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One Storm Shy of Despair

A Climate-Smart Plan for the Administration to Help Low-Income Communities

By Cathleen Kelly and Tracey Ross July 2014

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Introduction and summary

Climate change puts communities, businesses, and the economy at greater risk of heat waves, drought, flooding caused by severe storms and sea-level rise, and other extreme weather events.[1] It imposes an unfunded mandate on state and local governments and the American people to manage these risks and foot the bill for the damages.[2]

Recognizing these risks, President Barack Obama announced this week at the fourth and final meeting of the State, Local, and Tribal Leaders Task Force on Climate Preparedness and Resilience a series of actions to help state, local, and tribal officials prepare their communities for the effects of climate change. These actions range from helping communities to develop more resilient infrastructure and rebuild stronger and smarter existing infrastructure, to making our coasts more resilient, to providing decision makers with better information on flood and other climate change risks.[3] These are laudable actions that will help communities better prepare for the real and costly effects of climate change.

But more action is needed, in particular, to address the skyrocketing risks of climate change in low-income communities. Our nation saw firsthand the value of investing in climate-resilient communities when, on October 29, 2012, Superstorm Sandy crashed into the eastern seaboard from Florida to Maine, eventually reaching as far west as Ohio and Michigan.[4] The hurricane caused more than 150 deaths, damaged 659,000 homes, and disrupted millions of lives as transit systems, power, cell phone networks, and other critical services failed or closed.[5]

Three weeks later, with floodwaters receded and most services restored, life returned to normal for many, including for people in New York City. But for federal disaster workers in the area, something was not adding up. Only 6,800 people arrived at shelters, even though 375,000 New Yorkers—including 45,000 public housing residents—lived in the mandatory evacuation zone hit hard by the hurricane. Workers eventually discovered the nightmare lurking behind low shelter turnout. Many low-income elderly and disabled residents of New York City's public housing complexes were stranded in their dark and cold apartments

without heat, backup generators, emergency boilers, or working elevators, the latter preventing many of these residents from descending multiple flights of stairs.[6] Others endured these conditions because they had no other affordable place to stay or no reasonable means of leaving their neighborhoods because mass transit was shut down, among other reasons. While the overall response to Sandy was quick and honed by the tough lessons of Hurricane Katrina, recovery efforts left many low-income communities in distress.

Aside from a few new federal disaster assistance requirements aimed at helping low-income communities recover from Superstorm Sandy,[7] increasing equity and protecting the most vulnerable populations from climate change risks have not been a strong focus of federal disaster-recovery efforts, resilience strategies, or planning. The task force, which the president created in his Climate Action Plan and launched by a November 2013 executive order,[8] has an important opportunity to change this and help create resilient, safe, and equitable communities. It can do this by recommending in its report, which it is due by November of this year, that the president, state and local governments, and Congress take the following actions:

- **Strengthen affordable housing and infrastructure.** The president should call on agencies to make resilience a core aspect of all federal infrastructure and disaster-recovery funding.

- **Reduce environmental hazards and disaster risks.** The president and Congress should expand funding for the Pre-Disaster Mitigation Program fund, the Weatherization Assistance Program, and the Low Income Home Energy Assistance Program to help communities evaluate their disaster risks, develop hazard mitigation plans, increase energy efficiency, and pay electricity bills.

- **Enhance economic stability.** The president and Congress should oppose budget cuts in the Supplemental Nutrition Assistance Program, or SNAP, and ensure that there is adequate funding for Disaster SNAP to assist people harmed by natural disasters to purchase food. They should also reform the National Flood Insurance Program to remove flood-insurance subsidies to better reflect actual flood risks in insurance prices, and offer means-tested vouchers to middle- and low-income families so they can afford the insurance.

- **Take further steps.** While the federal government has an important role in catalyzing action on climate preparedness, leadership is required at all levels. Cities and states must update building codes and strengthen electricity grids to protect communities and businesses from power outages, and Congress must authorize investments critical to fortifying our nation's infrastructure and building resilient and equitable communities.

These critical steps will improve the quality of our housing and infrastructure, reduce environmental hazards, and increase economic security in low-income communities.

