



# CLIMATE CHANGE AND SOCIAL JUSTICE

Equality · Action · Gender · Resilience

**Climate change is more than an environmental issue.** Many of its consequences are social, economic and humanitarian. In the United States, though the impacts of climate change will be felt by all, it will not affect all equally. Those with the least access to resources face inexorable challenges to mitigate and adapt to climate changes. This cuts across age, race, socio-economic class and gender. Women in particular, in the U.S. and around the world, will be affected. Impacts include loss of homes and personal property, rising healthcare costs, increase in violent conflicts, and the foregone income that accompany climate change-induced disasters and instability.

## WOMEN MATTER WHEN WE TALK ABOUT THE EFFECTS OF CLIMATE CHANGE

### Women & Poverty

As of 2012, five million more women than men were living below the U.S. poverty line. Moreover, single women are more likely to support an entire household on minimum wage income.<sup>1</sup> What affects those facing poverty, affects women and their families.

### Women as Caregivers

Although women wear many hats and are successful in a range of occupations, many women are still relied upon as the primary caregivers to children and the elderly. When air pollution causes the rate of childhood asthma to increase or forest fires force entire communities to relocate, women will be most affected by the costs and time burden. But, they also have “knowledge, multiple and simultaneous responsibilities and...roles in productive areas” that will be an integral part of the solution.<sup>2</sup>

### Women in a Just Transition

A just transition to a sustainable, low carbon economy requires educated workers in new and expanding sectors, and women are moving rapidly into the space of “green jobs”, where they have transformative potential. In the United States, where the majority of college graduates (57%) and master’s level graduates (60%) are women,<sup>3</sup> less than 4% of the clean energy sector jobs in 2011 were held by young women.<sup>4</sup> With over 180 programs nationwide<sup>5</sup> focused on promoting women’s leadership in STEM (science, technology, engineering and math), women of all ages can become innovators and agents of change.

### Shared Responsibility

Sharing and shifting responsibilities among women and men for care and for taking progressive action on climate is an important step in climate justice.

*Climate change exacerbates existing inequalities and vulnerabilities. Persons who face intersecting inequalities due to discrimination based on gender, gender identity, disability, race, ethnicity, economic status, age, among others, are among those populations least likely to be able to withstand the inevitable effects of climate change. Addressing inequality and climate change must go hand in hand.*

## Climate Impacts in the U.S.

### HUMAN HEALTH AND SAFETY WILL BE ADVERSELY AFFECTED

#### Health

Climate change will increase occurrences of injury, disease or death in many regions, due to climate-induced heat waves and wildfires, undernutrition linked to crop failures, changes in food- and waterborne illnesses, and upswings in the amount of ground-level ozone.<sup>6,8</sup>

#### Displacement

Climate change will exacerbate displacement,<sup>6</sup> which means more than having to find a new home or job. “When people are forced to leave their homes and communities...many of their human rights are threatened, including their right to housing and security.”<sup>7</sup> Inequality magnifies the risk of displacement for many populations.

#### Violent Conflict

“Climate change can indirectly increase risks of violent conflicts...by amplifying well-documented drivers of these conflicts such as poverty and economic shocks,”<sup>6</sup> which violates the human rights of all those affected.

#### Safety & Human Trafficking

Since conflict and displacement disrupt social, economic, and political safety nets, many populations, such as women and children living in poverty, become even more insecure. Separation from family and community, loss of shelter, and the overall breakdown of social norms and cohesion that can accompany extreme disaster especially increase risks like human trafficking for vulnerable populations.<sup>2</sup>

*Evidence shows that during and after disasters, levels of sexual and gender-based violence often increase. After two tropical cyclones hit Tafe Province in Vanuatu in 2011, the Tanna Women's Counseling Centre reported a 300% increase in new domestic violence cases.<sup>9</sup>*



*According to the U.S. Department of Commerce's Report on the aftermath of Superstorm Sandy, significant losses in tourism spending reduced "employment by over 11,000 workers primarily in the Accommodations, Food Services, Retail, Amusements and Performing Arts and the Transportation Services sectors."<sup>10</sup>*

### LIVELIHOODS AND WAGES WILL BE THREATENED OR LOST

#### Hourly-Wage Earners

Those working hourly-wage jobs are often in a much less secure position than their salary-earning counterparts when it comes to labor lost due to disasters.<sup>11</sup> Two thirds of minimum wage-earners in the United States are women,<sup>13</sup> meaning that women are disproportionately affected by potential income losses due to climate change.

