HUNGER EDUCATION TOOLKIT

Making Connections, Our Web of Resources

Module 1: Opening | Activity Level: Low

Goal: The world in which we live is a rich tapestry of intersecting, linking elements. The ecosystems, the flora and the fauna, the people and creatures of the earth are all woven together to create God's beautiful web that we know as creation. When one part of the web is disturbed, moved, modified, or changed, other elements are affected, too. This exercise will provide us with a physical representation and reminder of the essential connections that exist between ourselves, those around us, and all of creation.

MATERIALS

- Ball of string or skein of yarn

INSTRUCTIONS

1. Ask participants to stand in a circle.
2. Hand one person the end of the string and ask him or her to hold it. As you do so, name some part of Creation (for example, "Ants are part of Creation"). Then move to a second person in the circle *(not the person directly next to person one)*, unwrapping the string as you go. When you reach the second person, ask him or her to hold the string so that it forms a line between them and the first person. You continue to hold the ball of string. As you hand the string to the second person, name a part of Creation that is related to and dependent upon the first (for example, ants live in and maintain the soil). Continue moving around the group, handing out sections of string and naming related parts of Creation as you go (for example, the soil provides plants with nutrients; animals eat the plants and fertilize the soil; the sun allows plants to grow and causes water to evaporate; evaporated water condenses and falls as rain—which nourishes the plants, animals and people; the nourished plants release oxygen that people and animals breath; etc.). Continue until everyone in the circle is holding a point on the string, which is now a web crisscrossing the circle.
3. Ask everyone to pull back a bit on their string to make the web taut.
4. **Reach into the web of sting, select one strand, and pluck it; that is, pull it and let go.**
5. Ask everyone who felt the tug to raise his or her hand. How many people felt it? Everyone?
   Point out that you pulled just a single strand of string and yet multiple people felt it. Pluck a different strand from a different part of the web and see who felt it. Repeat as needed to reinforce the point.

Note: Ideally, you'll have a circle of 6 to 12 people. If your group is larger than this, break into multiple circles of 6 to 12 people and ask one person in each group to serve as the leader, holding the ball of string and passing out sections of it as you state the Creation connections for all of the groups.

QUESTIONS FOR DISCUSSION:

1. What does interconnectedness mean in terms of how we live on and use the planet?
2. What does it mean in terms of our individual responsibility?
3. Are all parts of Creation affected equally by a change in the web? (Did some of you feel the reverberations of the plucked strand of string more than others?)
4. What does interconnectedness mean for those who are poorest and hungriest versus those who are wealthiest?

POINTS TO EMPHASIZE:

1. All things are connected, people to the land, creatures to the land, people to creatures, water to plants, etc. We, as humans, are woven into the delicate web of creation.
2. God made creation and is in all parts of creation.
   - "God is in all creatures, even in the smallest flowers." –Martin Luther
   - "The power of God is present at all places, even in the tiniest tree leaf." – Martin Luther
3. Those who are most vulnerable to the impacts of climate change are the poorest and hungriest people – subsistence farmers, refugees, fisher folk – those who depend on the land and sea for their survival.
4. Everyone's actions—from whole societies to individuals—can impact at least part of the web.

When you have completed the Opening Module(s), proceed to Module 2 Learning

HUNGER EDUCATION TOOLKIT

Jelly Bean Climate Change Resource Game

Module 2: Learning | Activity Level: Medium

Goal: Learn how climate change affects the limited resources of countries and therefore how it affects hunger. Recommended for groups of 4 to 24 people.

MATERIALS

- Country cards (provided)
- Climate change cards (provided)
- Jelly beans
- Discussion questions

Note that a bit of preparation is needed for the game. If you have access to cardstock, that works best for the country and climate change cards. If you will have multiple groups playing, be sure that the sets of country and climate change cards match (i.e., be careful in the reproducing of the cards not to jumble them all together, as this could hamper the effectiveness of the game in demonstrating how climate change and hunger are interrelated).

INSTRUCTIONS

The game is built around a group of four people, with each person representing one of four fictional countries: Aplome, Bigendy, Cipulti, and Diprala. If your group is large, split the participants into groups of four and several games can be conducted at once. If your group is not divisible by four, create pairs.

To determine who will be which country, each person (or pair) selects a country card at random. The card provides a brief description of the country and states the number of jelly beans the country has. Jelly beans represent the country's wealth and resources, and the facilitator distributes the appropriate number of jelly beans to each person. He/she also sets aside a handful to be given out during the game.

Next, a stack of climate change cards are shuffled and placed face down on the table. The game proceeds with the facilitator (or a player, if there are multiple groups) flipping the cards over one at a time. Each card describes a climate change event and its impact on the four countries. Each card instructs that jelly beans be eaten or added, depending on the event described.

The game ends when all of the cards have been flipped over. If anyone runs out of jelly beans, they—and the country they represent—have lost the game. The country with the most jelly beans left at the end wins.

The next step is to debrief the experience as a whole group, using the provided discussion questions as a guide. The game is set up to reflect real life – those who are living in or near poverty are disproportionately affected by climate change. This is likely to cause some frustration and dissatisfaction with the game, and the discussion is very important for both validating those feelings and channeling them appropriately.

Though the countries in this game are fictional, the changes they face in their environments are all possible effects of climate change according to the Intergovernmental Panel on Climate Change, as documented in *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, O.F. Canziani, J.P.Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 7-22.

In addition, the following sources were used to determine the types of impacts climate change will have on societies:

http://www.independent.co.uk/environment/nature/insect-explosion-a-threat-to-food-crops-781016.html

http://allafrica.com/stories/200810090254.html

http://www.irishtimes.com/newspaper/world/2008/0929/1222420015020.html

DISCUSSION QUESTIONS

1. How did you feel as the game began? How did you feel by the time the game ended?

2. What surprised you in this activity?

3. Which countries were the most vulnerable or disadvantaged in the activity?

4. Did you notice a difference in the number of jelly beans that were taken away from one country versus another? Why do you think that is the case?

5. Did you disagree with the number of jelly beans being added or taken away on any of the cards? Why or why not?

6. The countries in the game are fictional and don't represent any one real country. But they do resemble circumstances found in different parts of the world. What real countries share some of the characteristics of Alpome? Bigendy? Cipulti? Diprala?

7. Have you seen any of the events described on the cards occurring in our world today?

8. Do you see any of the events described on the cards occurring in your community? Your state? The U.S.?

9. What was the role of ELCA World Hunger in the events described in the activity? Is it sustainable?

10. In the game, when a country runs out of jelly beans, they lose. What do you suppose could happen in the real world when a country runs short on resources? How does it affect other countries? This is an important connection to make—we live in an increasingly interrelated world. How do the hardships of one country impact another (think about immigration issues, economic fallout, and so on)?

11. Why is ELCA World Hunger addressing climate change?

When you have completed the Learning Module(s), proceed to Module 3
Closing and ACTION

COUNTRY CARDS

COUNTRY NAME: ALPOME

Country Description: Alpome is a small, tropical island of about 3000 square miles and a population of 150,000, most of whom live in communities along the coasts. Alpome is mountainous with a wet and a dry side. It boasts beautiful beaches and waters, and significant biodiversity. It attracts many tourists, but being a relatively small and remote island, further economic expansion has been difficult, and the economy of Alpome has remained modest for many years.

Latitide: low

Industries: tourism, fishing, and limited agriculture

Per capita income: $2,930/year

Poverty rate: 18%

Vulnerabilities: extreme weather events (hurricanes, tropical storms), drought (drop in freshwater supplies), increase in water temperatures, spread of disease, political/civil instability

Jellybeans: 15

COUNTRY NAME: BIGENDY

Country Description: Bigendy is a warm, wet, mountainous country. It covers about 100,000 square miles and supports a population of 6 million people, many of whom live in small, rural communities. The climate provides good agricultural opportunities for Bigendy, and the mountains contain rich deposits of minerals. It is also beautiful. However, the mountains also make transportation difficult, and the steep slopes make farming time-intensive.

Latitude: low

Industries: agriculture (coffee and cocoa), eco-tourism, timber, and natural resource extraction

Per capita income: $2,400/year

Poverty rate: 35%

Vulnerabilities: drought (water supply for humans and agriculture), spread of human disease, spread of plant pests and disease, weather events (hurricanes, tropical storms) that lead to flooding, mudslides, etc., political instability

Jellybeans: 20

COUNTRY NAME: CIPULTI

Country Description: The primary feature of Cipulti's landlocked landscape is savanna, giving way to woodlands in the western part of the country, and desert in the southeast. Lake Twipol, near the country's northern border, attracts a variety of animals during their yearly migrations. Consequently, Cipulti has a thriving safari tourism industry. Generally poor soil quality and relatively low annual rainfall makes farming difficult. Cipulti covers about 325,000 square miles and is home to 17 million people.

Latitide: mid

Industries: agriculture (sheep, cattle and grain), natural resource extraction, safari tourism

Per capita income: $800/year

Poverty rate: 56%

Vulnerabilities: drought, deforestation, soil erosion, desertification, political instability

Jellybeans: 10

COUNTRY NAME: DIPRALA

Country Description: Diprala has a temperate seasonal climate, and includes coastal, mountainous, and flat terrain. Diprala is well-known for its outdoor recreational opportunities. It has a highly developed and diversified economy, and a highly skilled workforce. Diprala is about 175,000 square miles and has a population of 28 million people.

