduce the impact of future disasters by building on the strengths of communities and enabling them to become part of the solution to Climate Change.

Over the last fifty years, World Vision has invested heavily in relief and development in order to make lasting solutions to poverty. Climate Change threatens to undermine the development investment World Vision and others have made. Field staff are already observing the effects of Climate Change on the frequency and severity of storms, drought, and floods. The expected results will include increasing desertification, water shortages, food insecurity, and civil conflict. As Climate Change undermines the well-being of the poor, World Vision is concerned about Climate Change mitigation and in supporting and building the resilience of the poor as they adapt to Climate Change. Fortunately there is no conflict between WV core business and activities undertaken to mitigate against or to adapt to Climate Change. Environmental restoration, reforestation, conservation farming, agro-forestry and early warning and disaster preparedness are all activities which enhance resilience and contribute to transformational development and child and whole community welfare.

World Vision's Humanitarian and Emergency Affairs (HEA) Department currently spends 45% of its total budget on Preparedness and 55% on Response. With the likelihood of more frequent and more severe climatic disasters, HEA will need to allocate increased funds to Preparedness. Nearly 1 billion people living in extreme poverty depend in part on forests for their livelihoods, and for food, fuel, shelter, water regulation and climate stabilization.

There is an array of adaptive responses to Climate Change available to human societies ranging from purely technological (sea defenses), through behavioral (e.g., altered food and recreational choices) to managerial (e.g., altered farm practices), to policy (e.g., planning regulations). For developing countries, it is particularly important to address the availability of resources and to help build adaptive capacity. Adaptation measures are rarely undertaken solely in response to Climate Change alone but can be integrated with disaster planning, water resource management, coastal defense and improving overall economic resilience. Done well, these adaptation and preparedness efforts can significantly reduce an emergency's impact and protect communities from even greater asset loss should disaster strike.

In India, World Vision plans to take advantage of new technology in disaster-prone development areas. For the first time, satellite weather warnings will give villagers a chance to react and respond before a disaster strikes. The system works through a simple local computer network connected to television, Internet and the local public address system. During times of alert, all weather reports are aired in local language through multiple loudspeakers, plus the Internet is monitored for latest weather patterns. As backup, World Space Radio technology connects the early warning centers together, able to submit messages as well as send computer files. This means warnings can be communicated to many destinations even if Internet communications have failed. Once completed, it is hoped the system will cover as many as 5,800 villages in several

different states of India. As well, disaster preparedness activities in India include an introduction to alternative crops and livelihoods, identification and strengthening of roads, riverbanks and buildings prone to damage, and regularly rehearsed evacuation and response plans with community volunteers. With this year's monsoon season already wreaking havoc across the region, systems like these will help to protect some of India's most vulnerable communities.

In Vietnam recently, World Vision organized a forest fire simulation in Lang Chanh District, Thanh Hoa Province, to help improve local authorities and communities' capacity in responding and managing natural disasters that might occur in the area. The overall project provided participants with training courses on developing hazard maps, setting up household disaster preparedness plans, protecting the environment such as multi-purpose varieties of reforestation, and using rescue equipment and first aid emergency kits. It is expected to benefit more than 21,000 residents, who are poor farmers and are vulnerable to floods, flash flooding, storms, drought, forest fires and land erosion.

World Vision Ethiopia is currently discussing plans to implement small-scale irrigation around pan dams and shallow wells. The use of pumps and the growing of rapidly maturing crops are also ways the country is preparing for potential food shortages during famine.

In China, World Vision's flood disaster prevention program helps communities build water retaining walls on slopes with risks of landslides; build water supply systems to provide clean drinking water and for irrigation; and build dykes and drainage systems to divert flow of flood waters away from farmland or settlement areas.

World Vision's Interests and Principles

World Vision is a partner with people from around the world to relieve the need and suffering of the poor. Our central interests are to help prevent dangerous Climate Change as this will harm the poor, and to ensure that the poor of the world participate in the emerging global responses to Climate Change in ways that not only bring benefits to the planet but also help reduce poverty.

World Vision's position on the response to Climate Change is based upon the following principles:

- All people everywhere have a role to play in improving life on our planet through careful stewardship of the resources at our disposal; and
- Since they are the drivers of Climate Change, greenhouse gas emissions need to be fundamentally reduced to achieve solutions to the problems of anthropogenic Climate Change. All countries, especially the most developed and largest producers of greenhouse gasses, must undertake drastic steps to lower their use of greenhouse gas emitting resources.

The Contribution of the Developing World

While, correctly, most of the focus of Climate Change solutions is on the response needed by the industrial or developed world, the developing world can and should be a partner in creating lasting solutions. This will require resource commitments by the developed world. In collaboration with developing countries and their communities, the great landmasses of the developing world can be harnessed to the task in ways that are of benefit to the planet and to the poor.