#### Rural Livelihoods

People in rural areas face a serious loss of income due to the decline in agricultural productivity that accompanies extreme weather events, which are expected to increase with climate change, as well as slow onset climate events<sup>8</sup> like drought or sea level rise.

### FOOD AND WATER INSECURITY WILL INTENSIFY

#### Food

Decreased agricultural productivity means more than lost rural income; it also means food prices will become more volatile and food availability will become less predictable.<sup>6</sup> Food insecure families, including in urban food deserts, may face an increased risk of undernutrition.

#### Water

Droughts and other severe weather patterns can damage and disrupt water supplies. The 2014 drought in California has negatively impacted agricultural production and forced many cities to ration water; meanwhile the algae bloom in Lake Erie in July of 2014, thought to be a side-effect of increased rainfall in the area, left hundreds of thousands without drinking water for days.



## INFRASTRUCTURE WILL NOT WITHSTAND THE DAMAGE

### U.S. Infrastructure

U.S. infrastructure is in disrepair, and over the next several years it would take \$3.6 trillion to bring it back from the brink of collapse.<sup>11</sup> This cost will only increase if there is no action on climate change. “Essential infrastructure systems” including water and waste management, public transportation, roads and railways, and energy supply will all be threatened by “interrelated climate change impacts.”<sup>8</sup>

### Housing

In the aftermath of Superstorm Sandy, many public housing residents living in evacuation zones remained in their apartments despite lack of heat, electricity and hot water. Already vulnerable groups, like the elderly and the disabled, were unable to move to emergency shelters because the elevators in their buildings did not function without backup generators.<sup>11</sup>



*Coastal property is most at risk due to hurricane and other climate-change induced water disasters, including sea-level rise, over the next few decades. “There is a 1-in-20 chance...that by the end of this century, more than \$701 billion worth of existing coastal property will be below mean sea levels, with more than \$730 billion of additional property at risk during high tide.”<sup>12</sup>*

## ECONOMIC LOSSES WILL BE PERSONAL, LOCAL, NATIONAL, AND GLOBAL

### Major Losses in the U.S.

Significant losses are predicted to occur as a result of the following: “Large-scale losses of coastal property and infrastructure..., Extreme heat across the nation...threatening labor productivity, human health, and energy systems... [And] Shifting agricultural patterns and crop yields...”<sup>12</sup>

### Climate Change and Poverty

Those already living near, at, or below the poverty line are especially at risk. “An unforeseen crisis that causes financial hardship,” such as a catastrophic weather event, “can jeopardize the ability of families to pay the bills, put food on the table, and afford necessities...”<sup>11</sup> Just one event, like a flood “...can push a low-income family below the poverty line.”<sup>11</sup>

### The costs of inaction on climate change will be passed onto consumers

Food and energy prices are likely to increase, and costs of services like homeowner’s insurance will also likely rise due to increased risk from climate change-induced disasters.

*“Families headed by a single adult are more likely to be headed by women, and these female-headed households are at a greater risk of poverty. Almost 31% of households headed by a single woman were living below the poverty line—nearly five times the 6.3% poverty rate for families headed by a married couple. For households headed by a single male, 16.4% were living in poverty.”<sup>14</sup>*

## Climate Change Solutions

### CHANGE THE POLITICAL CLIMATE AND TURN PREDICTED LOSSES INTO POTENTIAL GAINS

#### Climate Change Mitigation Policies and Strategies

Reducing CO<sub>2</sub> emissions is essential to mitigate the effects of climate change. Many developing and emerging countries are looking to the United States to be a leader on emissions reduction. Moving the U.S. energy sector away from fossil fuels and ending dependence on foreign oil could also lead to the end of American military involvement in oil rich regions of the world, freeing resources.

