Considerations for At-Risk Groups in the U.S. Virgin Islands Climate Change Initiative

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Foundation for Development Planning, Inc



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Considerations for At-Risk Groups in the U.S. Virgin Islands Climate Change Initiative

Introduction

The U.S. Virgin Islands climate change executive order (No. 474-2015) provides a mechanism for all social sectors and groups to work together in building resilience to climate change, and the U.S. Virgin Islands Climate Change Council (the Council) is charged with facilitating this collaborative process.

The climate change executive order acknowledges that some groups of individuals are more vulnerable than others, and such groups are generally referred to as At-Risk Groups. Climate change is expected to exacerbate existing problems, as evidenced by excessive morbidity and mortality during heat waves. Given this attenuating effect of climate change, groups that are currently at risk, or that are particularly vulnerable during disasters, will face a level of vulnerability under climate change conditions that is significantly higher than the population at large.

Climate change adaptation planning must therefore address the increased vulnerability of atrisk groups to both extreme events (e.g. heat waves, floods, storms) and gradual changes to the bio-physical environment (e.g. increased heat, outbreak of diseases) and support systems.

This briefing paper is submitted to the Council to ensure that considerations for at-risk groups are incorporated in: (a) the general deliberations of the Council; (b) the operational modalities of the Council (such as the public engagement processes); (c) the assessment of adaptation plans for public agencies; (d) research and other activities undertaken as part of the climate change initiative; and (e) proposed climate change policies and adaptation strategies.

At-Risk Groups in the U.S. Virgin Islands

Socio-economic characteristics that are said to capture social vulnerability and health susceptibility are: gender, income, education, racial and/or ethnic minority, age 65 years or older, and household members with chronic medical conditions and/or disabilities (Akerlof et al, 2015).

At-risk groups include the following:

- Children;
- The elderly;
- Persons with chronic health conditions (such as respiratory diseases, diabetes, hypertension, dyslipidemia, and heart disease);
- Persons with chronic mental health conditions (such as schizophrenia, bipolar disorder, major depression and/or suicidal, and alcohol and/or substance abuse challenges);

- Persons with disabilities;
- Persons with compromised immune systems, particularly human immunodeficiency virus (HIV);
- Persons living in poverty (usually displayed as suffering from malnutrition or living in sub-standard housing); and
- The homeless.

"The vulnerability of these individuals is enhanced by race, ethnicity, age, sex, and factors such as income, insurance coverage (or lack thereof), and absence of a usual source of care. Their health and healthcare problems intersect with social factors, including housing, poverty, and inadequate education" (The American Journal of Managed Care, 2006).

The population of the U.S. Virgin Islands (USVI) includes several at-risk groups, and displays the conditions that exacerbate their vulnerability. An exploratory study of health disparities in the USVI in 2010 identified twenty eight (28) health concerns and disparities. Of these, the main concern was access to health services for (i) heart disease and stroke, (ii) cancer, (iii) diabetes, and (iv) HIV infection (Callwood et al, 2012).

In 2012, approximately 23 percent of the USVI population was living in poverty (as compared to the national rate of 15%). <u>http://www.usviber.org/CEDS%20Plan%202015.pdf</u>

In 2010, the overall prevalence rate of people of all ages with a disability in the USVI was 9.8 percent (Erickson, 2014). In 2012, the overall prevalence rate of children with a disability, ages birth-17 years, was 5 percent (1, 290 children) (Kids Count 2014). In 2012, 1,184 children, ages 3-17 years, were enrolled in Special Education (Kids Count, 2014). Among the five types of disabilities identified in the 2010 U.S. Virgin Islands Decennial Census, the highest prevalence rate was for *"Cognitive Disability*," 1.6 percent (306 persons) (Erickson, 2014). Regarding individuals with disabilities ages 18-64 years, 5,164 of the 64,168 in the USVI reported one or more disabilities in 2010.

Climate Change Impact on At-Risk Groups

The expected health impacts of climate change are well known (Confalonieri et al 2007, World Health Organization 2010, Taylor et al 2009, Clarke et al 2013).