Latitude: high

Industries: telecommunications, pharmaceuticals, engineering, natural resources, timber, manufacturing, agriculture

Per capita income: $40,910

Poverty rate: 8%

Vulnerabilities: drought (water for human use and agriculture), extreme weather, change in growing seasons, rise in sea level

Jellybeans: 50

CLIMATE CHANGE CARDS

The temperature rise of the ocean causes the fish populations to shift toward higher latitudes. Fishermen in Alpome bring in substantially smaller catches than they did five years ago. Alpome: -3 Bigendy: 0 Cipulti: 0 Diprala: 0	A major forest fire in Diprala destroys homes, animal habitats, hiking trails, and the forest industry. Alpome: 0 Bigendy: 0 Cipulti: 0 Diprala: -1
Due to rising levels of CO2 in the atmosphere, the number of leaf-eating insects surge around the globe. Crops are damaged and yields lessened everywhere. Alpome: -1 Bigendy: - 3 Cipulti: -3 Diprala: -1	Increasing global temperatures lengthen the growing season in mid-latitudes and higher altitudes, increasing agricultural production. But in low latitudes with dry climates, temperatures become too hot and the season shortens. Alpome: 0 Bigendy: +1 Cipulti: -2 Diprala: +2
A tropical cyclone hits Alpome. Buildings are destroyed and fresh water supplies interrupted. ELCA International Disaster Response, directed through ELCA local companion churches, provide immediate relief and engage in longer-term rebuilding of critical fish processing infrastructure. Improvements are made over the previous, older structures. Alpome: +2 Cipulti: 0 Bigendy: 0 Diprala: 0	ELCA World Hunger helps fund a project of Lutheran World Relief and its local partner to help people in a drought stricken area of Cipulti to water their crops with an innovative gravity-flow irrigation system that brings water right to their fields. Still, ongoing water shortages are cause for concern. Alpome: 0 Bigendy: 0 Cipulti: +2 Diprala: 0
Unusually heavy rains in Bigendy and Diprala cause flooding in low-lying farm areas, damaging crops. In addition, many houses are destroyed in Bigendy. In Diprala, many houses suffer damage, but are spared destruction due to better construction and building code enforcement. Alpome: 0 Bigendy: - 3 Cipulti: 0 Diprala: - 1	A city in the mountains of Diprala is concerned about a dam collapsing under the weight of glacier lake outburst caused by melting glaciers. The government spends millions of dollars to reinforce the dam and provide additional drainage channels. Alpome: 0 Bigendy: 0 Cipulti: 0 Diprala: - 1

CLIMATE CHANGE CARDS

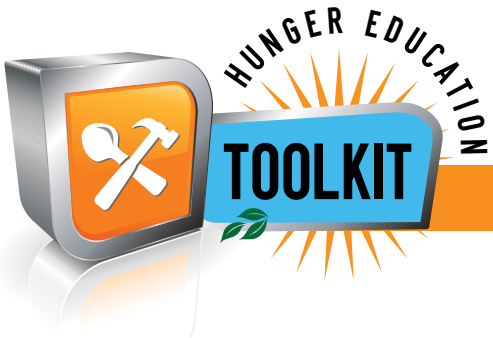
Diprala experiences warmer winters due to climate change. Fewer people die of cold exposure. Alpome: 0 Bigendy: 0 Cipulti: 0 Diprala: +1	Melting ice caps cause rising sea levels and coastal flooding. This is especially devastating to Alpome, since most of its citizens live and work along the coasts. Alpome: - 3 Bigendy: 0 Cipulti: 0 Diprala: - 2
Unpredictable rainfall and increased drought in semi-arid low latitudes causes crop and livestock failure as well as a shortage of fresh water for people. Alpome: 0 Bigendy: 0 Cipulti: -3 Diprala: 0	A tropical cyclone hits Alpome. Weaker than predicted, it didn't cause the widespread damage people feared. However, the temporary interruption to fresh water supplies caused an increase in water-borne disease. Alpome: -1 Bigendy: 0 Cipulti: 0 Diprala: 0
Overall warmer temperatures, a shorter growing season, and reduced water supplies in Cipulti cause animals to shift their migration routes north and west. As a result, they spend less time and cover less territory in Cipulti, damaging the safari tourism critical to Cipulti's economy. Alpome: 0 Bigendy: 0 Cipulti: -3 Diprala: 0	A tropical storm in Bigendy causes a major mudslide. Alpome: 0 Bigendy: -2 Cipulti: 0 Diprala: 0
Heavy rains destroy crops and stored food causing famine in Bigendy. The Lutheran World Federation (LWF), with assistance from ELCA International Disaster Response, responds to the disaster by creating food distribution, agricultural assistance programs, and shelter for those people who are homeless. Alpome: 0 Bigendy: +1 Cipulti: 0 Diprala: 0	After years of melting, the Obigline Glacier in Diprala disappears, causing the Obigline river to dry up. Diprala loses one of its sources of fresh water. Alpome: 0 Bigendy: 0 Cipulti: 0 Diprala: -2

CLIMATE CHANGE CARDS

Warmer temperatures allow ugly algae to grow in one of Bigendy's popular high mountain lakes, killing local fish and driving away hikers. Alpome: 0 Bigendy: -1 Cipulti: 0 Diprala: 0	Higher ocean temperatures cause a high-intensity tropical cyclone, bringing flooding from a bigger-than-usual storm surge in Alpome and, later, very heavy rain in Bigendy. Alpome: -3 Bigendy: -2 Cipulti: 0 Diprala: 0
A heat wave hits Cipulti, destroying crops, livestock, and reducing water supplies for people. Alpome: 0 Bigendy: 0 Cipulti: -2 Diprala: 0	Drought causes water shortages in Cipulti and Bigendy. Already dry, Cipulti is especially hard-hit. Alpome: 0 Bigendy: -1 Cipulti: -2 Diprala: 0
Warmer temperatures allow malaria-infected mosquitoes to enter Bigendy and Diprala, where malaria hasn't traditionally been a problem. Because Diprala has access to anti-malarial drugs, they are largely protected. However, Bigendy struggles and both countries have difficulty with resistant strains of the disease. Alpome: 0 Cipulti: 0 Bigendy: -2 Diprala: -1	Annual snowfall rates drop and no longer reliably provide snow for the skiing industry in Diprala. Ski resorts respond by making snow, which is expensive and requires lots of water. Tourism drops because the quality of snow is not as good. Fortunately, skiing is only one aspect of Diprala's economy, so the overall impact is not too bad. Alpome: 0 Cipulti: 0 Bigendy: 0 Diprala: -1
Higher temperatures bleach coral reefs, driving away local fish and scuba divers in Alpome. Alpome: -1 Bigendy: 0 Cipulti: 0 Diprala: 0	The Lutheran Church in Cipulti, working in accompaniment with ELCA Global Mission, receives ELCA World Hunger funds to set up 3 health clinics in Markeeza province. Maternal and infant mortality rates drop, and immunization rates rise. Alpome: 0 Bigendy: 0 Cipulti: +2 Diprala: 0

CLIMATE CHANGE CARDS

The efforts of ELCA Advocacy and Bread for the World, both supported by ELCA World Hunger, influences U.S. federal policy to increase aid to developing countries. Alpome: +1 Bigendy: +1 Cipulti: +1 Diprala: 0	Hunger, malnutrition, and the resulting impacts on child growth and development increase as multiple years of higher temperatures and lessened water supplies take their toll on Cipulti's food supplies. People begin emigrating to neighboring countries, causing political tensions. Alpome: 0 Bigendy: 0 Cipulti: -3 Diprala: 0
Reduced annual rainfall and higher levels of evaporation due to higher temperatures cause Alpome to experience fresh water shortages during the dry season. Alpome: -2 Bigendy: 0 Cipulti: 0 Diprala: 0	Increased temperatures allow non-native plant species to thrive on Alpome, causing a loss of native species. Alpome: -1 Bigendy: 0 Cipulti: 0 Diprala: 0



Climate Change and Hunger Toolkit

Closing and ACTION | **Activity Level: All**

Hunger and Climate Change will not end without your **action**. All of our actions, even small ones, add up to make a big difference. Below is a list of takeaways—actions—related to today's gathering that you can incorporate into your life right away to contribute to the end hunger and stop the warming of the globe. Take some time to talk as a group about the items listed here. What might you do together? What might you do individually? Who else might you invite to join you? This is certainly not a comprehensive list and your group may create their own list—GREAT!

Please share with us what you and your group are doing in your community related to hunger and climate change. We would love to hear about your good work! Tell us about it at hunger@elca.org.

GIVING

- **One is a BIG number**
  Give generously to ELCA World Hunger—contribute online or through your congregation. Challenge your family (and congregation) to contribute one percent of your income to ending hunger locally and globally. Learn more at www.elca.org/giving.
- **Just What I Wanted...Thank You!**
  Make plans to organize an Alternative Gift Fair in your congregation, neighborhood, campus or workplace. Make it easy to give gift donations from ELCA Good Gifts and God's Global Barnyard (www.elca.org/goodgifts). Sell items from Lutheran World Relief (LWR) such as fair trade coffee, chocolate, and handcrafts projects (www.lwr.org/fairtrade). Invite others in your community to contribute handmade items to the sale and donate the proceeds to ELCA World Hunger.
- **Nice Bag!**
  Reusable bags eliminate a tremendous amount of waste! Consider selling reusable bags in your congregation and community. You can even personalize the bags with printing and art work to make them extra special. Couple the bag sales with a month of environmental and hunger education through worship, small groups, or Sunday school.

  CAUTION—do your homework and make sure that the bags you purchase are sweat-shop free (or even make them yourself!). Connect the bag sales to the ongoing anti-hunger work of your community by donating sale proceeds to ELCA World Hunger.
- **Keep the Receipt**
  Track your spending for one week. Where did you spend the most? The least? What surprised you? Make a gift to ELCA World Hunger as a sign of gratitude for all that God has entrusted to you.

ADVOCATING

- **Get Connected and Act**
  - > Join the ELCA e-Advocacy network (http://ga6.org/elca_advocacy/join.tcl) and receive action alerts on timely legislative issues have an impact on hunger in the world.
  - > Write a letter to your elected officials about a topic you received from an e-Advocacy alert. Find out who they are by visiting: www.elca.org/advocacy. Click on the "Get Involved Link" then click on "Tools."
  - > Write an op-ed (opposite editorial) in your local paper related to a current local concern for those most in need.

> Join the ELCA Shareholders Network and stay up to date on current advocacy issues related to corporations that have environmental implications. Sign up at www.elca.org/corporate.

- **Organize Your Toolkit**
  Check out the ELCA Creation Care Toolkit (http://archive.elca.org/advocacy/environment/education.asp). See what you can incorporate into the life of your congregation or campus community.
- **Eco-Justice Campaign**
  Check out the Eco-Justice campaign of the National Council of Churches. Eco-justice includes all ministries designed to heal and defend creation, working to assure justice for all of creation and the human beings who live in it. Learn how you and your congregation can be involved in this important work at www.nccecojustice.org.

EDUCATING YOURSELF AND OTHERS

- **Say What?**
  Gather your family or a small group from your congregation, neighborhood, campus or workplace to watch and discuss "The Story of Stuff." This 20-minute, fast-paced, fact-filled online video examines the production and consumption patterns of our stuff from extraction through sale, use, and disposal. All the stuff in our lives affects communities at home and abroad, yet most of it hidden from view. Watch and learn at www.storyofstuff.com.
- **Measure your Footprint**
  The Environmental Protection Agency (EPA) has developed a Personal Emissions Calculator to help estimate and reduce personal greenhouse gas emissions. Use the calculator with a small group from your congregation, campus, workplace, or neighborhood and challenge each other to make lifestyle adjustments and reduce your carbon footprint. See www.epa.gov/climatechange/emissions/ind_calculator.html.
- **Green Church**
  Check out the Web of Creation website for terrific ideas and guides to help your congregation become a "Green Church" through worship, education, advocacy, and in your buildings and on the grounds. Share what "green actions" your congregation is taking with members, the local community, and ELCA World Hunger! Learn more at www.webofcreation.org.
- **Connect with Others Who Care**
  > Join the ELCA World Hunger Facebook Cause.
  > Connect with your synod's hunger team and learn what others in your area are doing... and join them. To learn more contact your synod office or send an email to ELCA World Hunger at hunger@elca.org.
  > Subscribe to and read the ELCA World Hunger blog "Hunger Rumblings" at http://blogs.elca.org/hungerrumblings.

