Just Sustainability: Urban Sustainability in Low-Income Communities

I

Introduction

The global society is at a crucial point in its history. With the rapid depletion of natural resources, the onset of global warming and the widening gap between the rich and the poor, something must be done to mitigate the conflict that is inevitably approaching. Humans must find a way to live together and to live in a way that does not exhaust their habitat, leaving no one behind.

The urban poor are universally forgotten, whether in a country that is considered economically developing or developed. Policies affecting housing, employment, transportation, access to public services and access to healthy foods have an impact on the standard of living of the urban poor. Commenting on the state of low-income communities in the United States, M. Pavel says "these communities typically lack access to basic infrastructure such as grocery stores, libraries, parks, banks and vibrant public spaces. Most have no possibility of finding living wage jobs near their homes and often lack transit options that would make employment elsewhere in the region a viable option."[1]   However, there are possibilities for these policies to be changed to create a healthier, more equal society.

The catalyst for this change could lie in the popularity of the environmental movement that has been emerging and becoming fashionable in response to the global crisis of resource depletion and global warming. With the popularity of "green" living practices – and the indication that the trend will not be ending any time soon, a possibility exists for those in poor urban communities to take advantage of the development that will be occurring. As people seek

---

[1] M. Pavel (2009) Breakthrough Communities. MIT Press Cambridge. (xx)

solar panels for their homes as alternative forms of energy, or locally grown produce, those in low-income communities can be prepared now for the future demand. Not only could this lead to employment and community revitalization, but it will also create a healthier environment with less resource use and less pollution. By educating the urban poor in sustainable practices and including them in the movement, a mass of people will be participating in a paradigm shift that is necessary for the survival of human life.

By combing equality movements with the environmental crisis, social justice has a potentially effective and urgent vehicle for change. Equality will not be achieved immediately, and this argument is being made simplistically without addressing the realities of daily life in every city across the United States, social stigmas that may prevent cooperation from other actors, or a number of other obstacles to achieving social justice. However, it is a start. It is a change in thought about the potential for community development and sustainability to work together to achieve equality.

II
Purpose and Method

In this paper, I approach the sustainability issue in the framework of the urban, American environment. I focus specifically on low-income communities and the potential to use the green movement as a means of promoting equality, and thus creating a more holistically sustainable American city. As the world trends towards adopting green standards and selling green products, the fashionability of "green" could be harnessed to improve low-income communities. By using the green movement to improve the lives of people in these neighborhoods, advocates could create a healthier environment, reduce energy and natural resource consumptions, and provide a structure for social equality.

I focus on the urban environment because of the high levels of emissions that are produced by cities. If the focus of the sustainability movement is on urban areas, high levels of reduction can occur and the message of sustainability will reach large numbers of people. Additionally, there is a great need for community development in low-income urban areas. If this development can be achieved in a healthy, sustainable way, it would be beneficial for everyone living in an urban area, as it could reduce crime and increase stability in the regions. It would also be beneficial for the global community at large because the consumption of resources by Americans directly affects the health and stability of the rest of the world. This is the best time to pursue such development because of the current trend towards the green industry. Private investors will be able to predict benefits from investment. The development would benefit low-income communities by revitalizing neighborhoods, bringing jobs and mobility to the communities and reducing the costs of living for a population that is plagued by unemployment and poverty.

The research focuses on the United States rather than the global urban community for two reasons. First, the cross-cultural implications would leave too much room for debate. The point of this paper is to demonstrate the potential for change in the United States. If international standards are referenced, it could present the argument against the possibility for enacting such changes in the United States due to cultural differences. By focusing the research on domestic issues and achievements, culture variable has been mitigated. Additionally, in my research I found a great deal of information concerning the "developing" world and how to enact sustainable changes in a way to help those nations improve. The lack of information about American cities and their unsustainability was of interest to me because it indicates the assumption that American cities, being "developed," are superior to other nations in the realm of

sustainability. Knowing that Americans consume more energy and produce more pollution than any other nation, it is clear that the country is in need of sustainable changes to keep costs low, preserve energy independence and promote social equality.

In order to examine and identify the potential for sustainability in poor communities in American cities, I focused on the issues that are typically addressed by city planners. Sustainability is a broad field and contains a host of issues that often overlap. Because of the interconnectivity of sustainability issues, it is difficult to address each issue and its connection to others in a clear manner. So, for the sake of clarity, I decided to examine the issues that are most commonly addressed by city planners when they are addressing sustainability in urban areas, in the way that they classify them. These included transportation, energy use, housing and waste. I also added the concerns of community development advocates, such as job creation and food access. By examining these issues, I was able to examine both the environmental issue areas and the equity issue areas, creating a more holistic study of sustainability.

Additionally, this paper seeks to identify and address the ways in which these areas of planning commit social injustices and could be altered to correct these injustices. In many cases, problems arise because of policies that do nothing more than support the unsustainable habits of the wealthy and could be adjusted to benefit low-income communities as well. In almost every case, altering the policies makes sense for economic development and environmental preservation.

After providing information on these areas and how they can be improved to achieve a more sustainable environment, I chose at least one example of how these changes have been successfully implemented in a community. These examples vary from the national to the local

levels and the actors range from the federal government to a community non-profit. Each of the scenarios proves effectiveness in using sustainability as a vehicle for low-income community development.

In the coming years, sustainable living will become a necessity for human kind. If we are to avoid conflict, the definition of sustainable living will have to include the pursuit of social equity. In this paper, I seek to provide a study and critique of sustainable city planning and its potential for achieving social justice in urban environments.

III

Definitions of Sustainable Development

There are many different ways of defining sustainability and it is important to reconcile all of these different definitions so that people have a similar understanding of the necessities for living sustainably. Unfortunately, this lack of consensus of definition can lead to confusion as to what the term means for the public. Additionally, it adds to the debate surrounding the topic. Political leaders manipulate the issue to suit their own purposes, further confusing the public. But even among those who promote sustainable cities, there is argument about what exactly a sustainable city is – specifically whether it should concern social equality as well as environmental safety.

The most commonly cited definition is provided by the Brundtland Commission (which was created by the United Nations in 1983 to study the consequences of the deterioration of the environment and its impact on social and economic systems) and dictates that sustainable development is "development that meets the needs of the present without compromising the

ability of future generations to meet their own needs."[2] This definition is often criticized as being anthropocentric. The definition assumes that the surrounding environment exists for the benefit of humans and that other species' needs are second. It also lacks a concrete definition for the term "needs." The needs of a family in a "developed" nation may be different from those of a family in an "underdeveloped" nation. This definition does nothing to address social justice issues or change the way people view the role of the environment.

The World Conservation Union defines sustainable development as "improving the quality of human life while living within the carrying capacity of supporting ecosystems."[3] This definition emphasizes the importance of protecting the environment. However, what both the Brundtland Commission and the World Conservation Union (and many other) definitions neglect is equity – the social justice aspect of sustainability. For a community that has a great divide between its citizens will never be sustainable.[4]

Most American cities ignore the need for social justice in their planning as a component of sustainability.[5] Ageyman and Evans's definition claims that sustainability is "the need to ensure a better quality of life for all, now and in the future, in a just and equitable manner, whilst living within the limits of supporting ecosystems."[6] This definition of sustainability is the most holistic because it includes equity. Without addressing the idea of equity in sustainability, the idea of sustainability is negated. Inequalities lead to instability in a society, and the very

---

[2] S. Wheeler (2004) Planning for Sustainability: Creating Livable, Equitable, and Ecological Communities. Routledge: New York. (91)
[3] *Ibid* (91)
[4] M. Pavel (2009) Breakthrough Communities. MIT Press Cambridge.
[5] Agyeman, J. & T. Evans (2003). Toward Just Sustainability in Urban Communities: Building Equity Rights with Sustainable Solutions. *The ANNALS of the American Academy of Political and Social Science 590:1* p35-53.
[6] *Ibid* (5)

paradigm of sustainability and minding consumption levels requires one to think of others and not just him/herself.

Ageyman and Evans's definition is supported by Atkinson, who goes further in suggesting that in order to adopt this definition, a new paradigm may be necessary for the American public.[7] She argues that the influence of neoliberalism gave power to a few through structures and created today's American class system which keeps the urban poor from achieving upward mobility.[8] These consequences prevented Americans from seeking sustainable alternatives to their current systems, because as long as those in power of the structures are content, behaviors are considered socially acceptable. According to Atkinson, if Americans are to seek urban sustainability, they will first need to accept a new paradigm considering the reduction of consumption, production, wealth, and individuality.[9]

In this paper, the term sustainability will be defined using Ageyman's definition. It is important to include the need for social justice in the definition if sustainability is truly to be achieved. It is essential to understanding the ultimate paradigm of sustainability – the goal is not to advance the individual, but rather the collective. People must consume less so that there may be more for the future.