Low-income communities are more vulnerable to extreme weather

While many describe extreme weather events as "social equalizers" that do not differentiate based on ethnicity, race, or class, the truth is that these events usually hit low-income communities the hardest because they exacerbate the health, safety, financial, and other socioeconomic problems that low-income communities experience year round. By 2012, 46.5 million Americans—nearly one in six people—were living in poverty.[9]

When families lack economic security, an unforeseen crisis that causes financial hardship can jeopardize the ability of families to pay the bills, put food on the table, and afford necessities such as medical expenses and child care. When that crisis is a natural disaster, families on the brink can be driven deeper into poverty.[10]

Furthermore, decades of underinvestment in low-income communities have made poverty-stricken neighborhoods particularly vulnerable to natural disasters. A combination of run-down housing and infrastructure, coupled with risky environmental conditions and economic instability, makes low-income families particularly vulnerable to floodwaters, toxic-waste exposure, extreme heat, and other climate change risks.

Shoddy housing puts low-income communities at risk

There is currently a shortage of more than 5 million affordable-housing units for low-income families across the country.[11] With few other options, low-income people often can only afford to live in suboptimal neighborhoods and housing that are highly exposed to flooding, extreme heat, and other climate change hazards. For example, 7 million low- and moderate-income families currently live in mobile homes.[12]

Finding safe and affordable housing is particularly challenging for people of color and low-income disaster victims in the wake of extreme weather events, which some researchers have termed the "second disaster."[13] Studies show that housing assistance during disaster recovery often favors middle-class victims, particularly homeowners.[14] After Hurricane Katrina, more than 40,000 affordable rental units—out of a total of 86,000—were severely damaged, driving up market rental prices for a two-bedroom apartment by 45 percent in two years.[15]

The poor quality of low-income housing demands more from disaster service providers than routine provisions of shelter and other housing support. After Superstorm Sandy, New York City relied on ad hoc teams of community volunteers to care for low-income elderly and disabled residents trapped in public housing towers.[16] In fact, social cohesion—the glue that holds tightly knit communities together and what motivates such teams to rapidly assemble—can be lifesaving in the wake of a disaster. In Chicago's heat wave of 1995, 739 people died in mostly low-income African American neighborhoods.[17] However, one such neighborhood, Auburn Gresham, with the same racial and income demographics, fared better than even more affluent neighborhoods. Why the difference? Auburn Gresham residents participated regularly in block clubs and church groups, creating strong bonds within the community that allowed neighbors to band together and assist neighbors in need.[18] It is these types of strong community ties and mobilization that the federal government and state and local leaders can better support through existing community-based organizations.[19]

Aging infrastructure threatens our economy and leaves low-income communities in distress

Americans rightly expect that the infrastructure we all rely on every day—from roads and bridges to power plants, electric grids, drinking water, and wastewater treatment facilities—is safe and structurally sound. Yet, last year, the American Society of Civil Engineers gave our nation's infrastructure a D+ rating and estimated that the investments needed to properly repair it would reach $3.6 trillion by 2020.[20] Sea-level rise and more extreme weather brought on by climate change put our nation's aging infrastructure at even greater risk of damage. This puts low-income people most at risk because they are more dependent on public transportation than middle-class or wealthy Americans to get to work, school, the grocery store, the doctor, and to evacuate when a storm hits.

Our nation's crumbling flood-control infrastructure was a major factor underlying the 2005 devastation in New Orleans after Hurricane Katrina. The average age of the 84,000 dams in the United States is 52 years old, with 14,000 of those considered high hazard.[21] And of the 2,350 levee systems the U.S. Army Corps of Engineers monitors, only 8 percent are in acceptable condition.[22] Unless we upgrade and repair these dams and levees, as well as other critical infrastructure at risk of crumbling during the next superstorm, many low-income communities will continue to be in harm's way.

High environmental hazards threaten the health and safety of low-income communities

The strength and quality of housing and infrastructure significantly affects community health and safety, and the location of these structures matters even more. Low-income communities of color disproportionately live near industrial sites such as chemical plants and refineries, which are often the source of toxic spills during storms.[23] In addition, people of color and low-income people are disproportionately affected by the hazardous debris and waste generated by storms, as they make up the majority of residents living within a couple miles of facilities where this waste is ultimately dumped.[24] Experts conclude that after disasters, "the likelihood remains high that minority and low-income neighborhoods will be burdened disproportionately with water and air pollution from debris removal and burning, given the historic pattern of siting landfills in those areas."[25]