LEADING THE SIMPLE LIFE

- **Alternatives for Simple Living**
  Visit www.simpleliving.org and explore lifestyle resources from Alternatives for Simple Living, including their annual booklet "Whose birthday is it, anyway?" Check out the new DVD, "$imply Enough," which is a great tool to facilitate conversations about our own lifestyle choices.
- **Calling All Thespians and Drama Queens**
  "THE RACE: A SIMPLICITY MUSICAL" is a creative and fun way to engage your congregation in exploring lifestyle and stewardship practices. The musical is easily staged and performed, requiring as few as eight performers and minimal technical crew. "The Race: A Simplicity Musical" is a terrific complement to your congregation's participation in ELCA World Hunger. Learn more at http://archive.elca.org/hunger/musical.
- **Fresh from the Farm**
  Purchase locally grown, organic (whenever possible) fruits and vegetables. These foods not only support local farmers and the local economy, they actually help the environment by limiting the gas used in shipping foods from far away farms and processing plants to your neighborhood. If you have space and a green thumb, try growing some of your own herbs and vegetables. As an added bonus, you'll eat better and may even improve your health.

Close this session with a song and prayer. Here are a few suggestions...

PRAYERS

1. Praise to you, Lord Jesus Christ, who in your self-emptying love gathered up and reconciled all creation to the Father. Innumerable galaxies of the heavens worship you. Creatures that grace the earth rejoice in you. All those in the deepest seas bow to you in adoration. As with them we give you praise, grant that we may cherish the earth, our home, and live in harmony with this good creation, for you live and reign with the Father and the Holy Spirit, one God, now and forever. Amen. *ELW, additional prayers, Creation, Creation's praise, page 81*
2. God of abundance, you have poured out a large measure of earthly blessings: our table is richly furnished, our cup overflows, and we live in safety and security. Teach us to set our hearts on you and not these material blessings. Keep us from becoming captivated by prosperity and grant us wisdom to use your blessings tot your glory and to the service of humankind, through Jesus Christ our Lord. Amen.*ELW, additional prayers, Stewardship, The proper use of wealth, page 80*
3. 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. *National Council of Churches 2008 Earth Day Sunday resource "The Poverty of Global Climate Change"*
4. Praise God, from who all blessings flow; praise God, all creatures here below; praise God above, ye heav'nly host; praise Father, Son and Holy Ghost. Amen. *Text: Thomas Ken, 1637-1711, alt., ELW 885*

SONG SUGGESTIONS FROM EVANGELICAL LUTHERAN WORSHIP (ELW)

- ELW 556
  Morning Has Broken
- ELW 680
  We Plow the Fields and Scatter
- ELW 715
  Christ, Be Our Light
- ELW 885
  Doxology

HUNGER EDUCATION TOOLKIT

What Does It Mean that the Earth Is Warming?

Module 1: Opening | Activity Level: Low

Goal: Introduce participants to the reality of global warming and stimulate thinking about ways in which climate change will impact the planet and the living things on it.

INSTRUCTIONS

What follows is a brief introduction to the realities of climate change, followed by a short list of resources. You can use this brief piece to introduce your audience to the issues surrounding global climate change. You can read the text verbatim if you like, though internalizing the content and shaping it to fit your precise context may be more effective. As there is a lot of information presented here, another option would be to copy this paper and pass out to all participants to read individually. Some of the facts are quite surprising so be sure to allow time for reflection and discussion.

WHAT DOES IT MEAN THAT THE EARTH IS WARMING?

Global warming means that the average temperature on earth is increasing over time. The Earth has warmed about 1.40˚ F over the last 100 years, and 1.10˚ F since 1975. A recent NASA study indicates that average temperature is increasing about .36 degrees F every decade. Recent years have seen the warmest average temperatures in the last 12,000 years, in other words, since human civilization has developed. In terms of how we live on planet Earth what does this really mean?

If the warming trend continues, scientists predict that average surface temperatures will be 1.8 to 3.6 degrees Fahrenheit warmer by the year 2050, in comparison to average temperatures in the 1970s. In temperate zones, this would be the climate equivalent of moving as much as 186 miles closer to the equator. Atlantic City, New Jersey, for example, would have a climate similar to today's Virginia Beach, Virginia, and Wichita, Kansas might have a climate more similar to that of Amarillo, Texas. If that was the only consequence of global warming, it might simply mean that we run our air conditioners more often.

However, the consequences of global warming are more complex than that, because changing temperatures affect summer temperatures more than winter temperatures, there are subtle but important changes in evaporation and precipitation patterns, and the effects of the changes in global average temperatures on the ocean are different than they are on land. These seemingly small changes are causing some important alterations in climate in several ways including a change in distribution of rainfall and an increase in extreme weather.

Although average rainfall will increase, some areas will experience an increase in rainfall and other areas will experience less rainfall. Precipitation is likely to come in fewer, more intense events with longer dry spells in between. A drying trend over many of the world's grain producing regions (the Mediterranean basin, southern Africa, parts of Australia, and northeast China) has already been observed since the last part of the 20th century and is having an impact on how (and whether) we grow food in areas that have been under cultivation for centuries. Flooding in regions that formerly rarely experienced flooding has major long term impacts on infrastructure, livelihoods and economic development and has both short and long term implications for agriculture. As a result of higher ocean temperatures there has been an increase in frequency and intensity of hurricanes and storm surges. This has been documented since the 1970's and is predicted to continue.

Indirect consequences of global climate change include a likely increase in food- and water-borne diseases among susceptible populations, a change in the distribution of disease carrying pests, like rodents and mosquitoes, and degraded air quality in many areas.

Although all societies are being challenged by climate change, wealthier and more developed countries have more resources available to adjust to the continuing changes. Do Christian people from the more developed nations have an additional responsibility to help people all over the globe in adapting to climate change? The ELCA World Hunger Program recognizes that including components that increase resiliency and flexibility to climate change are a part of sound development planning and also part of our responsibility to our global neighbors.

SOURCES OF INFORMATION

CCSP, 2008: *Analyses of the effects of global change on human health and welfare and human systems.* A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. [Gamble, J.L. (ed.), K.L. Ebi, F.G. Sussman, T.J. Wilbanks, (Authors)]. U.S. Environmental Protection Agency, Washington, DC, USA.

CCSP, 2008: *Weather and Climate Extremes in a Changing Climate. Regions of Focus: North America, Hawaii, Caribbean, and U.S.Pacific Islands.* A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. [Thomas R. Karl, Gerald A. Meehl, Christopher D. Miller, Susan J. Hassol, Anne M. Waple, and William L. Murray (eds.)]. Department of Commerce, NOAA's National Climatic Data Center, Washington, D.C., USA, 164 pp.

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PARTICIPANTS IN THE U.S. CLIMATE CHANGE SCIENCE PROGRAM (CCSP)

Agency for International Development

Department of Agriculture

National Oceanic and Atmospheric Administration

National Institute of Standards and Technology

Department of Defense

Department of Energy

National Institutes of Health

Department of State

Department of Transportation

U.S. Geological Survey

Environmental Protection Agency

National Aeronautics and Space Administration

National Science Foundation

Smithsonian Institute

When you have completed the Opening Module(s), proceed to Module 2 Learning

HUNGER EDUCATION TOOLKIT

Making Connections, Our Web of Resources

Module 1: Opening | Activity Level: Low

Goal: The world in which we live is a rich tapestry of intersecting, linking elements. The ecosystems, the flora and the fauna, the people and creatures of the earth are all woven together to create God's beautiful web that we know as creation. When one part of the web is disturbed, moved, modified, or changed, other elements are affected, too. This exercise will provide us with a physical representation and reminder of the essential connections that exist between ourselves, those around us, and all of creation.

MATERIALS

- Ball of string or skein of yarn

INSTRUCTIONS

1. Ask participants to stand in a circle.
2. Hand one person the end of the string and ask him or her to hold it. As you do so, name some part of Creation (for example, "Ants are part of Creation"). Then move to a second person in the circle *(not the person directly next to person one)*, unwrapping the string as you go. When you reach the second person, ask him or her to hold the string so that it forms a line between them and the first person. You continue to hold the ball of string. As you hand the string to the second person, name a part of Creation that is related to and dependent upon the first (for example, ants live in and maintain the soil). Continue moving around the group, handing out sections of string and naming related parts of Creation as you go (for example, the soil provides plants with nutrients; animals eat the plants and fertilize the soil; the sun allows plants to grow and causes water to evaporate; evaporated water condenses and falls as rain—which nourishes the plants, animals and people; the nourished plants release oxygen that people and animals breath; etc.). Continue until everyone in the circle is holding a point on the string, which is now a web crisscrossing the circle.
3. Ask everyone to pull back a bit on their string to make the web taut.
4. **Reach into the web of string, select one strand, and pluck it; that is, pull it and let go.**
5. Ask everyone who felt the tug to raise his or her hand. How many people felt it? Everyone?
   Point out that you pulled just a single strand of string and yet multiple people felt it. Pluck a different strand from a different part of the web and see who felt it. Repeat as needed to reinforce the point.

Note: Ideally, you'll have a circle of 6 to 12 people. If your group is larger than this, break into multiple circles of 6 to 12 people and ask one person in each group to serve as the leader, holding the ball of string and passing out sections of it as you state the Creation connections for all of the groups.

QUESTIONS FOR DISCUSSION:

1. What does interconnectedness mean in terms of how we live on and use the planet?
2. What does it mean in terms of our individual responsibility?
3. Are all parts of Creation affected equally by a change in the web? (Did some of you feel the reverberations of the plucked strand of string more than others?)
4. What does interconnectedness mean for those who are poorest and hungriest versus those who are wealthiest?

POINTS TO EMPHASIZE:

1. All things are connected, people to the land, creatures to the land, people to creatures, water to plants, etc. We, as humans, are woven into the delicate web of creation.
2. God made creation and is in all parts of creation.
   - "God is in all creatures, even in the smallest flowers." –Martin Luther
   - "The power of God is present at all places, even in the tiniest tree leaf." – Martin Luther
3. Those who are most vulnerable to the impacts of climate change are the poorest and hungriest people – subsistence farmers, refugees, fisher folk – those who depend on the land and sea for their survival.
4. Everyone's actions—from whole societies to individuals—can impact at least part of the web.