Since Agriculture, Forestry, and Other Land Use (AFOLU) represent approximately 30% of the global sources of greenhouse gases, significant attention must be given to turn AFOLU from sources of greenhouse gases to sinks for greenhouse gases.¹ This will be done largely through bio-sequestration of carbon (building or maintaining carbon in plants and wood).

The developing world has four key methods available for carbon sequestration:

1. Reforestation and afforestation;
2. Avoided deforestation;
3. Increased use of agroforestry;
4. Sustainable agricultural practice leading to increased soil carbon.

World Vision has had direct experience working in most of the fields listed above through its field programs in Africa (reforestation and afforestation projects in Ethiopia and Tanzania, agroforestry initiatives in Zambia, Malawi and Senegal, and sustainable agricultural practices throughout its agricultural programs in all its ADPs). Formalization of AFOLU in the manner proposed would give communities needed incentives for these environmentally beneficial practices to be scaled up.

Hindrances to the Developing World Dealing with Climate Change

Hindrances in Mitigation

1. Lack of Resources for Mitigation

The central issue preventing the developing world from moving forward on mitigation through carbon sequestration is lack of resources, including:

- Project funding;
- Trained and expert personnel;
- Scalable models;
- International systems facilitating resource flows.

2. The Solutions in the Kyoto Protocols are Insufficient and Inadequate

The Kyoto Protocol is an important step forward in the responsible nations to detail their plan to reduce greenhouse gas emissions. While the Kyoto Protocol to the United Nations Framework Convention on Climate Change moved the world forward on actionable plans toward stabilizing greenhouse gas concentrations, the agreement needs to be strengthened in a number of ways, which would significantly benefit the poor.

First, the Kyoto Protocol does not give enough weight to AFOLU. While AFOLU contributes approximately one third of global greenhouse gas emissions, the solutions set forth in the Kyoto Protocol only allow Annex I (developed) countries to use AFOLU projects for 1% of their emissions reductions compliance targets. By significantly under-representing the AFOLU issues, the Kyoto Protocols undervalues the ability of developing countries to use their land as a means of carbon sequestration for which the industrial world will pay.ⁱⁱ

Second, the Kyoto Protocol does not address the critical issue of Avoided Deforestation. The Kyoto Protocol thereby fails to acknowledge the importance of maintaining existing forests. By not valuing existing forests, the phenomenon known as “The Tragedy of the Commons” is permitted to continue, wherein the marginal benefit to taking value from forests through cutting and clearing is greater than the marginal value in maintaining forests.

Deforestation is a significant problem in many parts of the developing world. For example, historically, Ethiopia probably had two-thirds of its country covered in forest and woodlands while in 1989, only 2.7% of Ethiopia’s total land area was covered in forests and woodland.ⁱⁱⁱ Reforestation brings significant ecological benefits to the local community, and sequesters carbon from the atmosphere.

Continued deforestation rates in Brazil and Indonesia alone offset 80% of the annual reduction targets for Annex I countries in the Kyoto Protocol.^{iv} Deforestation needs to quickly come to an end.

In their June 2007 report, McKinsey & Company concluded that protecting standing forests together with large scale reforestation could be the single largest contributor to climate solutions between now and 2030, because the scale of the opportunities are huge, and the costs are relatively low compared to others within the suite of actions that will be needed.^v The landmark Stern Report on the *Economics of Climate Change* strongly recommended that forest protection at scale is a necessary bridge strategy to lower carbon emissions while more expensive, technologically challenging and politically complicated solutions play out.^{vi}

Agro-forestry and the practice of conservation agriculture, rehabilitating degraded lands from sources of emissions to carbons sinks, should provide roughly 13% of the solution to Climate Change, according to Robert Socolow of Princeton University.^{vii}

3. *Flaws in the Clean Development Mechanism*

Beyond the structural imbalances of the Kyoto Protocol with its lack of proper emphasis on AFOLU, the Clean Development Mechanism (CDM) has proven to be a formidable obstacle. Originally intended as a method to allow industrialised (Annex I) countries to invest in projects that reduce atmospheric greenhouse

gas concentrations in developing countries, the application of CDM methodology to developing world projects which utilize bio-sequestration approaches has proven not only extremely cumbersome, but very expensive.