IV

Consequences of Inaction

Humankind's lack of sustainable practices, particularly in urban environments, is affecting not only people but every living species on earth. Unsustainable practices like the

---

[7] Atkinson, A. (2004) Urbanisation in a neo-liberal world. *City* **8**:1, pp. 89-108.
[8] *Ibid*
[9] *Ibid*

wanton use of fossil fuels, which manifests itself in countless ways, can be attributed to creating several problems, including but not limited to: environmental destruction, cost of living increases, and a widening of the global economic divide.

Some of these problems, if ignored, will not be reparable. As researcher Donella Meadows and her team of MIT researchers found in 1972, if current levels of consumption continue unchecked, the human system could crash as early as the mid-twentieth century.[10] When the team conducted another study twenty years later, they achieved the same results.[11] Postponing sustainable changes in the world, particularly in urban communities, will eventually change the world as humans know it. Drastic changes will need to be made in the way humans consume because the resources simply will not be available.

Global Warming and Environmental Destruction

Unsustainable practices, including but not limited to automobile transportation, food production and transportation, and poor waste removal procedures, are hurting the environment and increasing the rate of global warming. As will be explained in later chapters, these practices not only make life difficult for people living in low-income communities, but are also ensuring the destruction of the human habitat, making life for future generations difficult or even impossible.

---

[10] S. Wheeler (2004) Planning for Sustainability: Creating Livable, Equitable, and Ecological Communities. Routledge: New York.
[11] *Ibid*.

The emissions from the human consumption of fossil fuels like oil are rapidly increasing the speed of global warming.[12] By doing so, humans are directly affecting the rate at which glaciers are melting, sea levels are rising and other species' habitats are being destroyed.[13]

> The Fifth U.S. Climate Action Report concluded, in assessing current trends, that greenhouse gas emissions increased by 17 percent from 1990-2007. Over that same time period, the U.S. GDP increased by 65 percent and population increased by 21 percent. The dominant factor affecting U.S. emissions trends is CO_2 emissions from fossil fuel combustion, which increased by 21.8 percent over the 17-year period.[14]

Cities contain high volumes of people concentrated in a small space. These people produce waste, rely on public and private transportation for mobility, require food to be shipped to cities, use large amounts of water and electricity – in short, they consume a lot of energy. Today's cities consume 75% of the world's resources and produce 80% of CO2 emissions.[15] It is impossible to ignore that cities provide a necessary space for sustainable reform – they must reform. Creating cities that consume less and produce less waste will reduce a large portion of the world's greenhouse gas emissions.

Urban form may be the largest determinant of greenhouse gas emissions – making the United States' form of urban sprawl highly detrimental to both reducing cost and reducing emissions.[16] Urban sprawl is the spreading of cities from concentrated, dense and walkable outwards to include and rely on suburbs. It is the result of people wanting more space for

---

[12] National Resources Defense Council (2008*). The Consequences of Global Warming*.
http://www.nrdc.org/globalwarming/fcons.asp
[13] *Ibid*.
[14] U.S. Environmental Protection Agency. *Climate Change – Greenhouse Gas Emissions.*
http://www.epa.gov/climatechange/emissions/index.html
[15] Keivani, R. (2010) A review of the main challenges to urban sustainability. *International Journal of Urban Sustainable Development 1:1* p5-16
[16] *Ibid*.

themselves, but as a result, makes travel and service use more difficult and less energy-efficient. In America, thanks to the autonomy of the automobile, many cities are subject to urban sprawl – this proclivity requires a greater use of energy for transportation and the provision of public services, increasing emissions.[17]

If humans continue to consume this way, we will pollute our environment with our emissions and simultaneously deplete our resources. Pollution will escalate, the income gap will continue to widen and states will become unstable as they constantly seek the resources their citizens demand.

Monetary Cost

Current urban practices are not only destroying the environment, but they are also increasing the cost of living for people who live in cities. These costs affect everyone in the spectrum of socioeconomic class. The more nonrenewable energy people use, the higher its cost. These costs not only manifest themselves in energy and gas bills, but also in medical bills (and taxes) associated with public health costs – from pollution inhalation to adverse effects from proximity to landfills and even obesity rates in some communities.

The design of today's American cities also increases costs. Because of the urban sprawl that has become the American metropolis, access to public services is more expensive because they have to be transported farther. This is also seen in the American dependence on the automobile. Gas prices are continuing to rise, and people continue to drive because they are not close enough to walk and lack adequate public transportation options.

---

[17] *Ibid.*

Cost of living increases will also be felt in the realm of public health. Directly because of consequences of living in polluted urban environments or communities near landfills or industrial waste dumps, people (especially those living in poor communities or communities of color) are beginning to have health problems.[18] These health issues directly impact the cost of living of the individuals it is affecting as well as indirectly affects the cost of healthcare taxes for the national population as a whole.

Yet another way in which unsustainable practices in cities are raising the cost of living is in food consumption. Because of the large numbers of people living in cities, and the use of land around cities for residential rather than agricultural purposes, food must be shipped to cities. This practice of transporting food hundreds of miles to feed a population that has food nearby is costing resources and money. If cities were to adopt more sustainable practices in food consumption to preference local sources, a huge dent would be made in cost of transport and cost of resources.

Economic Divide

Unsustainable practices also further the divide between the wealthy and the poor, creating a recipe for social instability. Transportation policies make it difficult for the poor to travel to work and easier for the wealthy to move about in their automobiles. The rising cost of fossil fuels like oil, due to their scarcity as a result of overconsumption, makes it difficult for those with low incomes to afford to heat their homes. The widening economic divide creates an unstable (and unsustainable) global situation that needs to be addressed.

---

[18] R. Skelton & V. Miller. (2006) NRDC: The Environmental Justice Movement.
http://www.nrdc.org/ej/history/hej.asp

The United Nations predicts that there will be 1.4 billion slum dwellers across the world in 2020.[19] Additionally, the global poor are urbanizing faster than the global population as a whole.[20] Without plans for absorbing these people, cities will become less safe, less clean and less efficient. These figures demonstrate the inevitability of the growth of cities and the disproportionate number of poor people living in them.

<div align="center">V</div>

The Convergence of Environmental Issues and Community Development

Scholars of sustainability seem to be in agreement that cooperation and alliance between those involved in environmental issues and those involved in community development is necessary to achieving success.[21] With the concerns of environmentalists and social justice advocates converging, opportunities are emerging for reinvestment and potential new allies for advocating for change.[22] Private and public leaders are calling for a sustainability agenda, suburbanites are beginning to complain about the negative impact of the automobile on their neighborhoods and wallets, and business leaders are concerned about their employers' proximity to work.[23] In order to be successful, environmental and community development specialists must embrace a holistic approach to sustainability, and consider environmental, social justice, economic, and political issues. However, it is imperative for the two different disciplines to adhere to this common ground rather than reverting back to their own biases and goals.

---

[19] Auclair, C. & A. Jackohango (2006?) UN-HABITAT - Working Group A Bottom of the Pyramid Approaches for Urban Sustainability Background Paper.

[20] *Ibid.*

[21] C.M. Duncan *From Bootstrap Community Development to Regional Equity* in M. Pavel (2009) <u>Breakthrough Communities</u>. MIT Press Cambridge.

[22] *Ibid.*

[23] *Ibid.*

The emphasis on place is very important for the sustainability movement. People must be invested in their environment if they are to be moved to action and dedicated to its preservation. Too many of the United States' urban communities today that do not emphasize a "people and place" philosophy including the low-income residents who live there risk displacing long-time residents and opening the area to gentrification.[24] If cities are going to be transformed, the changes must be supported by community members. Once the funding and push to revitalize the community has faded, the people living there will be left to manage it and ensure that it continues to be sustainable.

Advocates must also be sensitive to the impact of race and racism on urban planning, sustainability and helping low-income communities out of poverty. Racism is noticeable in most of the policies that keep low-income communities from receiving equal use of public utilities like transportation, employment and education.[25] It is also visible in the placement of landfills and other waste sites, which are more prevalent in poor communities of color than wealthy, white neighborhoods.[26]

Sustainability advocates must also embrace e the need to work on local, state and national levels to achieve results. It is not enough to change the paradigm in local communities, because funding comes from national and state levels. In any developmental project, it is essential to understand the stakeholders and how they can be utilized to be most effective for the cause. Urban sustainability planning is no exception.

---

[24] A.G. Blackwell & L.B. Starrett *Building the Capacity of the Regional Equity Movement* in M. Pavel (2009) Breakthrough Communities. MIT Press Cambridge. (310)
[25] j.a. powell *Reinterpreting Metropolitian Space as a Strategy for Social Justice* in M. Pavel (2009) Breakthrough Communities. MIT Press Cambridge.
[26] C.M. Duncan *From Bootstrap Community Development to Regional Equity* in M. Pavel (2009) Breakthrough Communities. MIT Press Cambridge.