#### Resilient Infrastructure

Investments in community resilience “pay off in big ways—they save lives and significantly reduce taxpayer spending on disaster recovery.”<sup>11</sup> Building green infrastructure and restoring coastal ecosystems can help reduce damage from climate change-induced water disasters.<sup>11</sup>

#### Social and Economic Safety Nets

Creating sustainable disaster recovery budgets should be a critical step moving forward,<sup>11</sup> taking into account not only the cost of restoring property and economic losses, but also the human costs associated with climate change, like food stamps and emergency shelters.



### HELP US MAKE CHANGE

The effects of climate change are already leading us down a path toward a more insecure world, but halting it and adapting to its impact is possible, if we unite now to act.

*Join with your friends, neighbors and colleagues  
to deliver your message for change...because  
together all of our voices cannot be ignored*

#### Write to your representatives

Tell them to take decisive action for national and local climate policy. Make it clear that women and men must be involved in the fight against climate change.

#### Inform yourself

Learn about why solutions must be gender-responsive, socially just, and environmentally sound. We must not only preserve the planet for future generations but also work to make it a better place.

#### Vote with your wallet

Women control 80% of the consumer purchasing power in the United States. Buy products that are made sustainably and have a minimal impact on the environment. Set the air conditioner higher in the summer and the heat lower in the winter, saving both money and the energy needed to power your home.

## NOTES

<sup>1</sup>Women and the Minimum Wage by State, National Women's Law Center.

<sup>2</sup>Nellemann, C., Verma, R., and Hislop, L. (eds). 2011. *Women at the frontline of Climate Change: Gender risks and hopes. A Rapid Response Assessment*. United Nations Environment Programme, GRID-Arendal.

<sup>3</sup>United States Department of Labor. 2009a. Women in the labor force: A databook (Report 1018). Washington, DC: Bureau of Labor Statistics. Retrieved August 15, 2012 from, <http://www.bls.gov/cps/wlf-databook-2009.pdf>

<sup>4</sup>Davidson, M., Gracey, K. “Green Jobs for Youth? An expanded analysis of youth in the green economy” June 2012

<sup>5</sup>STEMconnector: The One Stop Shop for STEM Education (2012) Retrieved August 15, 2012 from, <http://www.stemconnector.org/directory/results/taxonomy%3A62>

<sup>6</sup>IPCC, 2014: Summary for policymakers. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L.White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1-32.

<sup>7</sup>Levy, B.S., Sidel, V. W., *Collective Violence Caused by Climate Change and How It Affects Human Health and Rights*, Health and Human Rights Journal 1.16, June 2014, pp 32-40.

<sup>8</sup>National Climate Assessment. 2014. U.S. Global Change Research Program <http://nca2014.globalchange.gov/>

<sup>9</sup>Kilsby and Rosenbaum *Scoping of Key Issues in Gender, Climate Change, and Disaster Risk Management*. Internal Briefing Document for UN Women. September 2012.

<sup>10</sup>U.S. Department of Commerce Economic Impact of Hurricane Sandy September 2013

<sup>11</sup>Kelly, C., Ross, T., *One Storm Shy of Despair: A Climate-Smart Plan for the Administration to Help Low-Income Communities*, Center for American Progress, July 2014

<sup>12</sup>Risky Business: The Economic Risks of Climate Change in the United States, The Risky Business Project, June 2014, 4

<sup>13</sup>National Women's Law Center

<sup>14</sup>Poverty in the United States: A Snapshot” National Center for Law and Economic Justice. 2012 <http://www.nclj.org/poverty-in-the-us.php>