"Climate change affects the fundamental bases of good human health, which are clean air, safe drinking water, food security, and secure shelter (WHO, 2010). Climate change is known to impact health through three climatic dimensions: extreme heat, natural disasters, and infections and diseases. Increasing atmospheric temperature has often been associated with increased numbers of cardiovascular and respiratory diseases, particularly among elderly persons". (Clarke et al 2013, p.13)

Additionally, the economic and physical characteristics of small islands increase their vulnerability, thereby reducing their resilience to climate change (Mimura et al, 2007).

Under climate change scenarios, additional groups are likely to become vulnerable, such as persons living in a floodplain and people engaged in occupations that require them to be outdoors for extended periods.

In the wake of any disaster, at-risk populations, including persons with disabilities, would be at a greater long-term disadvantage due to low availability of resource and access. Existing inequities and disparities will create new risk factors, producing new variables to what is defined as the vulnerable population. To address climate change and its impacts, community engagement will be a critical strategy to create awareness and sustain efforts to reduce the impact on persons with disabilities and at-risk populations. Self-advocacy and community inclusion at the decision making and policy levels can assist in revamping current protocols and practices while assessing current needs and barriers to implementing and amending policy. Community trust and buy-in strengthens climate change mitigation efforts by allowing the community to invest, and thereby have a sense of ownership, in the initiative. As the effects of climate change become evident, collaborative arrangements between institutions, public and private stakeholders, and persons with disabilities is vital to the decision-making process as it relates to policy and systemic changes that protect persons with disabilities.

Considerations for At-Risk Groups in the U.S. Virgin Islands Climate Change Initiative

The U.S. Virgin Islands climate change executive order (No. 474-2015), in its preambular statements, acknowledges the higher level of climate-related vulnerability for particular groups in the U.S. Virgin Islands. Although the executive order does not speak specifically to at-risk groups, the acknowledgement that some groups face higher levels of risk implies that the initiative should pay particular attention to such groups.

Potential points of entry for translation of inferred policy to action can be found in the requirements for policy development, institutional programming, and public participation in the climate change initiative. Potential points of entry are:

(a) Section 2: Public Sector Performance

Section 2(a) requires all public institutions to prepare agency adaptation plans. While the focus is on reducing the impact of climate on agency operations, the section also requires each agency to "... *integrate climate change adaptation considerations into future project and program design and implementation*". This provision can be interpreted as policy and legal guidance to support engagement by public institutions with any institution that provides services to at-risk groups, or whose programs have direct or indirect impact on at-risk groups.

Section 2(c)(iv) implies that any attention paid to at-risk groups would involve not only a particular public agency, but would extend to that agency's supply chain.

(b) Section 3: Decision Support System

Section 3(a) mandates the provision of easily-accessible data to the public. This implies not only ease of access, but the use of data formats that support interpretation and use by the community, including persons with disabilities.

(c) Section 4: Climate Change Council

Section 4(d) allows the Council to establish working groups as necessary, and such groups may include institutions not represented on the Council. Given the importance of human health to sustainable societies, it is here assumed that a working group will be constituted around the issue of health. Another factor supporting this assumption is that the executive order includes the health sector in the list of sectors selected for vulnerability and risk assessment. Whether a focus on at-risk groups should be addressed within a working group on health or within a more focused sub-group is an issue to consider.

Sections 4(e)(i) and 4(e)(iii) support the development of new policies and strategies that ensure the incorporation of climate change adaptation measures into development planning. If, as discussed above, at-risk groups will be more vulnerable than other segments of the population, then appropriate standards and assessment methods must be developed to ensure that polices, strategies, programs, and projects adequately address the vulnerability of at-risk groups.

Sections 4(e)(ii) and 4(f) require that the climate change initiative facilitate the involvement of the community at the level of the individual or group. This involvement is in the form of individual and group action, as well as participation in the deliberations and work of the Council. These provisions have far-reaching implications for determination of data relevance, data capture, data management and sharing, engagement mechanisms, and support systems for the initiative. Institutions serving at-risk groups will need to mobilize the expertise and resources necessary to enable them to track and participate in all the components of the climate change initiative.

