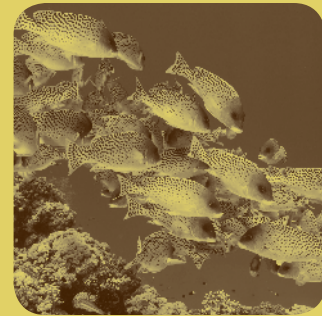


The Poverty of Global Climate Change



Global climate change is fundamentally altering God's Creation. Bird and fish migration patterns are changing, permafrost is melting, and coastal wetlands are disappearing as a result of sea level rise. The Intergovernmental Panel on Climate Change (IPCC) estimates that 20-30 percent of plant and animal species are at risk for extinction and that acidification of the oceans will fundamentally change marine life. Overall, global climate change is predicted to bring increases in flooding, severe storm events, and drought.



And, the expected toll on human society is staggering. The additional number of people affected by malnutrition could rise to 600 million by 2080. An additional 1.8 billion people could be living in a water scarce environment by 2080. And, an additional 220-400 million people could be exposed to malaria.¹



Although global climate change affects all human populations across the globe, it hits those living in poverty the hardest because they depend on the surrounding physical environment to supply their needs and have limited ability to cope to climate variability and extremes. Global climate change reduces access to drinking water, limits access to food, and negatively impacts human health particularly in Africa, Asia, and Latin America. According to the Fourth Assessment Report of the IPCC, developing countries are expected to suffer the most from the negative impacts of climate change.



For instance, Lake Chad, a water source for five countries and 20 million people in Africa, is drying up because of droughts. In 1960, Lake Chad covered more than 26,000 km². By 2000, it was down to 1,500 km².² When weather patterns change in Africa, crops fail and people go hungry.

The challenges of global climate change won't just be in developing countries. In the United States, for example, the town of Shismaref, Alaska, with a per capita income around \$10,500, will need to be relocated because of shoreline erosion, which is caused by the melting of protective sea ice.³

Our call as people of faith—to protect the vulnerable and to be stewards of God's Earth—means we must act to stop global climate change. Because the effects of global climate change are already impacting those who can least afford to deal with it, addressing global climate change is also a justice issue.

¹Watkins, Kevin. *Human Development Report 2007/2008. Fighting Climate Change: Human Solidarity in a Divided World*. United Nations Development Program. December 2007.

²*Lake Chad* www.wikipedia.org 20 Dec. 2007

³*Photo Essay: Sea Change* www.motherjones.org 20 Dec. 2007

MAJOR HUMAN CAUSES OF GLOBAL CLIMATE CHANGE

- Emissions from cars, trucks, planes, buses, etc.
- Electricity used in homes and businesses

HUMAN SOLUTIONS TO GLOBAL CLIMATE CHANGE

- Invest in clean and efficient sources of energy
- Make our personal and congregational lives more energy efficient: drive less, turn out the lights, use energy efficient light bulbs, conserve electricity while heating and cooling buildings, perform energy audits of homes and churches
- Buy locally produced food whenever possible to decrease the number of miles that food travels to get to the table
- Pass legislation aimed at reducing our national dependence on carbon-based energy, and participate in global solutions aimed to reduce worldwide carbon emissions



THE REALITY OF CLIMATE CHANGE

There is growing scientific consensus that human activities are producing carbon emissions that are increasing the Earth's temperature.

As a recent IPCC Report on Climate Change states, some impacts of global climate change are already being felt, such as the intensity of hurricanes and the increase of wildfires in the western U.S. More severe impacts are still to come.

Food Production Global climate change is expected to impact food production especially in places like Africa because of more frequent floods and droughts.

Ice Sheets and Sea Level Rise Greenland and Antarctica support massive amounts of ice that, if melted, could potentially raise sea levels by tens of feet. Studies already indicate that there has been a decrease in ice mass.

Coral Reefs Warmer waters have devastated reefs throughout the Caribbean, creating the worst coral reef bleaching event on record.