Extreme heat

Extreme heat is one of the leading weather-related killers in the United States, resulting in hundreds of fatalities every year. The intense heat waves in 2011 and 2012 took more than 181 lives and set temperature records across the nation.[26] These temperature increases can exacerbate what is known as the "heat-island" effect, where densely built-up areas tend to be hotter than nearby rural areas.[27] African Americans are 52 percent more likely than whites to live in such densely packed neighborhoods.[28] At night, the temperature difference between a dense city and a nearby rural area can be as high as 22 degrees.[29] This increases people's risk for heat stroke, high body temperatures, unconsciousness, and even death. While having a working air conditioner reduces the risk of death from extreme heat by 80 percent,[30] one in five low-income households do not have air conditioners, and many cannot afford the electricity to run them.[31]

One disaster away from deep poverty

Because flooding is one of the most expensive and most common extreme weather events, a single flood can push a low-income family below the poverty line.[32] In July 2012, Congress passed and President Obama signed the Biggert-Waters Flood Insurance Reform Act; this was meant to reduce National Flood Insurance Program, or NFIP, liabilities by rolling back federal flood-insurance subsidies that can encourage people to live in flood-prone areas because the real risk is not reflected in the insurance price.[33] These changes, along with new floodplain maps, were expected to increase insurance premiums by 20 percent to 25 percent, translating to thousands of dollars per policy.[34] The program, however, was repealed by Congress in March because of pressure from wealthy homeowners who would have been most affected by the reforms; because of pressure from real-estate associations that were unhappy about losing their insurance subsidies; and because of concerns about the affordability of flood insurance for middle- and lower-income families.[35] Still, homeowners will see rate increases of 5 percent to 18 percent.[36]

Unfortunately, our nation cannot afford to continue to subsidize flood insurance at current levels; last year, the Government Accountability Office flagged climate change as a huge liability for federal crop and flood-insurance programs.[37] The NFIP contributes $24 billion to the U.S. debt,[38] an amount that will increase as coastal flood-insurance policies are projected to grow 130 percent by the end of this century.[39] At the same time, affording flood insurance is a real challenge for middle- and lower-income families. Policymakers can reduce our nation's debt, remove the incentives to live in high-risk areas, and make flood insurance affordable for middle- and lower-income families by removing flood-insurance subsidies, while also providing means-tested vouchers to families who need them to cover part of their insurance premiums.

Job loss

Job loss is also a big concern for families living in or on the edge of poverty. Overall, federal labor laws include more protections for salaried workers than for hourly workers when a disaster hits. "Non-salaried workers are really at the mercy of their employers," said Ross Eisenbrey, vice president of the Economic Policy Institute.[40] "If the business closes because of the storm, employers don't have to pay non-salaried workers for lost wages. And if the business is open, but the worker can't make it into work, employers are also not required to pay for lost wages." This is problematic, given that 75.3 million Americans rely on hourly wages to pay the bills.[41]

Food security

Lastly, food security is a major concern following a disaster. In the wake of federally declared disasters, states can apply for the Disaster Supplemental Nutrition Assistance Program, or D-SNAP, which provides replacement benefits for regular food stamp recipients who lose critical food supplies in a disaster, and extends benefits to low-income households that would not ordinarily be eligible for food assistance. Unfortunately, a large threat looms to the program as D-SNAP is funded through the traditional SNAP program, which House Republicans have been targeting for billions of dollars in cuts.[42]

Recommendations

Given the high risks and consequences of more extreme weather and climate change in low-income communities, federal, state, and local policymakers must take immediate action to strengthen the resilience of these communities. While the upfront costs of strengthening community resilience are high,[43] resilience investments pay off in big ways—they save lives and significantly reduce taxpayer spending on disaster recovery. In fact, every dollar that the Federal Emergency Management Agency invests in resilience saves the nation $4 in disaster-recovery costs.[44]

Restoring natural areas has an even bigger payoff. A recent Center for American Progress report found that restoring natural coastal areas returns more than $15 in net economic benefits for every dollar spent, including those tied to buffering communities against extreme weather, and supporting fisheries, tourism, and jobs.[45]

With thoughtful planning, federal, state, and local policymakers can increase infrastructure and community resilience in ways that meet other pressing priorities. These include increasing the availability of clean and reliable electricity, increasing access to jobs, reducing air pollution, and improving quality of life in low-income areas by expanding public transit and green spaces, among other benefits.[46]

To be clear, resilience measures alone are not enough to tackle climate change. The federal government, cities, and states must expand their efforts to curb heat-trapping emissions. In particular, states should develop strong implementation plans to comply with President Obama's recently announced carbon standards for new and existing power plants.[47]

Even with immediate and dramatic reductions of heat-trapping emissions, we are already feeling the effects of climate change today, and additional effects in the future are inevitable. To help low-income communities better prepare, we recommend that the president's Task Force on Climate Preparedness and Resilience take the following actions.