When you have completed the Opening Module(s), proceed to Module 2 Learning

HUNGER EDUCATION TOOLKIT

The Weekend Cartographer: Mapping Climate Change

Module 1: Opening | Activity Level: Medium

Goal: As the earth continues to warm the landscape of our planet has begun to change, sometimes at an alarming rate. This activity is designed to help participants imagine how some specific communities could change given the current warming trend and stimulate thinking about ways climate change will impact the planet and the living things on it.

MATERIALS

- Plain paper
- Markers, colored pencils, or crayons
- *Optional*—blank overhead transparencies and different colored permanent markers

INSTRUCTIONS

1. Divide the group into five smaller groups. Then assign each small group one of the following communities and ask them to write it at the top of the blank page:
   - Midwest farm
   - Island off the coast of Alaska
   - Small town on a South Carolina beach
   - Ski resort in Colorado
   - Suburban neighborhood in Arizona
2. Ask each small group to imagine that they are in a hot air balloon floating over their assigned community. Each small group should have a different color writing utensil.
3. Invite the small groups to draw what they see. Be as specific as possible and try to include as many of the 'essentials' that are needed to sustain the livelihood of the community or business. Label anything that you think others may not be able to easily identify.
4. After about 8 minutes or when most groups have finished ask the participants to stop drawing.
5. Ask the large group the following question and record answers on a dry erase board or flip chart: If the current warming trend continues, what effect do you believe it could possibly have on the planet?

   (Watch for answers such as droughts, flooding, different weather patterns, higher snow elevations, increased pest problems, soil erosion, increased fire hazards, etc.)
6. Now, back to the pictures. Small groups are invited to pass the drawing they created to another group. When this has happened ask the following: Given what we have just described as possible changes to a warmer planet, draw with a different color one of the changes that could affect the landscape in front of you (ex: a changed coast line or dry well). Again, label any changes you make that you think others might not be able to easily identify
7. After a change has been made, pass the picture again to another small group and have them make one more change, again in a different color.

   **** This is a good opportunity to use those old overhead transparency sheets. Add a sheet each time the paper is passed and invite participants to make the changes. This will give the drawing different layers in which to flip through at the end.*
8. Continue to pass the pictures making adjustments one or two more times.

9. End the activity by giving the drawings back to the original small group for them to see just how much it has changed and ask small groups to share responses to the following questions:
   - What surprised you most about the adjusted drawing?
   - Is there a change that you do not agree with?
   - Is there a change that is missing?
   - What does this mean for global hunger issues?

When you have completed the Opening Module(s), proceed to Module 2 Learning

HUNGER EDUCATION TOOLKIT

The Weather Channel: Forecasting a Warmer Planet

Module 1: Opening | Activity Level: High

Goal: Stimulate thinking about ways climate change will impact the planet and the living things on it.

DESCRIPTION OF ACTIVITY

Small groups will each take one aspect of climate change and prepare a very brief newscast about it. Each newscast will consist of a one-item weather forecast (e.g. still no rain expected; the drought continues) and one news story related to the weather forecast (e.g. food prices rise and farmers despair as crops dry up). Each small group will present their newscast to the entire group, giving a broad picture of what climate change means, both in terms of ways in which the climate will change and also some of the impacts those changes will have.

MATERIALS NEEDED

- Paper
- Pens or pencils
- Climate change information handout
- World map (optional; for pointing to during weather forecasts)

INSTRUCTIONS

Divide the group into teams of 2 to 4 people. Give each team one of the climate change information handouts, and assign them a row on the sheet. (Depending on the number of groups you have, you may not use all the rows, or you may use some of them more than once. Either is fine!)

Tell the small groups they have 5 to 10 minutes to draft a one-item weather forecast and one news story related to the weather. The climate change information handout will give them data upon which to base their stories. Teams can choose to make their reports very specific, such as events taking place in a particular city or town, or more general, such as a whole region or country.

When the preparation time is up, ask each team to select one or two people to present their newscast to the whole group. The individual newscasts should be very short (a couple of minutes), but taken together, they give a broad picture of the issues that we face as the climate changes.

After all the teams have presented their newscasts, lead a short discussion around these questions/points:

- Was the news story you presented obvious to your group, or did you consider several possible stories before choosing one? Point: changing climate has lots of impacts
- Did any of the newscasts raise an issue you hadn't considered before? Point: It's a complex and pressing issue that most of us need to learn more about.
- Did you find any of it—from the information in the handouts to the newscasts themselves—unbelievable? Point: It can be difficult to get your head around problems that are so complex and big, and that may not seem real. (Note: these stories are fictional and quite possibly sensationalized by the groups. Recognize this possibility to the group and, as time allows, consider what was and wasn't realistic in the stories you heard)
- Why should people concerned about world hunger be concerned about climate change? Point: The poorest are the least able to adapt and will suffer disproportionately.

When you have completed the Opening Module(s), proceed to Module 2 Learning

Evangelical Lutheran Church in America
God's work. Our hands.

CLIMATE CHANGE INFORMATION HANDOUT

The following table comes from the Intergovernmental Panel on Climate Change and is titled, "Climate Change 2007 Synthesis Report: Summary for Policy Makers." The complete report can be found at http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf

Table SPM.3. Examples of possible impacts of climate change due to changes in extreme weather and climate events, based on projections to the mid- to late 21st century. These do not take into account any changes or developments in adaptive capacity. The likelihood estimates in column two relate to the phenomena listed in column one. {Table 3.2}

Row	Phenomenon and direction of trend	Likelihood of future trends based on projections for 21st century using SRES scenarios	Examples of major projected impacts by sector			
			Agriculture, forestry and ecosystems	Water resources	Human health	Industry, settlement and society
1	Over most land areas, warmer and fewer cold days and nights, warmer and more frequent hot days and nights	Virtually certain	Increased yields in colder environments; decreased yields in warmer environments; increased insect outbreaks	Effects on water resources relying on snowmelt; effects on some water supplies	Reduced human mortality from decreased cold exposure	Reduced energy demand for heating; increased demand for cooling; declining air quality in cities; reduced disruption to transport due to snow, ice; effects on winter tourism
2	Warm spells/heat waves. Frequency increases over most land areas	Very likely	Reduced yields in warmer regions due to heat stress; increased danger of wildfire	Increased water demand; water quality problems, e.g. algal blooms	Increased risk of heat-related mortality, especially for the elderly, chronically sick, very young and socially isolated	Reduction in quality of life for people in warm areas without appropriate housing; impacts on the elderly, very young and poor
3	Heavy precipitation events. Frequency increases over most areas	Very likely	Damage to crops; soil erosion, inability to cultivate land due to water logging of soils	Adverse effects on quality of surface and groundwater; contamination of water supply; water scarcity may be relieved	Increased risk of deaths, injuries and infectious, respiratory and skin diseases	Disruption of settlements, commerce, transport and societies due to flooding: pressures on urban and rural infrastructures; loss of property

Row	Phenomenon and direction of trend	Likelihood of future trends based on projections for 21st century using SRES scenarios	Examples of major projected impacts by sector			
			Agriculture, forestry and ecosystems	Water resources	Human health	Industry, settlement and society
4	Over most land areas, warmer and fewer cold days and nights, warmer and more frequent hot days and nights	Likely	Land degradation; lower yields/crop damage and failure; increased livestock deaths; increased risk of wildfire	More widespread water stress	Increased risk of food and water shortage; increased risk of malnutrition; increased risk of water and food borne diseases	Water shortage for settlements, industry and societies; reduced hydropower generation potentials; potential for population migration
5	Warm spells/heat waves. Frequency increases over most land areas	Likely	Damage to crops; wind throw (uprooting) of trees; damage to coral reefs	Power outages causing disruption of public water supply	Increased risk of deaths, injuries, water- and food-borne diseases; post-traumatic stress disorders	Disruption by flood and high winds; withdrawal of risk coverage in vulnerable areas by private insurers; potential for population migrations; loss of property
6	Heavy precipitation events. Frequency increases over most areas	Likely	Salinization of irrigation water, estuaries and fresh- water systems	Decreased fresh-water availability due to saltwater intrusion	Increased risk of deaths and injuries by drowning in floods; migration-related health effects	Costs of coastal protection versus costs of land-use relocation; potential for movement of populations and infrastructure; also see tropical cyclones above

HUNGER EDUCATION TOOLKIT

Watch and Learn: "Sisters on the Planet" Documentary

Module 2: Learning | Activity Level: Low

Goal: Participants learn about the realities of climate change and the impact that it has on the most vulnerable people.

MATERIALS

- Oxfam DVD "Sisters on the Planet" (available from ELCA World Hunger by e-mailing hunger@elca.org or calling 1-800-638-3522 x-2696)
- If you prefer, the videos can be watched on the Oxfam website: http://www.oxfam.org.uk/get_involved/campaign/climate_change/sisters/index.html.
- DVD player
- TV or LCD projector (if you choose to use an LCD projector, be sure that you have speakers for the audio)

INSTRUCTIONS

Each mini documentary lasts about five minutes. Watch as many as you see fit, but be sure to leave ample time for discussion. Martina's story is particularly poignant; Muriel's and Sahena's stories show what women in the Global South are doing to cope with climate change; and Melissa's story offers an example of what we in the Global North can do to educate and mobilize.

Show the short presentation(s) and then facilitate the group in exploring the following questions. The discussion questions are designed to open up conversation; there is no "right" or "wrong" answer. Allow about 30 minutes for this activity.

1. What surprised you in the video?
2. In what ways does the changing climate connect to hunger in the world? Some possible responses to watch for/encourage exploration of: unpredictability in farming, drought, floods, long walks for resources, availability of fresh water.
3. Can you think of other examples where climate change connects to hunger and poverty issues? (An interesting case study would be Hurricane Katrina here in the U.S.)
4. Did you see yourself at all in this video? How?
5. Did you notice a shift or transition in the video? If so, what was it?
6. How should the church respond to issues such as these? How should you personally respond to issues such as these? Do you already do these things? Why or why not?

When you have completed the Learning Module(s), proceed to Module 3: Closing and ACTION

HUNGER EDUCATION TOOLKIT

Global Warming Case Studies

Module 2: Learning | Activity Level: Low

Goal: To raise awareness of the impact climate change has on vulnerable people and see how ELCA World Hunger is working to alleviate that impact.

INSTRUCTIONS

1. Choose one of the two attached case studies—if your group has a strong affinity for a particular region of the world or is in a part of the country that has experienced similar issues (flooding or drought) use those connections to make the choice!
2. You can either print out the case study and provide each participant with a copy to read silently before you begin the discussion (if you choose this route, the cases are short enough to fit two to a page to save paper) or you can read it aloud to the group (or choose a volunteer to read it for everyone).
3. After reading the case study, engage the group in a discussion using the questions below. Key points to listen for and encourage discussion around are listed below each question. Allow about thirty minutes for this activity.