THE REALITY OF POVERTY AND GLOBAL CLIMATE CHANGE'S IMPACT

The world's most vulnerable communities bear the brunt of the forecasted global climate change calamities. Those living in poverty rely highly on the environment around them for food and shelter, and have a limited capacity to cope with climate variability and extremes. As temperature changes increase the frequency and intensity of severe-weather events around the world, impoverished communities, which often lack necessary infrastructure like storm walls and water-storage facilities, will struggle to respond to increased disasters. Warmer climates will also increase the spread of diseases like malaria and impact the ability of impoverished communities to respond adequately to outbreaks when they can't afford the medication for those infected. Perhaps the harshest consequence will come from changed rain patterns. This will increase the prevalence of drought in places like Africa, where only 4 percent of crop land is irrigated. The resulting decrease in food production will leave populations without food and limit their ability to trade internationally to generate income.

Global climate change poses one of the greatest threats to the most vulnerable among us, especially people in poverty. The impoverished and vulnerable do not have the economic and technological resources to adapt to the expected impacts of climate change. Heat waves, droughts, storms, and consequent economic costs fall most heavily upon those in poverty. Addressing climate change must involve addressing the plight of those in poverty to be successful, while addressing poverty must involve environmental sustainability to be a long-term solution.

SOLVING POVERTY CAN LESSEN THE IMPACT OF CLIMATE CHANGE

Development in impoverished countries can, if done properly, serve a two-fold purpose. First, it can create jobs and boost the economy. By investing in alternative energy sources, developing strong local agriculture, and creating inter-dependent local communities, economies can improve. Secondly, appropriate development can create sustainable environmental conditions. For example, policies for forest conservation and sustainable energy will, if correctly targeted and implemented, enhance the resilience of communities and thereby reduce their vulnerability to climate change. Appropriate infrastructure and technology improves livelihoods and reduces the impacts of global climate change for those living in poverty.

YOUTH ACTIVITIES

Note: these activities are best suited for ages 12 and up.

Your Ecological Footprint

- Read Psalm 8
- Have each person use the Ecological Footprint worksheet (found at: www.ncccojustice.org/eco/footprint) to determine the footprint they leave on God's creation
- Review the worksheet and discuss different ways that the participants, their families, and communities can reduce their ecological footprint. Discuss the impact reducing ecological footprints would have on God's Creation

Haves and Have Nots

- Read Psalm 24:1-2 out loud to the group and then divide the youth into four equally sized groups.
- Give one group a box containing a piece of poster board, a set of markers, and a container of water. Another group receives a piece of poster board, a marker, and a smaller container of water. The third group should receive the poster board, a pen, a pencil, and directions to a source of water (sink, water fountain, etc). The last group should receive a napkin, a pencil, and directions to the nearest lake, creek, or river.
- Inform the groups that they need water in order to make lemonade, and global warming has caused the river to dry up. Using the resources you've allotted, have them devise ways they can adapt. Have them use their drawing materials to outline how they will obtain water.
- The lack of access to clean water is a major problem for many living in poverty, and is getting worse as climate change causes more droughts. Discuss how this activity shows the plight of those in extreme poverty, and their susceptibility to and inability to adapt to climate change.

**CLIMATE CHANGE
AND THE MILLENNIUM
DEVELOPMENT GOALS**
**Many countries, including the
United States, as well as a
host of religious groups, have
committed to achieving the
Millennium Development Goals
(MDGs), which has goals to
eradicate extreme poverty
and hunger and achieve
environmental sustainability.
The ravages of global climate
change have the possibility
of reversing the work already
done towards achieving the
MDGs and keeping the work
that still needs to be done from
being completed.**



O Lord, how manifold
are your works!
In wisdom you have
made them all; the
Earth is full of your
creatures...Psalm 104:24, 30

SERMON STARTERS

THE POWER OF CHRIST IN US

Acts 7:55-60; Psalm 31:1-5, 15-16; 1 Peter 2:2-10;

John 14:1-14

The verses found in Acts, Psalms, 1 Peter, and John proclaim that our salvation relies on the power of God. Stephen was stoned to death for declaring his faith, and maintained that faith even in the face of death. The verses from Psalms remind us of the call to turn to God in times of trouble, and to pray for deliverance. 1 Peter reminds us that we are those chosen by God, granted mercy to live out that calling. In order to live that out, we are to turn to God. Finally, this well known verse in the Gospel of John tells us of the saving grace that comes from He who is the Way, the Truth, and the Life. It is through Christ that we come to know God, and do acts even greater than those of Christ, who is going to God.