Strengthen affordable housing and infrastructure

The president should call on agencies to make resilience a core aspect of all federal infrastructure and disaster-recovery funding.[48] For example, the Department of Housing and Urban Development, or HUD, should ensure that the roughly $3 billion available annually for Community Development Block Grants, or CDBGs, and all supplemental disaster-recovery funds channeled through this program support climate-resilient and sustainable housing and other projects.[49] Similarly, the Department of Transportation, or DOT, should ensure that the $600 million available in 2014 for Transportation Investment Generating Economic Recovery, or TIGER, discretionary grants—which help improve our nation's infrastructure—support storm-ready roads, rails, transit systems, and ports.[50] HUD and DOT have taken important steps toward supporting more resilient rebuilding by making some Superstorm Sandy disaster-recovery assistance available for resilience projects. In the future, President Obama should require that all federal infrastructure investments meet the resilience infrastructure guidelines developed by the Hurricane Sandy Rebuilding Task Force, which are similar to those supported in a recent CAP report.[51]

The president and Congress should help localities strengthen the quality of affordable housing by increasing pre-disaster affordable-housing investments and by increasing the low-income housing tax credit to disaster areas with a significant loss of such housing.[52]

Building on reforms after Superstorm Sandy, HUD should continue to require all state and city recipients of future CDBG Disaster Recovery, or CDBG-DR, funds to identify how they will address the rehabilitation and new construction needs of each affected public and assisted housing complex, and how they will reduce their extreme weather risks in the future.[53] HUD should also strengthen its CDBG-DR program to ensure fair distribution of funds to low-income communities. It can do this by directing home-recovery programs using these funds to follow a formula based on the cost of repairs, rather than on the value of homes, to ensure that low-income people with less valuable properties are not shortchanged.[54]

Federal, state, and local policymakers should foster social cohesion in low-income communities by supporting programs that build relationships between public- and affordable-housing residents and community leaders, improving disaster-relief plans for affordable-housing developments, and providing technical assistance to community-based organizations to increase response capacity.[55]

Reduce environmental hazards and disaster risks

The president and Congress should expand the Pre-Disaster Mitigation Program fund, which enables local communities to evaluate their disaster risks and develop hazard mitigation plans to make them more resilient to extreme weather damages and to reduce disaster-recovery costs. This annual funding should equal the three-year average of federal disaster-recovery spending.[56] Cities and states should be required by Congress and the Federal Emergency Management Agency, or FEMA, to develop hazard mitigation plans that consider future climate change risks. Building on the president's Climate Data Initiative launched in March, federal agencies should give city leaders ready access to the climate change risk information they need to develop such plans.[57]

The administration should call on Congress to significantly increase fiscal year 2015 appropriations to $400 million—the FY 2009 level—for two existing programs: the Weatherization Assistance Program, or WAP, which makes low-income households more energy efficient, and the Low Income Home Energy Assistance Program, or LIHEAP, which helps low-income families pay their electricity bills.[58] This would improve the energy efficiency of more homes and reduce families' spending on utility bills.[59] Congress should also work to considerably increase FY 2015 funds for LIHEAP to $5.1 billion—also equivalent to the FY 2009 funding and the highest level in the past decade. This would help more low-income households pay for higher electricity bills caused by hotter weather.[60]

FEMA should encourage localities to develop post-disaster debris removal plans with community input in advance of extreme weather to ensure that low-income communities are not disproportionately affected by toxic and hazardous debris.[61] These communities should follow the standards set out by the Resource Conservation and Recovery Act, or RCRA, on solid and hazardous waste management, as well as ensure that waste facilities are not located near low-income communities.[62]

To minimize costly disaster damages, federal agencies and cities should increase investments in green infrastructure—parks and green roofs that soak up rainwater and reduce stormwater runoff—and the restoration of natural systems in coastal areas, such as wetlands and oyster reefs that serve as buffers to storm surges and provide other environmental and economic benefits.[63] These investments can create jobs in communities and support long-term ecosystem recovery.[64] The federal government has made some important strides in increasing green infrastructure.