DISCUSSION QUESTIONS: *Lutherans Respond to Flooding in Nicaragua*

1. What did this story tell you about the relationship between poverty and climate/weather?
2. Discuss the response of the church to the flooding caused by Hurricane Felix.
   - The case study focuses on the **short term disaster response** (which ELCA World Hunger calls **"relief"**) but also points to some of the longer term work such as fair trade coffee and agricultural education (which ELCA World Hunger calls **"development"**) that helped to mitigate the impact of the storm in some areas. The story shows that there are actions that can be done to prepare for disasters as well as things to be done after they happen. The work of ELCA World Hunger involves both.
3. One of the symptoms of climate change is flooding. What do you think would happen if severe weather and flooding like that in the case study were to become more common in Nicaragua?
   - More widespread crop loss and persistent hunger.
   - Loss of topsoil in places with poor farming practices.
   - People might have to leave their land and even the country.
   - Development projects would be delayed. In addition to the ways in which flooding could wreak havoc on a development project, the church would also be forced to spend more time ministering to short term needs related to the disaster and less time on long term solutions.
   - Lutheran World Relief (LWR) would need more people and more resources (thus also more money).
4. If flooding were to become more common in Nicaragua, what are some possible solutions, both long term and short term?
   - Short term: more resources for disaster assistance.
   - Long term: as the climate changes, people will need help in adapting to new conditions like more severe storms. This may mean helping change farming practices to better protect the soil, changing to crops that can handle severe weather, and/or building homes and other structures that can withstand strong winds or high waters. As seen in the case study, people may also need to relocate where they live and farm away from coasts and more exposed areas.

- Possible follow up question: what if the increase in storms was linked to global warming and was preventable?

5. Scripture for discussion: Romans 8:22, "We know that the whole creation has been groaning in labor pains until now..." In what ways do you see creation groaning in this case study? What would be an appropriate Christian response to this groaning?

DISCUSSION QUESTIONS: *Lutherans Respond to Niger Food Crisis*

1. What are some of the problems caused by long term drought highlighted by this story?
   - Lack of food
   - Lack of work
   - Rising food prices
   - Decreased stability of the community as people were forced to migrate in search of food and work
   - Seeds for next harvest (i.e., future crops) lost
   - Starving livestock is a loss of food and investment
2. How did Lutheran World Relief (LWR) respond, and what did you think about their response?
   - Gave food for immediate relief that was purchased locally
   - Distributed food in a way that encouraged people to return to their communities
   - Collaborated to begin long term development programs to help build more sustainable farms and provide water
3. What does this story tell you about the relationship between weather and hunger?
4. What do you think would happen if the drought continued indefinitely?
   - Remaining wells/water sources might run dry
   - People might leave the community permanently
   - Food aid would likely continue to be necessary
   - Higher costs to those providing short term aid
   - More difficult and more expensive long term solutions (digging deeper wells, relocating entire communities if no more water)
5. If you are in a farm state or farming community, share stories of dealing with drought and examples of how it impacted the community.
6. What solutions do you see for a long-term drought?
   - Changes in agricultural practices—arid land crops, continued improvements in water management
   - Digging deeper wells, moving water from places with more abundant resources
   - Relocating communities to areas with more rain
   - Less reliance on agriculture (which means developing other means of supporting people and the economy)
   - Possible follow-up question: what if the long-term drought was due to global warming and was preventable?
7. Scripture for discussion: Romans 8:22, "We know that the whole creation has been groaning in labor pains until now..." In what ways do you see creation groaning in this case study? What would be an appropriate Christian response to this groaning?

When you have completed the Learning Module(s), proceed to Module 3
Closing and ACTION

CASE STUDY # 1: LUTHERANS RESPOND TO FLOODING IN NICARAGUA

Torrential rains in the fall of 2007 in Nicaragua have caused severe flooding, forcing thousands of people to flee their homes and leading to massive crop loss in the Central and Pacific region. Hurricane Felix, the third strongest hurricane to hit Central America in this decade, struck Nicaragua's North Atlantic Autonomous Region. The government there reported 67 dead, 110 missing, 136 rescued and 162,373 people affected. Lutheran World Relief (LWR), with a long history in Nicaragua, provided assistance to several of the communities affected by providing emergency food and supplies, and crop rehabilitation. Their work was supported by the Evangelical Lutheran Church in America's (ELCA) World Hunger program.

Floods cut off access to main roads, leaving many villages with scarce food and water supplies. The areas of Matagalpa and Jinotega, in the Central region, are the locations of much of LWR's ongoing development work with Fair Trade coffee, but damage to coffee farms was limited due to the soil conservation and agro-forestry activities conducted by LWR partners in the region during the last several years.

"Many of those affected are rural people with very little to fall back on," said Jean Waagbo, LWR's deputy regional director for Latin America. "In many cases, families have lost their entire crops of basic grains and vegetables in these heavy rains and devastating floods and will need to start over from scratch to rebuild their homes and livelihoods."

CASE STUDY #2: LUTHERANS RESPOND TO NIGER FOOD CRISIS

In extensive parts of Niger, one of the world's poorest nations, food crops and grasslands for grazing livestock are subject to recurring droughts, which have resulted in devastating food crises. In 2005, 3.5 million people—including half of the country's children—suffered from malnutrition due to a famine and locust swarms. Livestock intended for food starved for lack of feed, and rising food prices made it impossible for the most impoverished to purchase what food is available. A belated international response allowed the situation to reach crisis proportions.

In response, Lutheran World Relief (LWR), with strong support from the Evangelical Lutheran Church in America (ELCA) and The Lutheran Church-Missouri Synod (LCMS), expanded its existing programs in the areas worst affected by the food crisis. LWR and partners provided supplemental food rations, purchased from local markets in Niger and neighboring markets in Nigeria to meet the most immediate needs. During the worst of the food crisis, many people abandoned their villages to travel in search of food and work. LWR food distributions encouraged families to return to their communities, with the food giving them strength to return to working their land, and helping to restore their sense of community.

LWR also included longer-term efforts in its Niger response, including the distribution of 10 tons of seed stock for future plantings, repair of five existing grain banks, and construction of 30 new ones. Grain banks are used to store seeds between harvests, and after the harvest each household that received seeds repays 1/3 of the amount received, provided the harvest is sufficient.

Water management and sustainable agriculture have always been central components of LWR's work in Niger and neighboring countries. Grain banks, wells and community training are aspects of LWR's ongoing projects with local partners in Niger that have continued after the 2005 food crisis. It is ongoing work like this that helps strengthen communities and make them less vulnerable to the conditions that led to the food crisis.

HUNGER EDUCATION TOOLKIT

Jelly Bean Climate Change Resource Game

Module 2: Learning | Activity Level: Medium

Goal: Learn how climate change affects the limited resources of countries and therefore how it affects hunger. Recommended for groups of 4 to 24 people.

MATERIALS

- Country cards (provided)
- Climate change cards (provided)
- Jelly beans
- Discussion questions

Note that a bit of preparation is needed for the game. If you have access to cardstock, that works best for the country and climate change cards. If you will have multiple groups playing, be sure that the sets of country and climate change cards match (i.e., be careful in the reproducing of the cards not to jumble them all together, as this could hamper the effectiveness of the game in demonstrating how climate change and hunger are interrelated).

INSTRUCTIONS

The game is built around a group of four people, with each person representing one of four fictional countries: Aplome, Bigendy, Cipulti, and Diprala. If your group is large, split the participants into groups of four and several games can be conducted at once. If your group is not divisible by four, create pairs.

To determine who will be which country, each person (or pair) selects a country card at random. The card provides a brief description of the country and states the number of jelly beans the country has. Jelly beans represent the country's wealth and resources, and the facilitator distributes the appropriate number of jelly beans to each person. He/she also sets aside a handful to be given out during the game.

Next, a stack of climate change cards are shuffled and placed face down on the table. The game proceeds with the facilitator (or a player, if there are multiple groups) flipping the cards over one at a time. Each card describes a climate change event and its impact on the four countries. Each card instructs that jelly beans be eaten or added, depending on the event described.

The game ends when all of the cards have been flipped over. If anyone runs out of jelly beans, they—and the country they represent—have lost the game. The country with the most jelly beans left at the end wins.

The next step is to debrief the experience as a whole group, using the provided discussion questions as a guide. The game is set up to reflect real life – those who are living in or near poverty are disproportionately affected by climate change. This is likely to cause some frustration and dissatisfaction with the game, and the discussion is very important for both validating those feelings and channeling them appropriately.

Though the countries in this game are fictional, the changes they face in their environments are all possible effects of climate change according to the Intergovernmental Panel on Climate Change, as documented in *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, O.F. Canziani, J.P.Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 7-22.

In addition, the following sources were used to determine the types of impacts climate change will have on societies:

http://www.independent.co.uk/environment/nature/insect-explosion-a-threat-to-food-crops-781016.html

http://allafrica.com/stories/200810090254.html

http://www.irishtimes.com/newspaper/world/2008/0929/1222420015020.html

DISCUSSION QUESTIONS

1. How did you feel as the game began? How did you feel by the time the game ended?

2. What surprised you in this activity?

3. Which countries were the most vulnerable or disadvantaged in the activity?

4. Did you notice a difference in the number of jelly beans that were taken away from one country versus another? Why do you think that is the case?

5. Did you disagree with the number of jelly beans being added or taken away on any of the cards? Why or why not?

6. The countries in the game are fictional and don't represent any one real country. But they do resemble circumstances found in different parts of the world. What real countries share some of the characteristics of Alpome? Bigendy? Cipulti? Diprala?

7. Have you seen any of the events described on the cards occurring in our world today?

8. Do you see any of the events described on the cards occurring in your community? Your state? The U.S.?

9. What was the role of ELCA World Hunger in the events described in the activity? Is it sustainable?

10. In the game, when a country runs out of jelly beans, they lose. What do you suppose could happen in the real world when a country runs short on resources? How does it affect other countries? This is an important connection to make—we live in an increasingly interrelated world. How do the hardships of one country impact another (think about immigration issues, economic fallout, and so on)?

11. Why is ELCA World Hunger addressing climate change?

When you have completed the Learning Module(s), proceed to Module 3
Closing and ACTION

COUNTRY CARDS

COUNTRY NAME: ALPOME

Country Description: Alpome is a small, tropical island of about 3000 square miles and a population of 150,000, most of whom live in communities along the coasts. Alpome is mountainous with a wet and a dry side. It boasts beautiful beaches and waters, and significant biodiversity. It attracts many tourists, but being a relatively small and remote island, further economic expansion has been difficult, and the economy of Alpome has remained modest for many years.