However, sometimes environmental and development communities differ in their goals. Perhaps the most important area of contention between environmentalists and community development advocates is the ultimate goal of the two. Environmental advocates tend to focus more on the impact that practices are having on the environment and its future, whereas community development advocates are more focused on achieving justice in the form of jobs, housing, transportation, and other structures that promote equality in communities.

Traditional sustainability theorists tend to emphasize the impact on the environment while ignoring the necessity of economic development and employment for low-income communities.[27] While the environmental impact is undoubtedly a pillar in sustainability, as has been previously mentioned, the vitality and success of low-income communities is also required to build a sustainable future. If the sustainability movement is to be successful, those who focus on the environment and those who focus on community development must be willing to concede on certain issues and form coalitions combining their resources and power.[28]

Community development advocates are usually more willing to sacrifice the most environmentally sustainable practices in favor of practices that will stimulate job creation or other actions that can bring prosperity to a community. This is not to say that they do not desire to pursue the two as one in the same, but that when faced with a choice, they will usually opt for the choice that has a positive impact on the people in a community rather than the health of the environment.

These two groups need to come together to promote environmental justice and sustainability in low-income communities. The two go hand-in-hand, and with the sudden

---

[27] C.M. Duncan *From Bootstrap Community Development to Regional Equity* in M. Pavel (2009) Breakthrough Communities. MIT Press Cambridge.
[28] *Ibid*.

interest in sustainable and "green" issues, a great opportunity is presenting itself– development that low-income communities can and must be a part of. The development of low-income communities can provide economic benefits, reduce the cost of living in urban environments, rehabilitate public housing, make urban spaces more aesthetically pleasing, improve public health and clean up the global environment. Successes by low-income communities can prove the effectiveness of sustainability practices and provide incentive for other communities to adopt their models.

VI

Potential for Change

In today's rapidly urbanizing and ever-consuming world, changes must be made to create a more sustainable global community. There are several areas of sustainable community development that can, and have, influenced the standard of living of low-income communities. These areas include land use policies, employment, transportation, food access, housing reform, waste removal and energy use. This is not to say that the issue areas do not overlap, or that other issues arise surrounding planning and sustainability that are not mentioned in this paper, however these are the most commonly studied areas that can be logically affected to become more sustainable in every sense of the term.

These issues can be affected by several different actors who hold power. The most commonly cited are federal government, state government, local government, community members, private business and non-profits. Each of these stakeholders can affect the sustainability movement in a unique way.

The Actors: Who Has the Power?

Those with the power to affect sustainable change in low-income communities can be categorized into federal government, state government, local government, community members, private businesses (large and small) and non-profit organizations. These stakeholders have been identified because of their potential to affect change and their current involvement in sustainability issues coupled with social justice. As with achieving any desired outcome, it is imperative to understand the actors involved and their goals.

Federal and state governments are important to understand because this is where the funding and allocation of green programs and community development are originating.[29] Government departments like the Department of Energy are funding programs like the Weatherization Assistance Program (WAP), which is training people in low-income communities to weatherize homes. This program not only trains and employs people who did not previously have jobs, but it also helps to reduce the energy used by homes and reduces the cost of living for the owners of those homes. [30] WAP funding is distributed from the federal government to state governments, who then allocate funds to non-profits and local governments to implement programs.

Local governments have historically held a great deal of power in urban environments, as they are on the front lines of managing the communities. Local governments have the power to provide tax incentives promoting sustainability and allocating funds to public transportation or

---

[29] S. Wheeler (2004) Planning for Sustainability: Creating Livable, Equitable, and Ecological Communities. Routledge: New York.
[30] U.S. Department of Energy Weatherization Assistance Program Information
http://www1.eere.energy.gov/wip/wap.html

housing projects.[31] Considering their proximity to the communities, they are important actors to consider in the sustainability movement.

Community members are also to be acknowledged in the power structure. Community members not only have the ability to influence politicians, but they can also demonstrate for their rights, organize to put their representatives into power and sway public opinion. If community members are effectively mobilized, they can have a great impact on the sustainability movement. However, it is important to remember that growing up and living in poverty-stricken communities creates one of three situations: people either give up entirely, leave the community or work to change it.[32] If advocates are planning on including community members in their strategic plans for change, they must be prepared to help to motivate them.

Private business is essential in community development – it provides the funding and investment in the communities that can bring jobs and raise the property value. The United Nations recognizes the importance of private investment in creating sustainable cities, naming it a "vital partner" in revitalizing poor communities.[33] Private business, because of its ability to provide economic development, holds a lot of power in the struggle to create sustainable communities. A challenge to their involvement is the inclination of the private sector to seek profit, which is a contradiction to the paradigm of sustainability.

Finally, non-profit organizations, who are already active in issues of sustainability, are essential partners in the movement to achieve sustainability in low-income communities. They have manpower, drive, organization, and often receive grants from regional governments to

---

[31] S. Wheeler (2004) Planning for Sustainability: Creating Livable, Equitable, and Ecological Communities. Routledge: New York.
[32] M. Pavel (2009) Breakthrough Communities. MIT Press Cambridge.
[33] Auclair, C. & A. Jackohango (2006?) UN-HABITAT - Working Group A Bottom of the Pyramid Approaches for Urban Sustainability Background Paper.

enact programs. The dedication and abilities of non-profit organizations can be a great asset to the sustainability movement.

These actors all have a role to play in revitalizing low-income communities in a sustainable way. Advocates must work with them to ensure they are used to their utmost capabilities.

<div align="center">

V.2

</div>

Land Use Policies

Most planning officials and scholars recognize land use policies as the major issue area for understanding and correcting unsustainable practices. Land use policies determine how space is used – whether people live in high-rises or spread into the suburbs. They determine whether land is used for housing people or growing food. They impact transportation, as increasing urban sprawl is less accessible for people by foot or bicycle, both green alternatives to the automobile. As a result, these policies impact social justice achievements in low-income communities. "Land use policy has led to the culmulative effects of environmental hazards being shouldered within low-income and minority communities."[34]

Cities in the United States are sprawling, not compact. In the United States, people value privacy and their personal space. However, sprawling cities are significantly more harmful than compact cities.[35] Urban form may be the single largest determinant of greenhouse gas emissions, and sprawling cities are contributing.[36] Cities like Tokyo and Hong Kong that regulated car use

---

[34] Agyeman, J. & T. Evans (2003). Toward Just Sustainability in Urban Communities: Building Equity Rights with Sustainable Solutions. *The ANNALS of the American Academy of Political and Social Science 590:1* p35-53.(42)
[35] The World Bank Urban Development and Local Government (2010). Cities and Climate Change: An Urgent Agenda. http://siteresources.worldbank.org/INTUWM/Resources/340232-1205330656272/CitiesandClimateChange.pdf
[36] *Ibid*.

and urban sprawl early on in their development are more energy efficient now. It will be more

difficult for the United States to reverse its trend since it will require a change in the dominant

paradigm which places a high value on access to space which leads to sprawl.[37]

According to the Enivronmental Protection Agency, the amount of land consumed by

urbanization in 34 large U.S. cities grew sixty-five times faster than the rate of population

growth during four decades in the late twentieth century.[38] Cities like Detroit and St. Louis, both

of which are heavily segregated, have lost half of their population to the suburbs.[39] These

numbers show that Americans are spreading out in an unsustainable way.

If Americans are to reduce their emissions and waste, land use policies must change and

be embraced. Unfortunately, this also requires a paradigm shift in the way Americans view

space and individualism. Currently, 30% of lots in urban areas are vacant, yet Americans tend to

develop agricultural lands rather than rehabilitating existing urban communities.[40] These land

use policies become an issue for poor communities for this reason. Rather than investing in

rebuilding existing communities, governments cater to wealthier tax payers who are fleeing

cities.

V.3

Employment: Green Jobs and Low-Income Communities

Job development is essential for community development in any location. It brings

income into a community and gives the members a sense of security. Green jobs are particularly

sustainable as well because of the growing demand for them and the sustained necessity for them

---

[37] *Ibid*.

[38] S. Wheeler (2004) Planning for Sustainability: Creating Livable, Equitable, and Ecological Communities. Routledge: New York.

[39] *Ibid.*

[40] *Ibid.*

when alternative forms of energy will be necessary and normal. When considering community development, it is easy to emphasize job creation over environmental concerns—politicians do it to earn favor with the community. However, if job growth and sustainability can be linked, it can create a bond between the two ideologies, providing the potential for future sustainability efforts.