The Hurricane Sandy Rebuilding Task Force required that all federal investments to support Sandy recovery efforts consider green infrastructure to both reduce future storm damage and to provide habitat and watershed protection, as well as other benefits.[65] The Environmental Protection Agency has been working closely with communities on integrating green infrastructure into stormwater permits and combined sewer overflow remedies.[66] Cities should ensure that these green infrastructure investments support extreme weather preparedness and provide daily co-benefits such as reducing the urban heat-island effect, provide new green space and park amenities, and create jobs.

In extreme cases, the federal government should encourage states to use voluntary buyouts to allow homeowners in flood-prone areas to sell property to the government, which then restores the land to its natural state to reduce future flooding and disaster costs, create new public recreational spaces, and enhance wildlife habitat.[67]

Enhance economic stability

The president and Congress should oppose budget cuts to SNAP and ensure that there is adequate funding for Disaster SNAP to assist people harmed by natural disasters to purchase food.[68]

Congress and the president should reform the National Flood Insurance Program, as the now-repealed Biggert-Waters Flood Insurance Reform Act did, to lower or remove flood-insurance subsidies to better reflect actual flood risks in insurance prices. A reformed NFIP should offer means-tested vouchers to middle- and low-income families so they can afford the insurance without masking the price.[69]

The president should urge Congress to lengthen the period for which disaster victims can receive unemployment insurance and disaster unemployment assistance, and increase the amount of these benefits.[70] Although this federal assistance is the main source of income for tens of thousands of disaster victims, states are only required to distribute benefits that are half the amount of regular unemployment insurance after a disaster.

Take further steps

The State, Local, and Tribal Leaders Task Force on Climate Preparedness and Resilience has an important opportunity to advise the president on how to reduce the disproportionately high risks facing low-income communities as the temperature and frequency of extreme weather events continues to climb. While the task force is meant to shape the federal role in strengthening community resilience, a problem of this scale requires leadership at all levels.

In most cases, local leaders are the first line of defense during extreme weather events, and state leaders play a critical role in reducing storm damage to communities and infrastructure. While these recommended actions for the president and state and local governments will go a long way toward reducing extreme weather risks in communities, Congress also must act. Until they do so, the White House should task agency heads with crafting a national strategy for making our infrastructure more resilient, as advocated by CAP in a recent report.[71]

Cities must take steps as simple as updating building codes to reduce future extreme weather damage and deaths, and should use the model-building codes developed by the Hurricane Sandy Rebuilding Task Force to do so.[72]

State leaders need to work with local governments and utilities to increase electricity grid resilience by putting vulnerable power lines underground where possible, creating incentives for consumers to install smart meters, and distributing and decentralizing clean power around the grid so that communities are not as vulnerable to massive outages.[73]

Congress should fund President Obama's proposed Climate Resilience Fund as part of his FY 2015 budget to help our cities prepare for a future of destructive weather. This fund would invest in research on the effects of climate change and how we can better prepare our communities for them. It would also help communities plan and prepare for these threats, encourage adoption of local measures to reduce future risk, and fund breakthrough technologies and more resilient infrastructure that will make communities better prepared for the changing climate.[74]

In addition, Congress should reauthorize the National Dam Safety Program and provide $1 billion annually to rehabilitate our rundown dam and levee infrastructure that helps reduce flood risk.[75]

Lastly, Congress should swiftly enact President Obama's proposal to create a national infrastructure bank to use $10 billion in public funding to leverage private investment in national and regional infrastructure priorities. This national financing entity could also help coordinate national and regional infrastructure and resilience planning.

Conclusion

The new normal of more extreme weather triggered by climate change creates costly risks with devastating consequences, particularly in low-income communities. The time is now for leadership across all levels of government, and coordination across sectors and with the private sector, to reduce these risks. By improving the quality of our housing and infrastructure, reducing environmental hazards in communities, and increasing economic security, the president, state and local governments, and Congress can build resilient, safe, and equitable communities where all Americans can prosper.

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