Latitide: low

Industries: tourism, fishing, and limited agriculture

Per capita income: $2,930/year

Poverty rate: 18%

Vulnerabilities: extreme weather events (hurricanes, tropical storms), drought (drop in freshwater supplies), increase in water temperatures, spread of disease, political/civil instability

Jellybeans: 15

COUNTRY NAME: BIGENDY

Country Description: Bigendy is a warm, wet, mountainous country. It covers about 100,000 square miles and supports a population of 6 million people, many of whom live in small, rural communities. The climate provides good agricultural opportunities for Bigendy, and the mountains contain rich deposits of minerals. It is also beautiful. However, the mountains also make transportation difficult, and the steep slopes make farming time-intensive.

Latitude: low

Industries: agriculture (coffee and cocoa), eco-tourism, timber, and natural resource extraction

Per capita income: $2,400/year

Poverty rate: 35%

Vulnerabilities: drought (water supply for humans and agriculture), spread of human disease, spread of plant pests and disease, weather events (hurricanes, tropical storms) that lead to flooding, mudslides, etc., political instability

Jellybeans: 20

COUNTRY NAME: CIPULTI

Country Description: The primary feature of Cipulti's landlocked landscape is savanna, giving way to woodlands in the western part of the country, and desert in the southeast. Lake Twipol, near the country's northern border, attracts a variety of animals during their yearly migrations. Consequently, Cipulti has a thriving safari tourism industry. Generally poor soil quality and relatively low annual rainfall makes farming difficult. Cipulti covers about 325,000 square miles and is home to 17 million people.

Latitide: mid

Industries: agriculture (sheep, cattle and grain), natural resource extraction, safari tourism

Per capita income: $800/year

Poverty rate: 56%

Vulnerabilities: drought, deforestation, soil erosion, desertification, political instability

Jellybeans: 10

COUNTRY NAME: DIPRALA

Country Description: Diprala has a temperate seasonal climate, and includes coastal, mountainous, and flat terrain. Diprala is well-known for its outdoor recreational opportunities. It has a highly developed and diversified economy, and a highly skilled workforce. Diprala is about 175,000 square miles and has a population of 28 million people.

Latitude: high

Industries: telecommunications, pharmaceuticals, engineering, natural resources, timber, manufacturing, agriculture

Per capita income: $40,910

Poverty rate: 8%

Vulnerabilities: drought (water for human use and agriculture), extreme weather, change in growing seasons, rise in sea level

Jellybeans: 50

CLIMATE CHANGE CARDS

The temperature rise of the ocean causes the fish populations to shift toward higher latitudes. Fishermen in Alpome bring in substantially smaller catches than they did five years ago. Alpome: -3 Bigendy: 0 Cipulti: 0 Diprala: 0	A major forest fire in Diprala destroys homes, animal habitats, hiking trails, and the forest industry. Alpome: 0 Bigendy: 0 Cipulti: 0 Diprala: -1
Due to rising levels of CO2 in the atmosphere, the number of leaf-eating insects surge around the globe. Crops are damaged and yields lessened everywhere. Alpome: -1 Bigendy: - 3 Cipulti: -3 Diprala: -1	Increasing global temperatures lengthen the growing season in mid-latitudes and higher altitudes, increasing agricultural production. But in low latitudes with dry climates, temperatures become too hot and the season shortens. Alpome: 0 Bigendy: +1 Cipulti: -2 Diprala: +2
A tropical cyclone hits Alpome. Buildings are destroyed and fresh water supplies interrupted. ELCA International Disaster Response, directed through ELCA local companion churches, provide immediate relief and engage in longer-term rebuilding of critical fish processing infrastructure. Improvements are made over the previous, older structures. Alpome: +2 Cipulti: 0 Bigendy: 0 Diprala: 0	ELCA World Hunger helps fund a project of Lutheran World Relief and its local partner to help people in a drought stricken area of Cipulti to water their crops with an innovative gravity-flow irrigation system that brings water right to their fields. Still, ongoing water shortages are cause for concern. Alpome: 0 Bigendy: 0 Cipulti: +2 Diprala: 0
Unusually heavy rains in Bigendy and Diprala cause flooding in low-lying farm areas, damaging crops. In addition, many houses are destroyed in Bigendy. In Diprala, many houses suffer damage, but are spared destruction due to better construction and building code enforcement. Alpome: 0 Bigendy: - 3 Cipulti: 0 Diprala: - 1	A city in the mountains of Diprala is concerned about a dam collapsing under the weight of glacier lake outburst caused by melting glaciers. The government spends millions of dollars to reinforce the dam and provide additional drainage channels. Alpome: 0 Bigendy: 0 Cipulti: 0 Diprala: - 1

CLIMATE CHANGE CARDS

Diprala experiences warmer winters due to climate change. Fewer people die of cold exposure. Alpome: 0 Bigendy: 0 Cipulti: 0 Diprala: +1	Melting ice caps cause rising sea levels and coastal flooding. This is especially devastating to Alpome, since most of its citizens live and work along the coasts. Alpome: - 3 Bigendy: 0 Cipulti: 0 Diprala: - 2
Unpredictable rainfall and increased drought in semi-arid low latitudes causes crop and livestock failure as well as a shortage of fresh water for people. Alpome: 0 Bigendy: 0 Cipulti: -3 Diprala: 0	A tropical cyclone hits Alpome. Weaker than predicted, it didn't cause the widespread damage people feared. However, the temporary interruption to fresh water supplies caused an increase in water-borne disease. Alpome: -1 Bigendy: 0 Cipulti: 0 Diprala: 0
Overall warmer temperatures, a shorter growing season, and reduced water supplies in Cipulti cause animals to shift their migration routes north and west. As a result, they spend less time and cover less territory in Cipulti, damaging the safari tourism critical to Cipulti's economy. Alpome: 0 Bigendy: 0 Cipulti: -3 Diprala: 0	A tropical storm in Bigendy causes a major mudslide. Alpome: 0 Bigendy: -2 Cipulti: 0 Diprala: 0
Heavy rains destroy crops and stored food causing famine in Bigendy. The Lutheran World Federation (LWF), with assistance from ELCA International Disaster Response, responds to the disaster by creating food distribution, agricultural assistance programs, and shelter for those people who are homeless. Alpome: 0 Bigendy: +1 Cipulti: 0 Diprala: 0	After years of melting, the Obigline Glacier in Diprala disappears, causing the Obigline river to dry up. Diprala loses one of its sources of fresh water. Alpome: 0 Bigendy: 0 Cipulti: 0 Diprala: -2

CLIMATE CHANGE CARDS

Warmer temperatures allow ugly algae to grow in one of Bigendy's popular high mountain lakes, killing local fish and driving away hikers. Alpome: 0 Bigendy: -1 Cipulti: 0 Diprala: 0	Higher ocean temperatures cause a high-intensity tropical cyclone, bringing flooding from a bigger-than-usual storm surge in Alpome and, later, very heavy rain in Bigendy. Alpome: -3 Bigendy: -2 Cipulti: 0 Diprala: 0
A heat wave hits Cipulti, destroying crops, livestock, and reducing water supplies for people. Alpome: 0 Bigendy: 0 Cipulti: -2 Diprala: 0	Drought causes water shortages in Cipulti and Bigendy. Already dry, Cipulti is especially hard-hit. Alpome: 0 Bigendy: -1 Cipulti: -2 Diprala: 0
Warmer temperatures allow malaria-infected mosquitoes to enter Bigendy and Diprala, where malaria hasn't traditionally been a problem. Because Diprala has access to anti-malarial drugs, they are largely protected. However, Bigendy struggles and both countries have difficulty with resistant strains of the disease. Alpome: 0 Cipulti: 0 Bigendy: -2 Diprala: -1	Annual snowfall rates drop and no longer reliably provide snow for the skiing industry in Diprala. Ski resorts respond by making snow, which is expensive and requires lots of water. Tourism drops because the quality of snow is not as good. Fortunately, skiing is only one aspect of Diprala's economy, so the overall impact is not too bad. Alpome: 0 Cipulti: 0 Bigendy: 0 Diprala: -1
Higher temperatures bleach coral reefs, driving away local fish and scuba divers in Alpome. Alpome: -1 Bigendy: 0 Cipulti: 0 Diprala: 0	The Lutheran Church in Cipulti, working in accompaniment with ELCA Global Mission, receives ELCA World Hunger funds to set up 3 health clinics in Markeeza province. Maternal and infant mortality rates drop, and immunization rates rise. Alpome: 0 Bigendy: 0 Cipulti: +2 Diprala: 0

CLIMATE CHANGE CARDS

The efforts of ELCA Advocacy and Bread for the World, both supported by ELCA World Hunger, influences U.S. federal policy to increase aid to developing countries. Alpome: +1 Bigendy: +1 Cipulti: +1 Diprala: 0	Hunger, malnutrition, and the resulting impacts on child growth and development increase as multiple years of higher temperatures and lessened water supplies take their toll on Cipulti's food supplies. People begin emigrating to neighboring countries, causing political tensions. Alpome: 0 Bigendy: 0 Cipulti: -3 Diprala: 0
Reduced annual rainfall and higher levels of evaporation due to higher temperatures cause Alpome to experience fresh water shortages during the dry season. Alpome: -2 Bigendy: 0 Cipulti: 0 Diprala: 0	Increased temperatures allow non-native plant species to thrive on Alpome, causing a loss of native species. Alpome: -1 Bigendy: 0 Cipulti: 0 Diprala: 0

HUNGER EDUCATION TOOLKIT

Jelly Bean Climate Change Resource Game

Module 2: Learning | Activity Level: High

Goal: Learn how climate change affects the limited resources of countries and therefore how it affects hunger. Recommended for groups of 4 to 24 people.

MATERIALS

- Country cards (provided)
- Climate change cards (provided)
- Jelly beans
- Discussion questions

Note that a bit of preparation is needed for the game. If you have access to cardstock, that works best for the country and climate change cards. If you will have multiple groups playing, be sure that the sets of country and climate change cards match (i.e., be careful in the reproducing of the cards not to jumble them all together, as this could hamper the effectiveness of the game in demonstrating how climate change and hunger are interrelated).

INSTRUCTIONS

The game is built around a group of four people, with each person representing one of four fictional countries: Aplome, Bigendy, Cipulti, and Diprala. If your group is large, split the participants into groups of four and several games can be conducted at once. If your group is not divisible by four, create pairs.