There is a disparity between employment rates in low-income urban areas and employment in much of the rest of the country. Income inequality has grown by at least twelve percent in the United States in recent years and income and employment gains are particularly lagging for young African American men.[41] Only one in three blacks between the ages of 16-24 has a job and an additional one-third are unsuccessfully searching for jobs.[42] However, more than half of their white counterparts have jobs and their unemployment rate is only one half that of black youth.[43] These statistics demonstrate that there is an employment disparity between rich and poor and black and white in urban environments.

A contributing factor to these unemployment rates is the lack of job opportunities in low-income urban communities. In 1999, thirty percent of African Americans living in cities were unemployed as well as twenty-four percent of Latinos.[44] The communities are in disrepair and through various policies catering to the privileged (such as transportation provisions and business development) they are being left unable to find employment that does not exist in communities and immobile for the purposes of seeking employment elsewhere.

---

[41] M. Bennett &R. Giloth *Social Equity and Twenty-First Century Cities* in M. Bennett & R. Giloth (2007) Economic Development in American Cities. SUNY Press Albany (213).
[42] M. Simms & M. McDaniel (2010). The Black-White Jobless Gap. *The Urban Institute*. http://www.urban.org/publications/901378.html
[43] *Ibid*.
[44] M. Bennett &R. Giloth *Social Equity and Twenty-First Century Cities* in M. Bennett & R. Giloth (2007) Economic Development in American Cities. SUNY Press Albany.

An increased demand for skilled workers in the green sector could create the opportunities for upward social mobility in low-income communities.[45] This increased mobility, coupled with community development efforts, could help to pull low-income communities and their members out of poverty. However, if this is to happen, appropriate educational programs, traning and support needs to be developed for the young and the unemployed.[46]

There have been a few American non-profits that have harnessed the economic power of green jobs to advance a lower socioeconomic bracket. One example is Green for All, a non-profit that provides resources for job searching, job creation and organizing for the green economy.

Green for All is a national organization, but has a more local focus. It also has more of a focus on communities. Its mission statement calls the organization "a national organization working to build an inclusive green economy strong enough to lift people out of poverty."[47] Green for All focuses on creating jobs in the green economy for those in a lower socioeconomic bracket.

At the federal and state levels, Green for All advocates for innovative green policies and seeks to build a base of dedicated, educated supporters. The organization operates specific successful campaigns and programs for educating the public. One example of a national campaign in which Green for All assumed a leadership position was the Green Jobs Act of 2007,

[45] *Ibid.*
[46] *Ibid.*
[47] Green for All. *What We Do*. www.greenforall.org/what-we-do

which secured $125 million per year from the federal government to train workers for jobs in a range of green industries.[48]

> The Green Jobs Act (GJA) is an initial pilot program to identify needed skills, develop training programs, and train workers for jobs in a range of industries – including energy efficient building, construction and retrofits, renewable electric power, energy efficient vehicles, biofuels, and manufacturing that produces sustainable products and uses sustainable processes and materials. It targets a broad range of populations for eligibility, but has a special focus on creating "green pathways out of poverty." [49]

Green for All's emphasis on using green job development to create "pathways out of poverty" differentiates it from other green jobs organizations, and makes it more sustainable. It is more sustainable because of its emphasis on social justice which creates a more peaceful community.

Green for All is more active on the state than national level, directly advocating for green jobs policies in states like New Mexico and Washington.[50] The organization's most effective work, however, has a local focus. "In more than 20 cities across the U.S. — including Seattle, Portland, Oakland, Santa Clara County, Los Angeles, Albuquerque, Denver, New Orleans, Detroit, Pittsburgh, Brooklyn, Buffalo, and Boston — Green For All is creating scaled green jobs programs that provide pathways out of poverty for low-income individuals and communities of color."[51] Green for All is especially active in rebuilding New Orleans in a sustainable way, building partnerships, leading advocacy programs, securing funding for sustainable programs, creating innovative programs and ensuring youth education.

---

[48] *Ibid.*

[49] *Ibid.*

[50] *Ibid.*

[51] *Ibid.*

In New Orleans, Green for All has partnered with the city government, the Federal Reserve Bank of Atlanta, Seedco, the Green Collaborative of New Orleans and the Good Work Network to promote green job creation for the poor of New Orleans.[52] The Good Work Network in particular has been effective in establishing opportunities for sustainable job creation. They provide training programs and counseling for people seeking employment.[53] Green for All also provides support to other innovative programs that provide direct support and opportunity for local communities. One example is EnviRenew, which is a program that uses a neighborhood-driven delivery model to provide clean-energy measures, including a mix of solar and energy-efficiency improvements, to 250 homes. Green For All is helping the partnership built around EnviRenew meet its goals of hiring contractors and individuals from the community for the well-paid jobs on the project.[54] The EnviRenew program will green homes, reduce home energy costs and provide jobs and training for people from poor local communities who were struggling to find work.

Green for All also creates its own programs in New Orleans such as the Communities of Practice and Green for All Academy to involve low-income communities in the struggle for sustainability by educating them about the issues and training them how to canvas the city for support. These programs not only foster a sense of cohesion, but also identify and build leaders in the community.

Additionally, Green for All helps campaign to secure funding for green job development. Green For All is currently working with a network of philanthropic donors about the possibility of engaging private investors to capitalize a revolving loan fund that will support a clean-energy

[52] *Ibid.*
[53] Good Work Network. *Background.* http://www.goodworknetwork.org/aboutus.php
[54] Green for All. *What We Do.* www.greenforall.org/what-we-do

retrofit pilot program in New Orleans. The organization has also provided assistance to the Women's Donor Network's efforts to support a clean-energy program that would help female-headed households access energy-efficiency retrofits.[55]

Another innovative program supported by Green for All is a partnership with the Hip Hop Caucus that promotes sustainable living in low income urban African American communities. This program, called Green the Block, is a national campaign and coalition aimed at helping low-income communities of color become driving forces of the clean-energy economy.[56] Something that differentiates Green the Block from other public information campaigns and resources is that it makes an effort to appeal to the community it is trying to reach. Some of the themes of initiatives include *Stay Fresh: Food* and *Keeping it Cool: Water*.
[57] The language used in this campaign is more accessible to the communities, and therefore probably more effective in garnering interest and support. Green the Block is also sponsoring a Campus Consciousness tour with Drake, a prominent African American hip hop artist. The tour will promote green living and economic consciousness.

Finally, Green for All works to engage the youth in green issues and urban sustainability. The organization does this specifically through two programs: a Fellowship and Academy Program and a College Ambassador Program. The Fellowship and Academy Program educates students in sustainability issues and trains them to spread the word through media advocacy and

---

[55] *Ibid*.
[56] Green the Block. *About Green the Block*. http://greentheblock.net/about-green-block
[57] *Ibid.*

organizing workshops.[58] The fellows, who come from around the country, then return home and commit to a nine-month term of service as ambassadors of the movement in their communities.

The College Ambassador program seeks to educate college students in sustainability issues. The program is located on ten historical Black Colleges and Universities. The Ambassadorship consists of "expert trainings, a mentorship program in partnership with Green For All Academy Fellows, student-led green education workshops, and a semester long campus sustainability initiative created and carried out by the Ambassadors with support from students, faculty and Green For All."[59]

Green for All is making strides in programming, advocating and educating all communities on the important issue of sustainability in employment. It embraces a social justice approach to environmental issues, and has been immensely successful in implementing programs that affect change.

<center>`V.4</center>

Transportation: Inequality in Public Transportation

"Far more than just laying pathways to get from one place to another, transportation infrastructure has played a fundamental role in shaping the physical, social, and economic landscape in cities and regions all around the nation."[60] Transportation is the flow of people, and it is essential in today's widely-spread world. Although all levels of government need to be

---

[58] Green for All. *What We Do*. www.greenforall.org/what-we-do
[59] *Ibid*.
[60] N. Cytron. (Summer 2010) The Role of Transportation Planning and in Shaping Communities.*Community Investments. 22:2* (3)

involved in the planning of transportation, with funding coming from national and state governments, much of transportation planning is coordinated at the local and regional scale.[61]

Without adequate access to transportation, communities and individuals are limited to employment and other resources within their own communities and are isolated from the wider world. By addressing issues in transportation, communities can see a decrease in poverty and unemployment and better access for food, education, health care and other public services.[62]

Unfortunately, due to policy decisions in transportation funding, people in low-income communities – particularly in communities of people of color – are often prevented from access to these benefits.[63] Robert D. Bullard notes the ways that these communities have been left behind and taken advantage of:

> Transportation dollars have fueled suburban highway construction and job sprawl. Some transportation projects have cut wide paths through low-income and people of color neighborhoods, isolated residents physically from their institutions and businesses, disrupted once-stable communities, displaced thriving businesses, contributed to urban sprawl, subsidized infrastructure decline, created traffic gridlock, and subjected residents to elevated risks from accidents, noise, spills, and explosions from vehicles carrying hazardous chemicals and other dangerous materials.[64]

The treatment of these communities by policy makers and more affluent communities is a social justice issue that must be addressed for purposes of sustainability. If people in low-

---

[61] S. Wheeler (2004) Planning for Sustainability: Creating Livable, Equitable, and Ecological Communities. Routledge: New York.