Guidelines for Addressing the Issues of At-Risk Groups

Addressing the special vulnerabilities of at-risk groups in the climate change initiative involves articulating a philosophy of engagement, as well as mechanisms for collaboration. Principles of empowerment of powerless and vulnerable groups should be developed through a process of dialogue and shared understanding with the affected groups. Guiding principles resulting from such a process would then be incorporated into the discussions, decisions, and outputs of

the Council, public agencies, and other institutions and groups associated with the U.S. Virgin Islands climate change initiative.

Guiding principles would necessarily address:

- (i) Design of processes and materials to facilitate access and full participation by at-risk groups.
- (ii) Facilitating access to financial resources, technical assistance, and logistics support to ensure adequate preparation and full participation.
- (iii) Ensuring that at-risk groups are allowed to articulate and represent their interests.
- (iv) Ensuring that assessment protocols for policies, programs, strategies, and projects include measures for assessing the impact on at-risk groups.

Recommendation:

Given the high levels of poverty in the U.S. Virgin Islands, the existence of health disparities, and the low level of awareness regarding the impact of climate change, the Council would benefit from advice provided by appropriate experts. It is therefore recommended that the Council establish a small working group, comprised of specialized institutions that serve at-risk groups, to function in a technical advisory role to the Council on matters relevant to at-risk groups.

References

- Akerlof, Karen L., Paul L. Delamater, Caroline R. Boules, Crystal R. Upperman, and Clifford S. Mitchell. (2015). Vulnerable Populations Perceive Their Health as at Risk from Climate Change. International Journal of Environmental Research and Public Health, 2015, 12, 15419-15433. Retrieved from: <u>http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4690930/</u>
- Callwood, Gloria B., Doris Campbell, Faye Gary, and Michael L. Radelet. (2012). Health and Health Care in the U.S. Virgin Islands: Challenges and Perceptions. *The ABNF Journal*, Winter 2012.
- Clarke, Christine, Charmaine Gomes, Dillon Alleyne, and Willard Phillips. (2013) An assessment of the economic and social impacts of climate change on the health sector in the Caribbean. United Nations Economic Commission for Latin America and the Caribbean.

- Confalonieri, U., B. Menne, R. Akhtar, K.L. Ebi, M. Hauengue, R.S. Kovats, B. Revich and A. Woodward, 2007: Human health. *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, 391-431.
- Erickson, W. (2014). *Disability Status Report: U.S. Virgin Islands.* Ithaca, NY: Cornell University Employment and Disability Institute (EDI). Retrieved from: <u>https://www.disabilitystatistics.org/reports/2010-StatusReport-USVI/</u>
- Kids Count Data Book (2014). Our commitment matters. Retrieved from: <u>http://www.cfvi.net/documents/2014%20KIDS%20COUNT%20Data%20Book.pdf</u>.
- Mimura, N., L. Nurse, R.F. McLean, J. Agard, L. Briguglio, P. Lefale, R. Payet and G. Sem, 2007: Small islands. *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, 687-716.
- Taylor, Michael A., A. Anthony Chen, and Wilma Bailey. (2009). *Review of Health Effects of Climate Variability and Climate Change in the Caribbean*. Caribbean Community Climate Change Center.
- The American Journal of Managed Care. November 2006, S348-352. <u>http://www.ajmc.com/journals/supplement/2006/2006-11-vol12-n13suppl/nov06-2390ps348-s352</u>
- World Health Organization. (2010, Updated September 2016), "Climate Change and Health" [online], *Fact Sheet*, No. 266, Retrieved from: <u>http://www.who.int/mediacentre/factsheets/fs266/en/index.html</u>

Foundation for Development Planning, Inc.

The Foundation for Development Planning, Inc (FDPI) is a non-profit, non-governmental organization whose purpose is to engage in programs that lead to the sustainable development of Caribbean communities. This purpose is achieved through the development of policies, processes, methodologies, tools, and programs that enable effective management of island systems.

The Mission of the Foundation is to "Engage with relevant stakeholders to foster sustainable development in the Caribbean, integrating social, economic, and environmental dimensions".