To determine who will be which country, each person (or pair) selects a country card at random. The card provides a brief description of the country and states the number of jelly beans the country has. Jelly beans represent the country's wealth and resources, and the facilitator distributes the appropriate number of jelly beans to each person. He/she also sets aside a handful to be given out during the game.

Next, a stack of climate change cards are shuffled and placed face down on the table. The game proceeds with the facilitator (or a player, if there are multiple groups) flipping the cards over one at a time. Each card describes a climate change event and its impact on the four countries. Each card instructs that jelly beans be eaten or added, depending on the event described.

The game ends when all of the cards have been flipped over. If anyone runs out of jelly beans, they—and the country they represent—have lost the game. The country with the most jelly beans left at the end wins.

The next step is to debrief the experience as a whole group, using the provided discussion questions as a guide. The game is set up to reflect real life – those who are living in or near poverty are disproportionately affected by climate change. This is likely to cause some frustration and dissatisfaction with the game, and the discussion is very important for both validating those feelings and channeling them appropriately.

Though the countries in this game are fictional, the changes they face in their environments are all possible effects of climate change according to the Intergovernmental Panel on Climate Change, as documented in *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, O.F. Canziani, J.P.Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 7-22.

In addition, the following sources were used to determine the types of impacts climate change will have on societies:

http://www.independent.co.uk/environment/nature/insect-explosion-a-threat-to-food-crops-781016.html

http://allafrica.com/stories/200810090254.html

http://www.irishtimes.com/newspaper/world/2008/0929/1222420015020.html

DISCUSSION QUESTIONS

1. How did you feel as the game began? How did you feel by the time the game ended?

2. What surprised you in this activity?

3. Which countries were the most vulnerable or disadvantaged in the activity?

4. Did you notice a difference in the number of jelly beans that were taken away from one country versus another? Why do you think that is the case?

5. Did you disagree with the number of jelly beans being added or taken away on any of the cards? Why or why not?

6. The countries in the game are fictional and don't represent any one real country. But they do resemble circumstances found in different parts of the world. What real countries share some of the characteristics of Alpome? Bigendy? Cipulti? Diprala?

7. Have you seen any of the events described on the cards occurring in our world today?

8. Do you see any of the events described on the cards occurring in your community? Your state? The U.S.?

9. What was the role of ELCA World Hunger in the events described in the activity? Is it sustainable?

10. In the game, when a country runs out of jelly beans, they lose. What do you suppose could happen in the real world when a country runs short on resources? How does it affect other countries? This is an important connection to make—we live in an increasingly interrelated world. How do the hardships of one country impact another (think about immigration issues, economic fallout, and so on)?

11. Why is ELCA World Hunger addressing climate change?

When you have completed the Learning Module(s), proceed to Module 3
Closing and ACTION

COUNTRY CARDS

COUNTRY NAME: ALPOME

Country Description: Alpome is a small, tropical island of about 3000 square miles and a population of 150,000, most of whom live in communities along the coasts. Alpome is mountainous with a wet and a dry side. It boasts beautiful beaches and waters, and significant biodiversity. It attracts many tourists, but being a relatively small and remote island, further economic expansion has been difficult, and the economy of Alpome has remained modest for many years.

Latitide: low

Industries: tourism, fishing, and limited agriculture

Per capita income: $2,930/year

Poverty rate: 18%

Vulnerabilities: extreme weather events (hurricanes, tropical storms), drought (drop in freshwater supplies), increase in water temperatures, spread of disease, political/civil instability

Jellybeans: 15

COUNTRY NAME: BIGENDY

Country Description: Bigendy is a warm, wet, mountainous country. It covers about 100,000 square miles and supports a population of 6 million people, many of whom live in small, rural communities. The climate provides good agricultural opportunities for Bigendy, and the mountains contain rich deposits of minerals. It is also beautiful. However, the mountains also make transportation difficult, and the steep slopes make farming time-intensive.

Latitude: low

Industries: agriculture (coffee and cocoa), eco-tourism, timber, and natural resource extraction

Per capita income: $2,400/year

Poverty rate: 35%

Vulnerabilities: drought (water supply for humans and agriculture), spread of human disease, spread of plant pests and disease, weather events (hurricanes, tropical storms) that lead to flooding, mudslides, etc., political instability

Jellybeans: 20

COUNTRY NAME: CIPULTI

Country Description: The primary feature of Cipulti's landlocked landscape is savanna, giving way to woodlands in the western part of the country, and desert in the southeast. Lake Twipol, near the country's northern border, attracts a variety of animals during their yearly migrations. Consequently, Cipulti has a thriving safari tourism industry. Generally poor soil quality and relatively low annual rainfall makes farming difficult. Cipulti covers about 325,000 square miles and is home to 17 million people.

Latitide: mid

Industries: agriculture (sheep, cattle and grain), natural resource extraction, safari tourism

Per capita income: $800/year

Poverty rate: 56%

Vulnerabilities: drought, deforestation, soil erosion, desertification, political instability

Jellybeans: 10

COUNTRY NAME: DIPRALA

Country Description: Diprala has a temperate seasonal climate, and includes coastal, mountainous, and flat terrain. Diprala is well-known for its outdoor recreational opportunities. It has a highly developed and diversified economy, and a highly skilled workforce. Diprala is about 175,000 square miles and has a population of 28 million people.

Latitude: high

Industries: telecommunications, pharmaceuticals, engineering, natural resources, timber, manufacturing, agriculture

Per capita income: $40,910

Poverty rate: 8%

Vulnerabilities: drought (water for human use and agriculture), extreme weather, change in growing seasons, rise in sea level

Jellybeans: 50

CLIMATE CHANGE CARDS

The temperature rise of the ocean causes the fish populations to shift toward higher latitudes. Fishermen in Alpome bring in substantially smaller catches than they did five years ago.

Alpome: -3
Bigendy: 0
Cipulti: 0
Diprala: 0

A major forest fire in Diprala destroys homes, animal habitats, hiking trails, and the forest industry.

Alpome: 0
Bigendy: 0
Cipulti: 0
Diprala: -1

Due to rising levels of CO2 in the atmosphere, the number of leaf-eating insects surge around the globe. Crops are damaged and yields lessened everywhere.

Alpome: -1
Bigendy: - 3
Cipulti: -3
Diprala: -1

Increasing global temperatures lengthen the growing season in mid-latitudes and higher altitudes, increasing agricultural production. But in low latitudes with dry climates, temperatures become too hot and the season shortens.

Alpome: 0
Bigendy: +1
Cipulti: -2
Diprala: +2

A tropical cyclone hits Alpome. Buildings are destroyed and fresh water supplies interrupted. ELCA International Disaster Response, directed through ELCA local companion churches, provide immediate relief and engage in longer-term rebuilding of critical fish processing infrastructure. Improvements are made over the previous, older structures.

Alpome: +2
Bigendy: 0
Cipulti: 0
Diprala: 0

ELCA World Hunger helps fund a project of Lutheran World Relief and its local partner to help people in a drought stricken area of Cipulti to water their crops with an innovative gravity-flow irrigation system that brings water right to their fields. Still, ongoing water shortages are cause for concern.

Alpome: 0
Bigendy: 0
Cipulti: +2
Diprala: 0

Unusually heavy rains in Bigendy and Diprala cause flooding in low-lying farm areas, damaging crops. In addition, many houses are destroyed in Bigendy. In Diprala, many houses suffer damage, but are spared destruction due to better construction and building code enforcement.

Alpome: 0
Bigendy: - 3
Cipulti: 0
Diprala: - 1

A city in the mountains of Diprala is concerned about a dam collapsing under the weight of glacier lake outburst caused by melting glaciers. The government spends millions of dollars to reinforce the dam and provide additional drainage channels.

Alpome: 0
Bigendy: 0
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CLIMATE CHANGE CARDS

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Warmer temperatures allow ugly algae to grow in one of Bigendy's popular high mountain lakes, killing local fish and driving away hikers. Alpome: 0 Bigendy: -1 Cipulti: 0 Diprala: 0	Higher ocean temperatures cause a high-intensity tropical cyclone, bringing flooding from a bigger-than-usual storm surge in Alpome and, later, very heavy rain in Bigendy. Alpome: -3 Bigendy: -2 Cipulti: 0 Diprala: 0
A heat wave hits Cipulti, destroying crops, livestock, and reducing water supplies for people. Alpome: 0 Bigendy: 0 Cipulti: -2 Diprala: 0	Drought causes water shortages in Cipulti and Bigendy. Already dry, Cipulti is especially hard-hit. Alpome: 0 Bigendy: -1 Cipulti: -2 Diprala: 0
Warmer temperatures allow malaria-infected mosquitoes to enter Bigendy and Diprala, where malaria hasn't traditionally been a problem. Because Diprala has access to anti-malarial drugs, they are largely protected. However, Bigendy struggles and both countries have difficulty with resistant strains of the disease. Alpome: 0 Cipulti: 0 Bigendy: -2 Diprala: -1	Annual snowfall rates drop and no longer reliably provide snow for the skiing industry in Diprala. Ski resorts respond by making snow, which is expensive and requires lots of water. Tourism drops because the quality of snow is not as good. Fortunately, skiing is only one aspect of Diprala's economy, so the overall impact is not too bad. Alpome: 0 Cipulti: 0 Bigendy: 0 Diprala: -1
Higher temperatures bleach coral reefs, driving away local fish and scuba divers in Alpome. Alpome: -1 Bigendy: 0 Cipulti: 0 Diprala: 0	The Lutheran Church in Cipulti, working in accompaniment with ELCA Global Mission, receives ELCA World Hunger funds to set up 3 health clinics in Markeeza province. Maternal and infant mortality rates drop, and immunization rates rise. Alpome: 0 Bigendy: 0 Cipulti: +2 Diprala: 0

CLIMATE CHANGE CARDS

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Reduced annual rainfall and higher levels of evaporation due to higher temperatures cause Alpome to experience fresh water shortages during the dry season. Alpome: -2 Bigendy: 0 Cipulti: 0 Diprala: 0	Increased temperatures allow non-native plant species to thrive on Alpome, causing a loss of native species. Alpome: -1 Bigendy: 0 Cipulti: 0 Diprala: 0

Either during or soon after your learning experience, you and your group may want to start addressing climate change in a concrete way. If so, choose this option for a simple living project that can be done as a group or in the near future. More ideas can be found in the "Closing and ACTION" module above.

As you prepared for this climate change learning experience, you probably realized that addressing climate change will involve both corporate and individual action. Below are two activities to choose from: an advocacy project that addresses climate change at the community level and a personal reflection exercise. Select which activity will work best for your group and make the necessary preparations to do it during your time together.

PREPARE A PHONE CALL TO YOUR ELECTED OFFICIAL

A timely phone call to an elected official can have a big impact. A prepared statement that includes certain components will make your phone call the most effective. Use the following suggestions to craft a statement as a group.