In our world today we are facing perhaps the greatest challenge ever put before us as a global community. Climate change is fundamentally altering the world around us. We are damaging God's Creation, and with it, putting the most vulnerable among us in even greater danger. Those living in poverty are not equipped to deal with impacts of climate change such as flooding, disease, drought, and stronger hurricanes. Scripture reminds us that it is in hard times that we are to turn to God—for prayer and for the power to perform good works. The opportunity is before us, to set the example and be a light in this world—greening our churches, our homes, and calling on our leaders to fight climate change. Christ died so that we may have life, and participate in the saving of this world. We have the opportunity. We can take steps to fight climate change and with it help our brothers and sisters who are living in poverty.

GOD'S SPIRIT IS IN YOU

Acts 17:22-31; Psalm 66:8-20; 1 Peter 3:13-22;

John 14:15-21

These verses remind us of God's role in Creation, and our responsibility for it. The scripture from Acts tells us that God does not reside in a shrine, but rather throughout all of Creation, for God made it. These verses also include a stern reminder for us to care for God's Creation. The scripture from 1 Peter reminds us that repentance and creation saving action is going to require sacrifice. But we are not to fear, for with God pleasing action comes God's blessing. It is this blessing that allows us to turn from our ways and begin to renew God's Creation that surrounds us. God has blessed us with the constant presence of the Holy Spirit

within us, so that we may live in a way that is fitting of God's children.

We are now aware that the responsibility for global climate change rests with humans, and that the cycle of extreme poverty is perpetuated by human sin, including sins of omission. We have been blessed with the power of the Holy Spirit to do the right thing, to treat this Creation as God's, and to work to restore Creation in a way that helps people living in poverty. Just as our actions (and inactions) have caused these sins to continue, our repentance and recommitment can turn them around, for God's presence never leaves us.

WE ARE WHO CREATION IS WAITING FOR

Psalm 104: 1-25, 30. Romans 8:19; Col. 1:15-20

This Psalm reminds us not only that it is God who created all things, but that God is constantly creating, and renewing Creation. This is emphasized in the passage from Colossians, which proclaims Christ as the firstborn of all Creation, all of which comes from God. According to scripture, all that is needed is the revealing of the children of God. And we are those children of God for which Creation is waiting.

Imagine, if it could be expressed, the enthusiasm with which Creation would greet us if we were to live in the glorious way that God intended. As the children of God, we are tasked with continuing the reconciliation that Jesus Christ began. This means living in harmony with the rest of Creation, both our brothers and sisters living in poverty, and the environment which surrounds us all. We should be mindful of the way we treat God's creation, and the way we treat the vulnerable among us. Because we are the very children that Creation has been waiting for, we should strive to live out our call to do justice and love mercy. In Genesis, God created everything and declared it good. In the life, death, and resurrection of Jesus the Christ, God again reconciled all of Creation back to God. Finally, God enabled us, as God's children, to be revealed to Creation through the power of the Holy Spirit. As living parts of God's reconciliation, it is time to live into that reality, and reveal ourselves to the rest of Creation. In revealing ourselves, we are to act in ways that promote abundance and no longer perpetuates the reinforcing and interconnected cycles of climate change and poverty, but rather pulls all of Creation out of those cycles, and renews it once again.