[62] R.D. Bullard Addressing *Urban Transportation Equity in the United States* in M. Pavel (2009) Breakthrough Communities. MIT Press Cambridge.

[63] *Ibid.*

[64] *Ibid* (49)

income communities do not have proper access to the necessities of modern-day life, they will continue to fall farther behind other groups in the United States.

In addition to furthering social inequalities, Americans' reliance on the automobile instead of public transportation is hurting the environment and contributing to the public health issues that arise as a consequence of poor environmental health. The overwhelming use of cars has extremely negative impacts on greenhouse gas production and the environment in general, as the massive use of the automobile causes much more pollution than any other mode of transportation.[65] If an individual switches a 20-mile roundtrip commute to public transportation, his or her annual CO2 emissions will decrease to a 10 percent reduction in a two-car household's carbon footprint.[66] Expanded public transit strategies coordinated with carpooling, land use development, and operational efficiencies can reduce greenhouse gases by 24 percent.[67] The annual savings in vehicle costs to consumers will exceed the cost of enacting these strategies by as much as $112 billion.[68] The switch to public transportation would make significant reductions in greenhouse gases, save consumers money and create a healthier environment.

Finally, public transportation projects can help create jobs – jobs in low-income communities that can employ community members, if approached appropriately. Every one billion dollars invested in public transportation capital and operations creates and supports an average of 36,000 jobs.[69] Investment in public transportation has the potential to provide low-income communities with access to employment and necessities of life, and a reduction in costs of living and improvements in health.

---

[65] J. Mercier (2009) Equity, Social Justice and Sustainable Urban Transportation for the Twenty-First Century.*Administrative Theory & Praxis* (M.E. Sharpe); *Jun2009, Vol. 31 Issue 2,* p145-163.
[66] Public Transportation (2011). *Environment*. http://www.publictransportation.org/benefits/environment.asp
[67] *Ibid.*
[68] *Ibid.*
[69] *Ibid.*

New models for transportation planning include an emphasis on mass transit like subway systems, a focus on sidewalks rather than roads, bicycle paths, and promoting carpooling.[70] Each of these methods is dependent upon land use policies, but must be considered nonetheless.

The Pratt Center for Community Development in New York City is an organization working towards achieving transportation equality for those in low-income neighborhoods. The Pratt Center works with other organizations "to make New York's transportation systems serve the needs of all New Yorkers and support sustainable growth of the city and its neighborhoods."[71] Some of the tactics used by the Center include research, policy advocacy and organizing. It seeks to promote faster commutes, decreased traffic, improved environmental quality, and community participation in transportation policy.[72]

The Pratt Center has three programs that directly address these issues. One is the Bus Rapid Transit program, which seeks to use bus lines rather than metro construction to increase access. The Pratt Center argues that

> Multi-billion dollar subway and commuter rail projects don't serve the communities with the most urgent transit needs; they also require an all-or nothing commitment that burdens the transit system and its riders with debt, and don't deliver their promised benefits for many years. BRT uses dedicated lanes on existing streets, and doesn't require the construction of rails or tunnels. A new BRT line can therefore be put in place much more quickly and cheaply than a new subway line, and with much less disruption of the communities it will serve.[73]

---

[70] S. Wheeler (2004) Planning for Sustainability: Creating Livable, Equitable, and Ecological Communities. Routledge: New York.
[71] Pratt Center for Community Development. *Our Initiatives*. http://www.picced.org/our-initiatives
[72] *Ibid*.
[73] *Ibid.*

The Pratt Center also planned and suggested potential bus routes based on the currently underserved areas. By doing this, it seeks to connect low-income communities with employment opportunities and mobility in a quicker, easier way. This promotion of mass transportation is sustainable not only environmentally, but also socially.

The second program supported by Pratt is COMMUTE, a coalition of New York City community groups that has come together to promote public transportation investments for underserved, low-income New Yorkers.[74] Pratt provides the research and organizational skills necessary to help coordinate the groups.

The third program is a community revitalization of the Sheridan Expressway, a part of New York City that is underutilized. Pratt seeks to use the space to present affordable housing and green space.[75] A *New York Times* article chronicled Pratt's battle, saying that:

> When state officials unveiled a plan in 1997 to expand the expressway's entry ramps, easing truck traffic to the city's commercial food markets, the community rebelled, and Pratt began to develop a counterplan that would dismantle the expressway altogether and free up 28 acres of land. More specifically, the plan would extend local streets across the site to a new riverfront park, provide up to 1,200 units of affordable housing, create a new sewage facility and restore wetlands along the river. Commercial development could be linked to a planned commuter train station.[76]

Pratt is trying to revitalize a community in the same way that the *Times* article declared imperative for the survival of American cities.[77] Once again, Pratt is considering the importance of social and environmental sustainability.

---

[74] *Ibid.*

[75] *Ibid.*

[76] Ouroussoff, N. (March 25, 2009) Reinventing America's Cities: The Time Is Now. *The New York Times.* http://www.nytimes.com/2009/03/29/arts/design/29ouro.html?pagewanted=3&_r=1

[77] *Ibid.*

Transportation policies and availability have a huge impact on the mobility of those in both low-income communities and wealthier neighborhoods. Old policies favoring the automobile must change to become more inclusive for all communities and more environmentally friendly. Organizations like the Pratt Center will continue to advocate for the change, but in order for it to be truly effective, community members will have to influence policy makers since much of the problem with transportation is that its funding and implementation comes from policy makers.

V.5

Waste Management and Low-Income Communities

Here, waste management will be defined as access to opportunities for recycling, water removal and proximity to toxin disposal and landfill. Waste management responsibility lies primarily with the local governments, as it requires an intimate understanding of the space available in a community and the operations (ie. water systems) of a particular community.[78]

Recycling is an effective, easy way for cities to promote sustainability and create a culture of sustainability. Many cities have programs in place to promote recycling – such as providing separate bins for collection, making separation easier. Some states also provide bottle return incentives, where people can earn money by recycling bottles. The bottle deposit policies have been effective in reducing littering and promoting recycling in Vermont, Connecticut, Delaware, Massachusetts, Oregon, New York, Iowa, Maine, California and Michigan.[79] However, if governments want these policies to continue to be effective, they should consider increasing the deposit rate (typically $.05 per container), which has not changed since the

---

[78] S. Wheeler (2004) Planning for Sustainability: Creating Livable, Equitable, and Ecological Communities. Routledge: New York.
[79] *Ibid*.

1970s.[80] Another sustainable form of recycling is composting food scraps or yard waste, which compose twenty-six percent of landfill waste.[81] Composting is an EPA-supported means of turning waste into matter that can be re-used as natural fertilizer.[82]

Water waste is another issue area of sustainability in communities. Local governments have great control over the handling of sewage and stormwater runoff.[83] One way of doing so sustainably is by separating sewage and stormwater systems so that sewage treatment plants are not overwhelmed during big storms.[84] To prevent people from dumping materials into water systems, governments can use stenciled storm drains with messages about where the water goes.[85] This is also an effective form of communicating the message of environmental connectivity.

Waste removal and dumping disproportionately affects those in low-income communities.[86] There are 425,000 hazardous waste dumps in the United States and many are in or near poor and minority communities.[87] In one specific case in an urban environment in Port Arthur, Texas, a company known as Veolia Environmental Services won a forty-nine million dollar contract to incinerate 1.8 million gallons of toxic waste water. The process would potentially create environmental hazards for nearby communities. The community situated near the proposed site was 57.5 percent people of color, and the site was located by low-income

---

[80] *Ibid*.

[81] U.S. Environmental Protection Agency. *Composting*.
http://www.epa.gov/epawaste/conserve/rrr/composting/index.htm

[82] *Ibid*.

[83] S. Wheeler (2004) Planning for Sustainability: Creating Livable, Equitable, and Ecological Communities. Routledge: New York.

[84] *Ibid.*

[85] *Ibid.*

[86] Bloom, J. (2010) *American Wasteland: How America Throws Away Nearly Half of Its Food (and What We Can Do About It).* Philadelphia, PA: Da Capo Press.