The CDM processes need thorough revision to allow them to assist developing countries to contribute to the stabilisation of atmospheric greenhouse gas concentrations, while also assisting these countries achieve sustainable development. Principally, the CDM rules and approaches need to embrace the use of remote sensing technologies which can scientifically measure, verify, and certify bio-sequestration at costs that encourage communities and countries in the developing world to participate in these bio-sequestration approaches. Moreover, the CDM needs to be not only reactive to approaches proposed for bio-sequestration, but should propagate standard methodologies, approaches, and models which can be easily scaled up and replicated throughout the developing world. A similar degree of rigour should be applied to the implementation of the CDM. Only by being highly replicable in the developing world will it help to solve the global climate crisis.

Hindrances in Adaptation

1. Lack of Resources for Adaptation

Many of the poorest developing countries lack the resources necessary to devote large sums to adapting their societies and economies to Climate Change. adaptation is needed in terms of:

- Physical safety for those affected by rising sea levels, higher storm surges, worse floods, or more severe storms, which in turn trigger other developmentally damaging consequences;
- Disease patterns, as warmer weather changes insect habitats, moving malaria and other communicable diseases to previously unaffected areas;
- Water security for consumption, transportation, irrigation, aquaculture, sanitation, and drainage as rainfall patterns are altered;
- Food security, as shifting weather patterns affect food production. Wildlife, in the midst of drought, for example, may migrate into agricultural areas, impacting food productivity. Subsistence crops may not survive with decreased rainfall.

World Vision's Position on Ensuring the Participation of the Developing World

1. New global, regional, national, and local solutions to Climate Change should include bio-sequestration through AFOLU

The Kyoto Protocol's lack of recognition of the AFOLU must not be repeated. Avoided deforestation must be included as a significant approach. AFOLU solutions should more closely approximate their 30% of the total solutions, as this is their true importance. Moreover, regulatory regimes in developed, industrial countries should explicitly

allow AFOLU sourced bio-sequestration efforts from developing countries.

Reductions in atmospheric greenhouse gases anywhere on the planet positively benefits all.

2. *World Vision calls on all nations to sign-on to the Kyoto Protocol and participate in a United Nations process to draft up the Kyoto Protocol's replacement prior to its deadline of 2012.*

3. *Immediate action is needed to overhaul and streamline the Clean Development Mechanism (CDM)*

The CDM approach to AFOLU requires thorough revision to allow developing countries to participate in Kyoto Protocol mechanisms.

In addition, the CDM needs to embrace remote sensing technologies which can measure, verify, and certify bio-sequestration at costs that encourage communities and countries to participate, and to do so at significant scale.

Also, the CDM needs to become proactive and develop methodologies which can be easily replicated throughout the developing world without compromising scientific rigour.

4. *Significant new flows of Official Development Aid (ODA) is needed to fund developing country mitigation and adaptation strategies*

Developing world Climate Change mitigation practices will benefit all on this planet. Reforestation, avoided deforestation, and the other AFOLU activities cited above require significant investment to build the needed capacities, systems, and models.

Reforestation and forest protection at scale is likely the most effective bridge strategy to lower atmospheric greenhouse gas concentrations. This will require investment.

As both Oxfam and Christian Aid have pointed out in recent reports, the developing world should not be expected to pay for the effects of pollution they did not create, either in terms of out-of-pocket adaptation costs or in reducing their pace of economic development.^{viii} World Vision is in broad agreement with these colleague organisations that the main costs of adapting to Climate Change in the Developing World should come from the Industrial World. The simple principle is that the polluter pays.

All monies dedicated to addressing the issues of Climate Change in developing countries **must be in addition** to current ODA flows **and**