SENDING FORTH

Leader: Grant us a spirit of concern for the future of our environment; Bring an end to the exploitation of the earth's scarce resources; Encourage us to be responsible stewards of your Creation.
Response: Creator God, make us prophets of our time

Leader: Grant us a spirit of respect, recognizing the value and integrity of all Creation; Encourage us to be accepting of ourselves and of others.
Response: Creator God, make us prophets of our time

Leader: Help us become advocates of peace, bringing an end to conflict and division; Renew our commitment to challenging the causes of injustice.
Response: Creator God, make us prophets of our time

Leader: Grant us a spirit of openness to see God within and around us; Help us rejoice in the good we have experienced as we move forward to the future; Help us use our senses to celebrate beauty and creativity in the world.
Response: Creator God, make us prophets of our time

Leader: Grant us a spirit of truth to recognize failings, which have hurt us, others and the world; Give us the humility to ask forgiveness for our part in any wrongdoing;
Response: Creator God, make us prophets of our time

Leader: Grant us a spirit of generosity to reach out in trust to those we encounter; Help us to embody God's love in our relationships with one another and with all of Creation.
Response: Creator God, make us prophets of our time

For more information on global climate change and how you can help protect God's creation, visit the National Council of Churches Eco-Justice Program website at www.ncccojustice.org, 202-544-2350, info@ncccojustice.org



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And, the expected toll on human society is staggering. Global climate change reduces access to drinking water, limits access to food, and negatively impacts human health particularly in Africa, Asia, and Latin America. Although global climate change affects all human populations across the globe, it hits those living in poverty the hardest because they depend on the surrounding physical environment to supply their needs and have limited ability to cope to climate variability and extremes.

Our call as people of faith to protect the most vulnerable and to be stewards of God's Earth means we must act to stop catastrophic global climate change.



CALL TO WORSHIP

Adapted from Acts 17:22-31

Leader: The God who made the world and everything in it, who is Lord of heaven and Earth, does not live in shrines made by human hands.

All: For all is of God.

Leader: Nor is God served by human hands, as though the Creator needed anything, since the Lord gives to all mortals life and breath and all things.

All: For all is of God.

Leader: Since we are God's offspring, we ought not to think that the deity is like gold, or silver, or stone, an image formed by the art and imagination of mortals.

All: For all is of God. Let us worship God!

PRAYER OF CONFESSION

God of all Creation, we come to you in a moment of personal and corporate confession. We participate in a system which is exploitative and violent and which separates humanity from the rest of Creation. By acts of omission and commission we cause harm to others. At times we are guilty of complicity, passivity and denial, at other times of abuses of power. We hear the cries of both our fellow humans, who are already living in the midst of extreme poverty and hunger; and the cries of all creation. We know we bear responsibility for the pain of both, and we know the impact one has on the other. We confess our complicity in the plight of all of your Creation, and beg your forgiveness and mercy, that we may do better to follow in the way of You who creates. **Amen.**

PRAYER OF REPENTANCE

Creator God, have mercy on our wayward world, tottering on the brink of self-destruction. Have mercy on the rulers and statesmen who bear the ultimate burden of government. Have mercy on our nation as we face our share of responsibility. We recognize that we have allowed the values of consumerism to override the permanence of your Creation, and cause us to act in ways that damage your creation and wrap your children in the cycle of poverty. Have mercy on us all, and grant us your forgiveness. Amen.

ASSURANCE OF PARDON

Leader: The Lord says, See, I am making all things new.

Response: If anyone is in Christ, there is a new Creation.

Leader: In Christ, God reconciled the world. Through Christ your sins are forgiven.

(Adapted from 2 Corinthians 5:17-19 and Revelation 21:5)

O Lord, how manifold are
your works! In wisdom
you have made them all;
the earth is full of your
creatures... When you
send forth your spirit,
they are created; and
you renew the face of
the ground. Psalm 104:24, 30

THE UNITED STATES, CLIMATE CHANGE, AND POVERTY

The United States is the largest per capita producer of carbon emissions per capita in the world, having 4 percent of the world's population and producing more than a quarter of the greenhouse gases emitted.⁴ In our effort to seek justice, it is only appropriate that those who cause a problem take responsibility to rectify it. Global climate change requires that people of faith lift up the voices of the voiceless—those in poverty, the elderly, and those of future generations. Global climate change raises questions of social justice, equality, and human rights stretching across borders and generations.