[87] B. Crow (2010) *Social dynamics of the U.S. environmental challenge*. In Environment, Development and Sustainability Perspectives and Cases from around the World. Ed. G. Wilson, P. Furniss & R. Kimbowa. New York: Oxford University Press.

housing projects.[88] Additionally, the community was not informed of the contract and the site location until after the contract had been signed.[89] Six out of eight Texas metro areas have similar sitings for waste facilities.[90] The positioning of these facilities demonstrates an injustice to both low-income communities and communities of color, and unfortunately the two are often one in the same. Additionally, "in Los Angeles and other areas, such [hazardous waste recycling] plants are disproportionately located in low-income communities and communities largely populated by non-whites."[91]

Interestingly, most of the articles and programs found for implementing waste reduction strategies in a way that is beneficial for and involves low-income communities were focused on international communities, not the United States. Most of the articles focused on the ineffectiveness and challenges of recycling and waste management programs in poor American urban communities. Most of the information addressed the inequalities of incineration or hazardous waste plants but did not mention solutions to those problems. Additionally, an article from 2009 noted that the EPA was planning on studying the effects of the placement of hazardous waste facilities near low-income communities in Los Angeles, but there was little information available about the results of that study.[92] With the exception of ineffective local government initiatives and an AmeriCorps VISTA program that teaches kids how to recycle and uses the money they save to host ice cream parties for them, most of the solutions offered by the research were in international communities, not American communities.[93]

---

[88] R.D. Bullard (July/Aug. 2007). Dismantling Toxic Racism. *Crisis* 114:4 p.22-25.
[89] *Ibid*.
[90] *Ibid*.
[91] A. Littlefield (July 22, 2009) EPA vows to examine impact of hazardous waste on poor communities. *The Los Angeles Times.* http://latimesblogs.latimes.com/greenspace/2009/07/hazardous-waste-environmental-justice-epa.html
[92] *Ibid*.
[93] A. Lucius (July 1, 1996). Recycling Program Creates Jobs, Alleviates Poverty. *Waste Age*. http://wasteage.com/mag/waste_recycling_recycling_program/

The lack of information and organization surrounding this important issue is a void in the sustainability movement. If local governments or non-profits do not find an effective way to communicate the importance of recycling to low-income communities, or to provide incentives for recycling, a large portion of the population is wasting resources and missing out on opportunities for growth and development. Additionally, if there continues to be a lack of organization and advocacy surrounding landfills and hazardous waste facilities, low-income communities and communities of color will continue to have to deal with the consequences of policies and systems that place waste dumps near their homes. This is not to release the government structures from responsibility for the placement of these facilities, but due to their long history of this action, it is clear that more community involvement is necessary in implementing change.

V.6

The Sustainability of Food Access in Low-Income Communities

Food access is another issue of sustainability in urban environments. Because there is little land for farming in these areas, inhabitants have to rely on food that is grown in other parts of the country and transported to cities. The growth and transportation of this food requires the use of fossil fuels that is unsustainable. Additionally, because of the location of grocery stores in urban areas and the lack of accessible transportation, many people living in low-income communities live in food deserts where they have no access to healthy foods. Yet another issue affecting low-income communities in food access is the kind of food that is available to them. Many low-income communities don't have access to healthy foods like fruits and vegetables, or if they do have access, they cannot afford them. As a result, many people are eating diets of fast food that are high in fat and low in nutrients.

In a study on public health and food access in Chicago, Gallagher found that analyzing food access by race at the block level, majority African-American communities have the lowest access to chain grocery stores, independent and smaller grocery stores, and all grocery stores, but about roughly equal access to fast food restaurants compared to other racial groupings.[94] This disparity further supports the earlier claim that urban areas are stratified in an unsustainable way – transportation and food access being obvious indicators. The study also concluded that "communities that have no or distant grocery stores but nearby fast food restaurants instead – i.e. communities that are out of balance regarding healthy food options –will likely have increased premature death and chronic health conditions, holding other influencers constant."[95] Gallagher also notes the impact that these health conditions will have on the community as a whole – it will have to bear the financial burdens of responsibility for those who cannot afford their own health care.[96]

One way that communities can be empowered to have more control over their access to healthy foods is by planting and maintaining community gardens. Community gardens are becoming popular throughout the United States, largely thanks to a campaign supported by First Lady Michelle Obama.[97] Community gardens are not an answer to the food crisis faced by low-income communities, but they are a good way to provide an alternative for families and a way to provide children with an education about healthy eating habits and the source of their food.

Growing Power, Inc. is a national non-profit organization with projects in Chicago that address the food desert issues. Growing Power's mission is to "support people from diverse

---

[94] Mari Gallagher Research and Consulting Group. (2006) Examining the Impact of Food Deserts on Public Health in Chicago. http://www.agr.state.il.us/marketing/ILOFFTaskForce/ChicagoFoodDesertReportFull.pdf
[95] *Ibid*. (32)
[96] *Ibid.*
[97] J. Lowe (February 23, 2009). Michelle Obama supports community gardens. *The Christian Science Monitor.* http://www.csmonitor.com/The-Culture/Gardening/diggin-it/2009/0223/michelle-obama-supports-community-gardens

backgrounds, and the environments in which they live, by helping to provide equal access to healthy, high-quality, safe and affordable food for people in all communities."[98] Growing Power operates five gardens in Chicago and couples the food production with education, job creation and advocacy.

Growing Power partners with local community organizations like churches and park advisories to ensure that the urban gardens can exist. The organization also focuses on education, understanding the importance of teaching people so that they can help themselves. They not only educate people on gardening practices, but also the importance of healthy eating. One of the plots operated by Growing Power, Jackson Park Urban Farm grows produce, focuses on the training and education of residents who use plots, promotes youth development, community outreach through education programs and the availability of locally grown fresh, safe and healthy food that exceeds certified organic standards.[99]

Additionally, Growing Power is involved in creating structures that can ensure healthy, sustainable eating practices. The organization is a member of a partnership called the Chicago Food Policy Advisory Council, which "facilitates the development of responsible policies that improve access for Chicago residents to culturally appropriate, nutritionally sound, and affordable food that is grown through environmentally sustainable practices."[100] By involving themselves in the policy making process, and participating in a structure that does so, Growing Power is becoming a more powerful force in food policy. Another organization it maintains is called the Growing Food and Justice for All Initiative (GFJI) which "is an initiative aimed at dismantling racism and empowering low-income and communities of color through sustainable

---

[98] Growing Power. *Chicago Farms and Projects*. http://www.growingpower.org/chicago_projects.htm
[99] *Ibid*.
[100] *Ibid.*

and local agriculture."[101] By addressing the racism aspect of food issues and low-income

communities, Growing Power is opening an honest dialogue that addresses the real issues behind

community development and funding. Growing Power also recognizes the importance of

understanding the racism in city planning and policy making by creating an organization

specifically addressing issues of racism.

Access to food does affect city planning, but it is addressed more so by community

development advocates and health officials. However, if planners embrace it as a pillar of

sustainable city planning (creating spaces for gardens in the city and freeing land for agricultural

use outside of the city), they can have a great impact on the amount of resources used to provide

the food and the access that those in low-income communities have to healthy foods.

V.7

Sustainable Housing and Low-Income Communities

Buildings in the United States are responsible for 39% of CO2 emissions, 40% of energy

consumption, 13% water consumption and 15% of GDP per year, making green building a source

of significant economic and environmental opportunity. Greater building efficiency can meet

85% of future U.S. demand for energy, and a national commitment to green building has the

potential to generate 2.5 million American jobs.[102]

A strong public sector role is necessary for providing appropriate, sustainable low-

income housing to communities.[103] The private sector may have a role, but since its primary

motivation is profit creation, low-income communities and the environment are left at the mercy

of the market.[104] The main tasks at hand for local governments in providing affordable housing

---

[101] Growing Food and Justice for All Initiative. *About Us.* https://www.growingfoodandjustice.org/About_Us.html
[102] U.S Green Building Council. *About USGBC.* http://www.usgbc.org/DisplayPage.aspx?CMSPageID=124
[103] S. Wheeler (2004) Planning for Sustainability: Creating Livable, Equitable, and Ecological Communities. Routledge: New York.
[104] *Ibid.*

for low-income communities are: providing sufficient quantities of housing, ensuring the

sustainability of the housing and using housing to create a sense of community worth through

social investment.

StephenWheeler stresses the importance of providing adequate amounts of housing,

saying that housing prices are prone to rapid escalation, displacing the poor and leading to

gentrification of a community.[105] He provides a few means of doing this: directly providing the

housing, providing grants or loans to nonprofits, or hiring private contractors and requiring them

to allocate a certain percentage of the housing to low-income residents.[106] Local government is

essential in keeping contracting opportunities aside for smaller businesses that can provide

diversity in the landscape rather than large-scale, mass-production housing providers.[107]

Another necessity for subsidized low-income housing is taking advantage of government

money to create buildings that are environmentally neutral or friendly. When governments have

control over how the buildings are created, they can have a substantial impact on how efficient

they are. One way of ensuring energy efficiency – which not only saves energy but also lowers

home heating and cooling fees – is by weatherization or by contracting companies that are LEED

(Leadership in Energy and Environmental Design) certified by the U.S. Green Building Council.