STEP ONE: PREPARE

- Before the meeting, select which legislator(s) (state or federal, congress or senate, etc.) you would like to contact. Have their contact information available for distribution to the group.
- Prepare a short summary of the legislator's background history, especially as it relates to environmental issues.

  If you do not already have some sense of how your representatives have voted on climate change issues, you can visit the League of Conservation Voters National Environmental Scorecard (www.lcv.org/scorecard) to learn more about their positions.
- Prepare a short explanation of what the phone call will look like. Be sure to tell the participants that when they make the phone call they will speak to staff assistants who are responsible for recording the issues constituents call about. The call will only take about two minutes. As such, when you prepare your message, keep it short and to the point. One short paragraph is all they'll have time to read, especially on a call-in day. Finally, have a pen and paper handy to make sure everyone who plans on making the phone call subscribes to e-Advocacy Networks to get notified when their call will make the most difference.

STEP TWO: CREATE

- Either as a large group or in smaller groups, craft a short, one paragraph statement that includes the following components:
  - > Introduction of self
  - > Thank you to the legislator or staffer for his/her time
  - > Appreciation for previous votes you liked
  - > Brief description of your background
  - > Explanation of the issue
  - > The specific request or "ask"

STEP THREE: PRAY

Offer a petition that God would work through your efforts.

KEEP THE RECEIPT

One of the keys to addressing climate change is limiting personal consumption. This exercise will get you and your participants thinking about your spending habits. Depending on the dynamics of your group, you can do the activity as an individual, private reflection or as a group "competition."

STEP ONE: GET READY

- This activity involves tracking one's personal spending for one week. At least one week before your scheduled meeting, be sure you contact all the participants and tell them to save their receipts for the upcoming week and to bring the receipts to the gathering.
- Make sure you have the materials you will need for the exercise, including pens or pencils, paper, and a few calculators to share.

STEP TWO: ADD IT UP

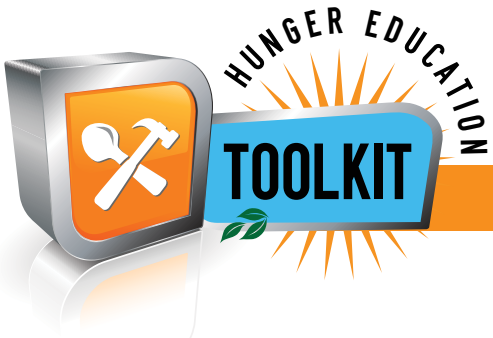
- Have the participants take out their receipts and individually add them up for a grand total. If the group is comfortable with it, add the individual totals together and divide by the number of participants to calculate the average spending for the group. If you choose to have a "competition," by show of hands, see who spends less than the average and more than the average. You can also see which individuals spent the very least and the very most.
- You can have also have the participants add up their receipts according to categories (e.g., food, gas, clothes, entertainment, etc.). Again, if the group is comfortable with it, you can find the total and the average for the group as a whole of the various categories. Again, you can "compete" in the various categories to see who spends below the average, above the average, the very least, and the very most.

STEP THREE: REFLECT

- Ask the participants to reflect on the following questions:
  - > Where did you spend the most? The least?
  - > What surprised you in your spending habits?
  - > What changes do you think you'd like to make?
  - > What changes would be most difficult to make?

STEP FOUR: PRAY

Thank God for all the blessings in your life. Ask for strength to live in a way that honors God and God's creation.



Climate Change and Hunger Toolkit

Closing and ACTION | **Activity Level: All**

Hunger and Climate Change will not end without your **action**. All of our actions, even small ones, add up to make a big difference. Below is a list of takeaways—actions—related to today's gathering that you can incorporate into your life right away to contribute to the end hunger and stop the warming of the globe. Take some time to talk as a group about the items listed here. What might you do together? What might you do individually? Who else might you invite to join you? This is certainly not a comprehensive list and your group may create their own list—GREAT!

Please share with us what you and your group are doing in your community related to hunger and climate change. We would love to hear about your good work! Tell us about it at hunger@elca.org.

GIVING

- **One is a BIG number**
  Give generously to ELCA World Hunger—contribute online or through your congregation. Challenge your family (and congregation) to contribute one percent of your income to ending hunger locally and globally. Learn more at www.elca.org/giving.
- **Just What I Wanted...Thank You!**
  Make plans to organize an Alternative Gift Fair in your congregation, neighborhood, campus or workplace. Make it easy to give gift donations from ELCA Good Gifts and God's Global Barnyard (www.elca.org/goodgifts). Sell items from Lutheran World Relief (LWR) such as fair trade coffee, chocolate, and handcrafts projects (www.lwr.org/fairtrade). Invite others in your community to contribute handmade items to the sale and donate the proceeds to ELCA World Hunger.
- **Nice Bag!**
  Reusable bags eliminate a tremendous amount of waste! Consider selling reusable bags in your congregation and community. You can even personalize the bags with printing and art work to make them extra special. Couple the bag sales with a month of environmental and hunger education through worship, small groups, or Sunday school.

  CAUTION—do your homework and make sure that the bags you purchase are sweat-shop free (or even make them yourself!). Connect the bag sales to the ongoing anti-hunger work of your community by donating sale proceeds to ELCA World Hunger.
- **Keep the Receipt**
  Track your spending for one week. Where did you spend the most? The least? What surprised you? Make a gift to ELCA World Hunger as a sign of gratitude for all that God has entrusted to you.

ADVOCATING

- **Get Connected and Act**
  - > Join the ELCA e-Advocacy network (http://ga6.org/elca_advocacy/join.tcl) and receive action alerts on timely legislative issues have an impact on hunger in the world.
  - > Write a letter to your elected officials about a topic you received from an e-Advocacy alert. Find out who they are by visiting: www.elca.org/advocacy. Click on the "Get Involved Link" then click on "Tools."
  - > Write an op-ed (opposite editorial) in your local paper related to a current local concern for those most in need.

> Join the ELCA Shareholders Network and stay up to date on current advocacy issues related to corporations that have environmental implications. Sign up at www.elca.org/corporate.

- **Organize Your Toolkit**
  Check out the ELCA Creation Care Toolkit (http://archive.elca.org/advocacy/environment/education.asp). See what you can incorporate into the life of your congregation or campus community.
- **Eco-Justice Campaign**
  Check out the Eco-Justice campaign of the National Council of Churches. Eco-justice includes all ministries designed to heal and defend creation, working to assure justice for all of creation and the human beings who live in it. Learn how you and your congregation can be involved in this important work at www.nccecojustice.org.

EDUCATING YOURSELF AND OTHERS

- **Say What?**
  Gather your family or a small group from your congregation, neighborhood, campus or workplace to watch and discuss "The Story of Stuff." This 20-minute, fast-paced, fact-filled online video examines the production and consumption patterns of our stuff from extraction through sale, use, and disposal. All the stuff in our lives affects communities at home and abroad, yet most of it hidden from view. Watch and learn at www.storyofstuff.com.
- **Measure your Footprint**
  The Environmental Protection Agency (EPA) has developed a Personal Emissions Calculator to help estimate and reduce personal greenhouse gas emissions. Use the calculator with a small group from your congregation, campus, workplace, or neighborhood and challenge each other to make lifestyle adjustments and reduce your carbon footprint. See www.epa.gov/climatechange/emissions/ind_calculator.html.
- **Green Church**
  Check out the Web of Creation website for terrific ideas and guides to help your congregation become a "Green Church" through worship, education, advocacy, and in your buildings and on the grounds. Share what "green actions" your congregation is taking with members, the local community, and ELCA World Hunger! Learn more at www.webofcreation.org.
- **Connect with Others Who Care**
  > Join the ELCA World Hunger Facebook Cause.
  > Connect with your synod's hunger team and learn what others in your area are doing... and join them. To learn more contact your synod office or send an email to ELCA World Hunger at hunger@elca.org.
  > Subscribe to and read the ELCA World Hunger blog "Hunger Rumblings" at http://blogs.elca.org/hungerrumblings.

LEADING THE SIMPLE LIFE

- **Alternatives for Simple Living**
  Visit www.simpleliving.org and explore lifestyle resources from Alternatives for Simple Living, including their annual booklet "Whose birthday is it, anyway?" Check out the new DVD, "$imply Enough," which is a great tool to facilitate conversations about our own lifestyle choices.
- **Calling All Thespians and Drama Queens**
  "THE RACE: A SIMPLICITY MUSICAL" is a creative and fun way to engage your congregation in exploring lifestyle and stewardship practices. The musical is easily staged and performed, requiring as few as eight performers and minimal technical crew. "The Race: A Simplicity Musical" is a terrific complement to your congregation's participation in ELCA World Hunger. Learn more at http://archive.elca.org/hunger/musical.
- **Fresh from the Farm**
  Purchase locally grown, organic (whenever possible) fruits and vegetables. These foods not only support local farmers and the local economy, they actually help the environment by limiting the gas used in shipping foods from far away farms and processing plants to your neighborhood. If you have space and a green thumb, try growing some of your own herbs and vegetables. As an added bonus, you'll eat better and may even improve your health.

Close this session with a song and prayer. Here are a few suggestions...

PRAYERS

1. Praise to you, Lord Jesus Christ, who in your self-emptying love gathered up and reconciled all creation to the Father. Innumerable galaxies of the heavens worship you. Creatures that grace the earth rejoice in you. All those in the deepest seas bow to you in adoration. As with them we give you praise, grant that we may cherish the earth, our home, and live in harmony with this good creation, for you live and reign with the Father and the Holy Spirit, one God, now and forever. Amen. *ELW, additional prayers, Creation, Creation's praise, page 81*
2. God of abundance, you have poured out a large measure of earthly blessings: our table is richly furnished, our cup overflows, and we live in safety and security. Teach us to set our hearts on you and not these material blessings. Keep us from becoming captivated by prosperity and grant us wisdom to use your blessings tot your glory and to the service of humankind, through Jesus Christ our Lord. Amen.*ELW, additional prayers, Stewardship, The proper use of wealth, page 80*
3. 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. *National Council of Churches 2008 Earth Day Sunday resource "The Poverty of Global Climate Change"*
4. Praise God, from who all blessings flow; praise God, all creatures here below; praise God above, ye heav'nly host; praise Father, Son and Holy Ghost. Amen. *Text: Thomas Ken, 1637-1711, alt., ELW 885*

SONG SUGGESTIONS FROM EVANGELICAL LUTHERAN WORSHIP (ELW)

- ELW 556
  Morning Has Broken
- ELW 680
  We Plow the Fields and Scatter
- ELW 715
  Christ, Be Our Light
- ELW 885
  Doxology