RESOURCES FOR GROUP STUDY

Web of Life

- Form a circle of people (about ten). Give them three balls of string, and ask them to throw the balls across the circle to each other, while holding on to a portion of the string. Continue to toss the balls across the circle until you have built up a web of string. Eventually you will be able to balance an inflatable globe, representing the Earth, on the top of the web. The group has now created a representation of the web of life, which is necessary to support life on the planet. Allow two or three people to let go of their strings. Eventually, perhaps quickly, the web will not be able to bear the weight of the globe. While the web of life may be able to sustain a few breaks, eventually there will come a time when it is no longer able to sustain the abundant life that we know.
- Reflect on how this displays the causes and effects of climate change and poverty, and how this shows the interconnectedness of all of God's Creation.

Genesis Story

- Read Genesis 1:23-31 out loud as a group or alternately by different people.
- Ask the following questions for discussion: If we recognized everything as a creation of God, and a Creation that God said was good, how would this change how we interact with it? What does it mean to be "made in God's own image?" How should this change how we interact with all of Creation? If everyone recognizes every other human being as created in the image of God, should we allow disproportionate impacts of climate change to be felt?

Word study: Creation

- Open with the following observation: Often—too often—we talk of this as an environmental movement, or an ecological movement. When we do, we miss what makes this a matter of faith. This environment is the creation of God, and the word Creation appears 55 times in Scripture.
- Have participants locate at least one reference to Creation in the Bible and have a few participants share their Bible passage. Afterwards, have people write or draw an example of what Creation means to them.
- With the group, discuss current attitudes towards Creation and global climate change and how our attitudes should change based on God's view of Creation.

⁴Issues: *Global Warming*. Natural Resources Defense Council. <http://www.nrdc.org/globalWarming/f101.asp#7>. December 2007.

CONGREGATIONAL STORIES

- **In July 2006, the Unitarian Universalist Association (UUA) adopted a formal statement of conscience on the threat of global warming. The statement includes a two-year study process and commits the UUA to promoting individual and collective actions to address global warming.**
- **In March 2006, the Sisters of St. Dominic of Caldwell turned on 648 solar panels that now power 8 percent of the campus, making it the largest solar power program in New Jersey.**
- **The Hebron Baptist Church in Dacula, GA, installed nearly 1,000 energy-efficiency lights, saving \$1,400 per month after loan payments. The church is saving \$32,000 each year and has reduced its carbon emissions by 1 million pounds.**
- **Bethesda Lutheran Church in Ames, IA, replaced incandescent lighting with compact fluorescent lighting, installed computer controls to heat and cool occupied rooms, purchased new energy efficient freezers, and installed new storm windows over the stained glass windows. They are saving \$5,000 each year and have reduced their carbon emissions by 100,286 pounds.**



A CALL TO ACTION

As people of faith, we understand our responsibilities to protect the sacred gifts given by God and to heal a world torn by brokenness and human strife. Global warming, like all human-induced environmental degradation, is a sign of this brokenness. The increase in greenhouse gas emissions is causing God's Earth to warm to dangerous levels and creating changes to our global climate. The changes that we are already experiencing and will continue to experience are threatening the livelihood of those living in poverty who are least able to deal with these changes. We know that industrialized nations contribute more carbon emissions than their less industrialized neighbors. In many ways, global warming represents an unprecedented moral failure on our part as stewards of God's creation and harbinger's of justice.

Action Steps

- Integrate the issues of global climate change and poverty as justice challenges facing people of faith through study and worship. Use this resource to lead Sunday school classes, small group discussions, or plan a worship service.
- Make your home, church, or faith community more energy-efficient. For ideas, visit www.nccecojustice.org/climate.html.
- Support legislation fighting climate change that includes assistance to those living in poverty.

For more information on global climate change and how you can help protect God's creation, visit the National Council of Churches Eco-Justice Program website at www.nccecojustice.org, 202-544-2350, info@nccecojustice.org

CONGREGATIONAL STORY
Solana Beach Presbyterian Church in Solana Beach, CA, upgraded its incandescent lamps with fluorescent lighting, added occupancy sensors, installed LED exit signs, and new air conditioning and heating systems. They are saving \$6,620 each year and have reduced their carbon emissions by 120,000 pounds.