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Virgin Islands University Center for Excellence in Developmental Disabilities

The Virgin Islands University Center for Excellence in Developmental Disabilities VIUCEDD) was established in October 1994. It is one of 67 University Centers for Excellence in Developmental Disabilities funded by the Administration on Intellectual Developmental Disabilities.

The Mission of VIUCEDD is to enhance the quality of life for individuals with disabilities and their families and to provide them with tools necessary for independence, productivity and full inclusion.

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Historically American...Uniquely Caribbean...Globally Interactive...

School of Nursing - Caribbean Exploratory (NIMHD) Research Center # 2 John Brewers Bay, St. Thomas, VI 00802

April 26, 2016

Mr. Lloyd Gardner President Foundation for Planning Development Inc. St. Thomas, US Virgin Islands

Dear Mr. Gardner:

The Caribbean Exploratory (NIMHD) Research Center of Excellence (CERC) is a leader in the area of health disparities research in the U.S. Virgin Islands, a public health challenge for our community that will be impacted negatively by climate change. The work of CERC on health disparities supports the acknowledgement of the VI Climate Change Executive Order (No. 474-2015) that some groups of individuals are more vulnerable to the impacts of climate change than others. Therefore, it is appropriate and timely for CERC to declare its support of the VI climate change initiative and the work of the VI Climate Change Council.

Research on health disparities supports conclusions that link manifestations of climate change with an exacerbation of existing chronic health conditions. Therefore, it is critical that climate change adaptation planning address this increased vulnerability so that individuals living with conditions like cardiovascular disease, cancer, diabetes and respiratory disease can survive in a world with more frequent extreme weather events, increased outbreaks of infectious diseases and changed physical environments.

CERC joins other organizations that serve or conduct research involving at-risk groups in urging the VI Climate Change Council to give adequate consideration to at-risk groups during general deliberations, public engagement processes, assessment of adaptation plans for public agencies, research conducted as a part of the climate change initiative, and proposed policy and adaptation strategies. CERC is prepared to be a part of the institutional pool conducting research on the impacts of climate change on health disparities in support of the VI Climate Change Adaptation Initiative and the work of the VI Climate Change Council.

Thank you for your attention and support.

Sincerely,

Glow B. Callerood

Gloria B. Callwood, Ph.D, RN, FAAN PI and Director, CERC



Virgin Islands Developmental Disabilities Council, Inc. (VIDDC) 3011 Golden Rock Christiansted, St. Croix VI 00820 Phone: (340) 773-2323 Ext. 2137 E-mail: viddcouncil@gmail.com

April 15, 2016

Virgin Islands Center for Excellence in Developmental Disabilities University of the Virgin Islands #2 John Brewers Bay St. Thomas, U.S. Virgin Islands 00802

Re: Letter of Support for Considerations for At-Risk Groups in the U.S. Virgin Islands Climate Change Initiative

To Whom It May Concern:

The Virgin Islands Developmental Disabilities Council, Inc. (VIDDC) submits this letter of support for the VIUCEDD briefing paper for the Considerations for At-Risk Groups in the U.S. Virgin Islands Climate Change Initiative. The VIDDC strongly believes that many in the developmental disability population; blind, deaf and hard-of-hearing individuals are especially vulnerable to climate change and the natural disasters that can manifest as a result.

The key purpose of the VIDDC is to fulfill a federal mandate in accordance with the Developmental Disabilities and Bill of Rights Act of 2000, to provide advocacy, capacity building and system change on behalf of individuals with intellectual and developmental disabilities in the Virgin Islands. To that end, the VIDDC has provided funding and support for the "Preparing Together" program that identifies and trains volunteers to address the needs of individuals with developmental disabilities before and during a disaster. The program is led by St. Luke's AME Church, other faith-based organizations, the Volunteer Organizations Active in Disaster (VOAD), the American Red Cross and local organizations and agencies.

Another consideration of the briefing paper could be to include those persons living, working or attending school in land filled areas.

Sincerely,

L. G. Pa

Yvonne D. Petersen Territorial Executive Director