LEED is an internationally recognized green building certification system**,** ensuring that a

building or community was designed and built using strategies aimed at improving performance

in energy savings, water efficiency, CO_2 emissions reduction, improved indoor environmental

quality, and stewardship of resources and sensitivity to their impacts.[108] Additionally, the U.S.

---

[105] *Ibid.*

[106] *Ibid.*

[107] *Ibid.*

[108] U.S Green Building Council. *About USGBC.* http://www.usgbc.org/DisplayPage.aspx?CMSPageID=124

Green Building Council provides resources for community organizers and local governments to use to advocate for building a sustainable neighborhood.

Historically, the United States has provided social housing at a minimal level, neglecting quality, landscaping or environmental sustainability.[109] Bland housing options fail to provide a sense of community or diversity, and the poor quality stigmatizes neighborhoods. These labels dissuade public participation in community development and local politics, and serve to continue the cycle of poverty and poorly developed urban environments.

An example of a local government program that focuses on offering sustainable housing to low-income families is in Seattle. The city government of Seattle's Office of Housing created a program called SeaGreen which is responsible for ensuring the sustainability of Seattle's affordable housing. Seattle recognizes the importance of saving energy in low-income areas, saying "We as a community of affordable housing providers have an opportunity to develop affordable housing using green building strategies to reduce the impacts contributing to depletion of natural resources, water quality, air pollution, and global warming, while also lowering operating costs and maintenance needs."[110] When reporter Aubrey Cohen interviewed Kollin Min, a program manager for community housing projects in Maryland about green building, he said "green building, which includes everything from conserving resources to improving indoor air quality, makes sense for low-income housing because it's economical for those with the least to spare and provides healthier living for those more at risk for respiratory ailments."[111]

---

[109] S. Wheeler (2004) Planning for Sustainability: Creating Livable, Equitable, and Ecological Communities. Routledge: New York.

[110] Office of Housing, City of Seattle. (Nov. 2002). *SeaGreen Greening Seattle's Affordable Housing Guide Office of Housing* (ii) http://www.seattle.gov/housing/seagreen/SeaGreen.pdf

[111] A. Cohen (May 4, 2007) More low-income housing being built green. *SeattlePi* http://www.seattlepi.com/default/article/More-low-income-housing-being-built-green-1236518.php

The benefits of green housing are outlined in SeaGreen's *Greening Seattle's Affordable Housing Guide*:

> In addition to increasing resource efficiency and reducing environmental impacts, sustainable building strategies can yield cost savings through long term reduced operating costs. Specifically these benefits include improved energy performance and comfort, a healthier indoor environment, increased durability of building components, and simplified maintenance requirements that can lead to a better bottom line for property managers and owners. Sustainable building works as a set of strategies to improve the economics of managing affordable housing while also improving the quality of affordable housing. Multifamily housing also increases urban density, reducing transportation impacts from sprawl.[112]

By creating a guide for builders, SeaGreen is controlling the message and creating a sense of uniformity in green building in the city. It requires anyone who could potentially win a contract from the government to submit a plan that acknowledges sustainability in its building plan.[113] The SeaGreen program, one of the first of its kind, is a model that works and is spreading across the country.

Regarding effectiveness, a study by New Ecology, Inc., a building sustainability research group in Cambridge, Massachusetts, found that:

> For up to 5 percent more in development costs, buildings could use 30 percent to 50 percent less energy to heat and cool, 20 percent less electricity and 10 percent to 20 percent less water; cut storm water runoff; hold up better over time; be healthier and more comfortable for residents; and use recycled materials and recycle construction waste.[114]

---

[112] Office of Housing, City of Seattle. (Nov. 2002). *SeaGreen Greening Seattle's Affordable Housing Guide Office of Housing* (iii) http://www.seattle.gov/housing/seagreen/SeaGreen.pdf

[113] A. Cohen (May 4, 2007) More low-income housing being built green. *SeattlePi* http://www.seattlepi.com/default/article/More-low-income-housing-being-built-green-1236518.php

[114] *Ibid.*

Housing is an issue area that has a huge impact on environmental health and community health – both figuratively and literally. It affects the aesthetics of a community and, if it is designed in a sustainable way, can reduce costs and provide a healthier environment for living.

V.8

Energy Use and Low-Income Communities

Energy use is another area in which low-income communities can be at the forefront of change. Energy reduction strategies can be applied in communities that are undergoing revitalization, and the industry can create jobs for community members.   Energy reduction not only furthers the environmental agenda of sustainability goals, but also the social aspect, as reducing energy usage also reduces the bills paid. In a Miami-Dade government program introducing ways of reducing home energy usage, individual families gained an average savings of 15% of their energy bills amounting to approximately 274 dollars per year depending on fuel prices.[115] While 274 dollars may seem modest, it could make a large difference in the home of a low-income family.

There are several ways of implementing changes in a home that will save money on monthly bills and are accessible for those with low-incomes. Many of these changes will stem from community education – emphasizing the need to turn off lights that are not being used or unplugging appliances or electronics that are not in use. However, once households are educated in the purchase of light bulbs that will save money, or how to clean an air filter so that it works more efficiently and lasts longer, the people in the homes will be able to implement changes in their homes that will save energy and money.[116]

---

[115] Miami-Dade County Community Action Agency. Energy Conservation Programs.
http://www.miamidade.gov/caa/energy_conservation.asp
[116]U.S. Environmental Protection Agency. Climate Change—What You Can Do At Home.
http://www.epa.gov/climatechange/wycd/home.html

Ways that local governments or non-profits can help low-income communities become more energy efficient are providing financial incentives for purchasing green power, making solar panels available to communities for a lower price, and aiding with weatherizations.[117] These methods are not necessarily simple to implement and their effectiveness hinges on financial appeal.

One example of energy conservation is weatherization. Weatherization is enacting changes in a home that allows it to operate using less energy. The Weatherization Assistance Program (WAP) is an example of a federal program that provides funds for unemployed people to weatherize the homes of those in low-income communities. Its ultimate goal is to ease the burden of energy bills on low-income families.[118] According to the Department of Energy, "families receiving weatherization services see their annual energy bills reduced by an average of about $437, depending on fuel prices."[119] With the American Recovery and Reinvestment Act of 2009, WAP was awarded five billion dollars to focus on weatherizing the homes of 600,000 low-income families.[120]

Weatherize DC is a non-profit organization that works for clean energy in the District of Columbia. They train and employ people from underserved communities to weatherize homes and provide energy audits. Weatherize DC focuses on community involvement, relying on volunteers from the community to canvass neighborhoods in DC to spread the word about weatherization and clean energy from the ground up. In 2010, Weatherize DC helped DC

---

[117] *Ibid.*

[118] U.S. Department of Energy. Weatherization & Intergovernmental Program. Weatherization Assistance Program Goals and Metrics. http://www1.eere.energy.gov/wip/wap_goals.html

[119] U.S. Department of Energy. Weatherization & Intergovernmental Program. Weatherization Assistance Program http://www1.eere.energy.gov/wip/wap.html

[120] U.S. Department of Energy. Weatherization & Intergovernmental Program. Weatherization Assistance Program Goals and Metrics. http://www1.eere.energy.gov/wip/wap_goals.html

residents save an estimated $70,000 and placed 14 people in weatherization jobs.[121]

Additionally, because of its success, Weatherize DC plans to expand nationally in 2011.[122]

Weatherize DC may be a small-scale non-profit, but it is producing results. It is an example of

how even small organizations can have an impact on the sustainability movement.

The effectiveness of implementing changes in energy consumption in low-income

communities is entirely dependent upon the cost of those changes. Understandably, people who

are having trouble affording to feed their families are unlikely to put money into a new appliance

or solar panel that costs more money and will not produce savings immediately. It is just not

feasible for the survival of the family. If these changes are to occur, they must be made

affordable for the communities through government incentives or services provided by non-

profits.

VII

Conclusions

Americans must recognize that sustainability – with the necessary inclusion of equality –

is an attainable goal. As the examples above have demonstrated, changes can be made to

influence human practices in a way that is inclusive, cost-effective and environmentally sound.