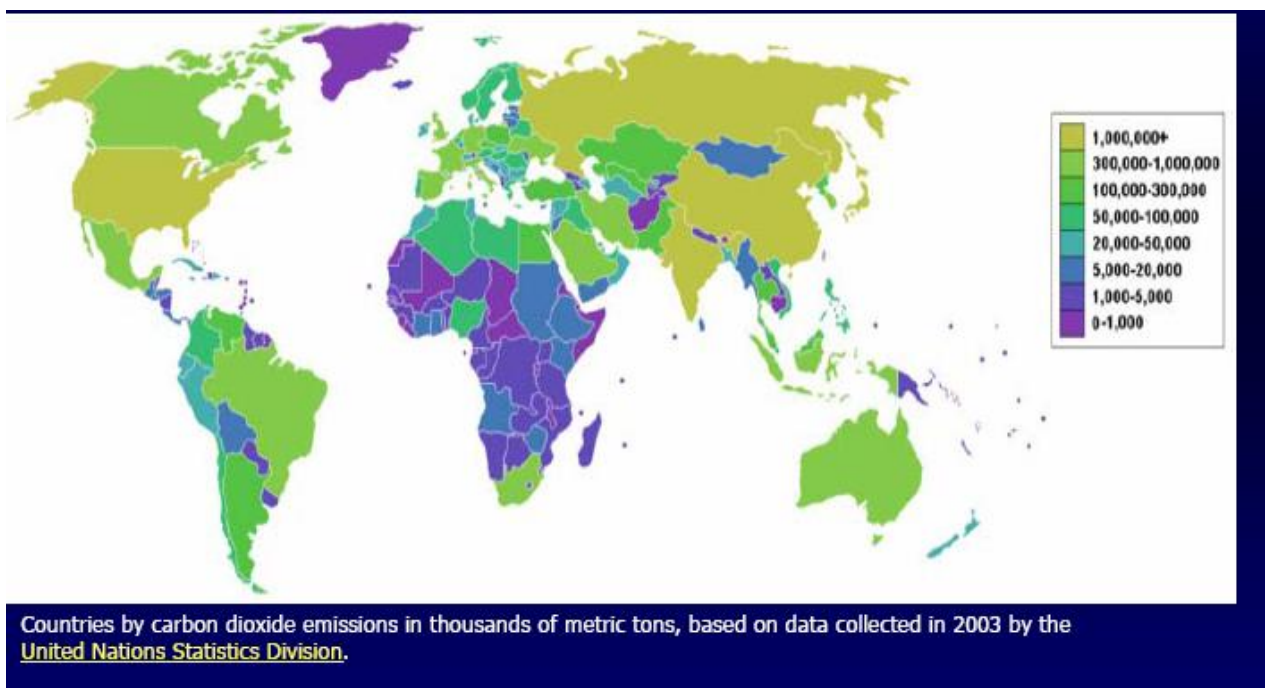
not by diverting funds committed for addressing issues of poverty reduction and achieving the MDGs.

5. *If market-based cap and trade systems are used in new solutions, AFOLU in developing countries should make up a significant part of those solutions*

The Kyoto Protocol mechanisms are based upon the “Cap and Trade” approach. This approach can be harnessed to support not only mitigation processes in Developing Countries, but also to support development activities which help move people out of poverty.

Care should be taken to ensure that the small-holder farmers of the developing world are prime beneficiaries from approaches that involve bio-sequestration.

6. *If Carbon Taxes are Used in New Solutions, Revenues Should Be Used to Fund Developing Country Mitigation and Adaptation Strategies*



World Vision’s Position on Action in the Industrial, Developed World

As an organisation of Christians, World Vision’s view is that human beings are fundamentally stewards of the planet, as the Earth is the Lord’s. As evidence mounts that our activities are causing harm to the world’s climate, and as Climate Change will affect the poor and the powerless the most, the industrial world must act with urgency. The industrial world has harnessed fossil fuels and used the atmosphere as the carbon sink for emissions. To reverse this disproportionate contribution to Climate Change,

the industrialised world must firstly take drastic steps to lower their own emissions; secondly, offset any essential emissions that cannot be eliminated and most importantly assist developing countries to mitigate the impact imposed on them. Those responsible for the problem must act to counter the impact they have inflicted on the poor through the development of targeted and timely solutions

ⁱ Baumert, K., Herzog, T., Pershing, J. (2005) *Navigating the Numbers: Greenhouse Gas Data and International Climate Policy*, World Resources Institute, Washington D.C., 4 pp.

ⁱⁱ Institute for Environmental Security, (2007). "Reducing Emissions from Deforestation in Developing Countries", [<http://unfccc.int/resource/docs/2007/smsn/ngo/006.pdf>].

ⁱⁱⁱ Leykun, L., Million, B., (1998). "State of Forest Genetic Resources in Ethiopia", Forest Genetic Resources Working Papers, November, 6 pp. [<ftp://ftp.fao.org/docrep/fao/004/AB387e/AB387e00.pdf>].

^{iv} The Economist (2004). "Saving the rainforest", The Economist, July 22. [http://www.economist.com/opinion/displaystory.cfm?story_id=EI_NJQTVRD].

^v Enkvist, P.A., Naucler, T., Rosander, J., (2007). "A cost curve for greenhouse gas reduction", *The McKinsey Quarterly*.

^{vi} Stern, N.H., (2006) *The Economics of Climate Change*, Cambridge University Press, Cambridge, 712 pp.

^{vii} Pacala, S., Socolow, R., (2004). "Stabilization Wedges: Solving the Climate Problem for the Next 50 Years with Current Technologies", *Science*, Vol. 305, 13 August, 2 pp.

^{viii} Christian Aid Report (2006) *The Climate of Poverty: Facts, Fears and Hope*.

Oxfam Briefing Paper (2007) *Adapting to Climate Change: What's Needed in Poor Countries and Who Should Pay*.