These changes have taken place in different cities and have been implemented by different actors

in different issue areas. The potential exists, but in order to truly be effective, it must be

accompanied by a shift in thinking about equality, competition and ways of life. To achieve this

change in ideology, community development advocates and environmentalists must work

together. Urban sustainability will not be a simple or easy achievement, particularly considering

---

[121] L. Vespoli. (Feb. 3, 2011) Last Year's Impact Fuels Today's Movement. *WeatherizeDC Blog.*
http://www.weatherizedc.org/blog
[122] *Ibid.*

the entrenched inequalities in the American social structures. However, it is a necessity for the security of the future of the global society.

The neoliberal American identity and the social structures accompanying it are the largest obstacles to change. Policies rewarding competition and the people who hold power in the system have upheld and perpetuated injustices in American cities. Until these policies change, social justice movements will be limited in their efficiency. With continued education campaigns about the necessity of sustainability, perhaps the paradigm will shift over time. However, it will take much time and effort on the part of advocates and leaders in business and politics.

To change this paradigm, it is essential that community development advocates and environmentalists continue to work together. While the two groups are motivated by different goals, they can combine their power and resources; they can be an effective force for change. For even if the goals of each group sometimes hinder one another, they are both important and deserve negotiation to achieve environmental and social justice. If community development advocates and environmentalists cannot negotiate with one another to achieve sustainability, how can others be expected to do the same?

Sustainability is not a simple concept. It will not be achieved easily or without complications – social ideologies, economic realities and individual capacity for concern are just a few of the roadblocks to achieving sustainability. However, the examples above have demonstrated that sustainable changes including social and environmental justice are possible.

Sustainable living is one of the greatest concerns of current society. It is required by all and can be practiced by all, regardless of socioeconomic class, race or nationality. And it is necessary – perhaps more necessary than any other issue currently being discussed. Without a

drastic change in the way people, especially Americans, consume, future prosperity will not only

be jeopardized, but nonexistent.

References

Atkinson, A. (2004) Urbanisation in a neo-liberal world. *City* **8**:1, pp. 89-108.

Auclair, C. & A. Jackohango (2006?) UN-HABITAT - Working Group A Bottom of the Pyramid Approaches for Urban Sustainability Background Paper.

Agyeman, J. & T. Evans (2003). Toward Just Sustainability in Urban Communities: Building Equity Rights with Sustainable Solutions. *The ANNALS of the American Academy of Political and Social Science 590:1* p35-53

Bennett, M. &R. Giloth (2007) *Social Equity and Twenty-First Century Cities* in Economic Development in American Cities, ed. M. Bennett & R. Giloth. SUNY Press Albany.

Blackwell, A.G. & L.B. Starrett *Building the Capacity of the Regional Equity Movement* in Breakthrough Communities, ed. M. Pavel. MIT Press Cambridge.

Bloom, J. (2010) *American Wasteland: How America Throws Away Nearly Half of Its Food (and What We Can Do About It).* Philadelphia, PA: Da Capo Press.

Bullard, R.D. (July/Aug. 2007). Dismantling Toxic Racism. *Crisis* 114:4 p.22-25.

Bullard, R.D. (2009) *Addressing Urban Transportation Equity in the United States* in Breakthrough Communities, ed. M. Pavel. MIT Press Cambridge.

Cohen, A. (May 4, 2007) More low-income housing being built green. *SeattlePi* http://www.seattlepi.com/default/article/More-low-income-housing-being-built-green-1236518.php

Crow, B. (2010) *Social dynamics of the U.S. environmental challenge* in Environment, Development and Sustainability Perspectives and Cases from around the World. Ed. G. Wilson, P. Furniss & R. Kimbowa. New York: Oxford University Press.

Cytron, N. (Summer 2010) The Role of Transportation Planning and in Shaping Communities.*Community Investments. 22:2*

Duncan, C.M. (2009) *From Bootstrap Community Development to Regional Equity* in Breakthrough Communities, ed. M. Pavel. MIT Press Cambridge.

Good Work Network. *Background*. Accessed 20 March, 2011. http://www.goodworknetwork.org/aboutus.php

Green for All. *What We Do*. Accessed 4 March, 2011. www.greenforall.org/what-we-do

Green the Block. *About Green the Block*. Accessed 3 March, 2011 http://greentheblock.net/about-green-block

Growing Power. *Chicago Farms and Projects*. Accessed 13 March, 2011.
http://www.growingpower.org/chicago_projects.htm

Growing Food and Justice for All Initiative. *About Us.* Accessed 15 March, 2011.
https://www.growingfoodandjustice.org/About_Us.html

Littlefield, A. (July 22, 2009) EPA vows to examine impact of hazardous waste on poor
communities. *The Los Angeles Times.*
http://latimesblogs.latimes.com/greenspace/2009/07/hazardous-waste-environmental-justice-epa.html

Lucius, A. (July 1, 1996). Recycling Program Creates Jobs, Alleviates Poverty. *Waste Age*.
http://wasteage.com/mag/waste_recycling_recycling_program/

Lowe, J. (February 23, 2009). Michelle Obama supports community gardens. *The Christian
Science Monitor.* http://www.csmonitor.com/The-Culture/Gardening/diggin-it/2009/0223/michelle-obama-supports-community-gardens

Keivani, R. (2010) A review of the main challenges to urban sustainability. *International
Journal of Urban Sustainable Development 1:1 p5*-16

Mari Gallagher Research and Consulting Group. (2006) Examining the Impact of Food Deserts
on Public Health in Chicago.
http://www.agr.state.il.us/marketing/ILOFFTaskForce/ChicagoFoodDesertReportFull.pdf

Mercier, J. (2009) Equity, Social Justice and Sustainable Urban Transportation for the Twenty-
First Century.*Administrative Theory & Praxis* (M.E. Sharpe); *Jun2009, Vol. 31 Issue 2,*
p145-163.

Miami-Dade County Community Action Agency. Energy Conservation Programs.
http://www.miamidade.gov/caa/energy_conservation.asp

National Resources Defense Council (2008*). The Consequences of Global Warming*. Accessed
31 March, 2011. http://www.nrdc.org/globalwarming/fcons.asp

Office of Housing, City of Seattle. (Nov. 2002). *SeaGreen Greening Seattle's Affordable
Housing Guide Office of Housing* (ii) http://www.seattle.gov/housing/seagreen/SeaGreen.pdf

Ouroussoff, N. (March 25, 2009) Reinventing America's Cities: The Time Is Now. *The New
York Times.*
http://www.nytimes.com/2009/03/29/arts/design/29ouro.html?pagewanted=3&_r=1

Pavel, M. (2009) Breakthrough Communities. MIT Press Cambridge.

Public Transportation (2011). *Environment*. Accessed 2 March, 2011.
http://www.publictransportation.org/benefits/environment.asp

Pratt Center for Community Development*. Our Initiatives*. Accessed 10 March, 2011.
http://www.picced.org/our-initiatives

Powell, j.a. (2009) *Reinterpreting Metropolitian Space as a Strategy for Social Justice* in
Breakthrough Communities, ed. M. Pavel. MIT Press Cambridge.

Simms, M. & M. McDaniel (2010). The Black-White Jobless Gap. *The Urban Institute*.
http://www.urban.org/publications/901378.html

Skelton, R. & V. Miller. (2006) NRDC: The Environmental Justice Movement.
http://www.nrdc.org/ej/history/hej.asp

U.S Green Building Council. *About USGBC.* Accessed 14 March, 2011.
http://www.usgbc.org/DisplayPage.aspx?CMSPageID=124

U.S. Environmental Protection Agency. *Composting*. Accessed 14 March, 2011.
http://www.epa.gov/epawaste/conserve/rrr/composting/index.htm

U.S. Environmental Protection Agency. Climate Change—What You Can Do At Home.
Accessed 14 March, 2011. http://www.epa.gov/climatechange/wycd/home.html

U.S. Department of Energy. Weatherization & Intergovernmental Program. Weatherization
Assistance Program. Accessed 14 March, 2011. http://www1.eere.energy.gov/wip/wap.html

U.S. Department of Energy. Weatherization & Intergovernmental Program. Weatherization
Assistance Program Goals and Metrics. Accessed 14 March, 2011.
http://www1.eere.energy.gov/wip/wap_goals.html

U.S. Environmental Protection Agency. *Climate Change – Greenhouse Gas Emissions.*
Accessed 14 March, 2011. http://www.epa.gov/climatechange/emissions/index.html

Vespoli, L. (Feb. 3, 2011) Last Year's Impact Fuels Today's Movement*. WeatherizeDC Blog.*
http://www.weatherizedc.org/blog

The World Bank Urban Development and Local Government (2010). Cities and Climate
Change: An Urgent Agenda. Accessed 13 January, 2011.
http://siteresources.worldbank.org/INTUWM/Resources/340232-
1205330656272/CitiesandClimateChange.pdf

Wheeler, S. (2004) Planning for Sustainability: Creating Livable, Equitable, and Ecological
Communities. Routledge: New York.