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Sustainable Community Development: The Vancouver Initiative

Abstract

There is an importance in encouraging sustainable community development and practices, and action and change can be done individually and collectively. The urgency in implementing these changes has risen over the last decade, and an emphasis on municipal and community participation and responsibility to minimize ecological footprints has been recognized more than ever. The general notion of sustainable development according to Cohen, is that sustainable living is not just about the preservation of wilderness and nature, but the transition into a green economy (Cohen 2018). Cohen emphasizes that sustainable cities strive for a social, environmental and economically healthy and resilient place of living for populations, without compromising the space for future generations to do the same (2018). A successful green economy depends on cities and its inhabitants to coexist with nature rather than destroying it. The purpose of this work is to focus on the city of Vancouver, and the local initiatives that promote sustainable living from an individual and community perspective; it will take into account the importance of sustainable local food, sustainable education in school systems, and green spaces to promote a socio-nature relationship with the environment. This work will specifically take a look at Vancouver's Greenest City Action Plan 2020, and the initiatives that the municipality and citizens of Vancouver are doing to work towards being considered one of the top ten greenest cities in the world. I will refer to Cohen's sustainable urban lifestyle that he deems can be achieved in a sustainable city, and this is through the changed and educated meaning behind values and consumption. The transition into a green city involves the collaboration and participation of many stakeholder groups, from transparent municipalities, educators, community groups, and businesses that believe in the importance of changing our beliefs and values of what it means to be sustainable.

Introduction

I will begin by attempting to introduce the concept of an environmentally sustainable city, and the elements, which work harmoniously with one another in order to be deemed as "urban sustainability." In Tomalty's work, he repeatedly notes that there is no universal definition of urban sustainability, although it heavily relies on the notion that it must work agreeably amongst economic and social needs of its inhabitants, without compromising the ecological wellbeing over time (Tomalty 2013). Tomalty implies these economic and social needs involve maintaining an adequate standard for living, which includes education, housing, healthcare, and food; this should also embrace universal equality for all to have the opportunity for participation in communities, and political life (2013).According to Cohen, the overall goal of a sustainable city is to provide settlement for its residents, while making the least possible environmental impact (Cohen 2018). Cohen states this in turn involves the relationship of many perspectives and priorities, which invites room for conflict; environmental, economic, social, political, demographic, institutional, and cultural groups are all potential opposing stakeholders (2018). There are many fundamentals to the goal of sustainability aside from the requirement for stakeholder groups to work harmoniously with one another, and this involves transparency and education.

In respects to who should be involved, we are aware that as individuals we have an obligation to the environment, and we should change our behaviors and alter our lifestyles to partake in minimal destruction to the earth; as a global entity made up of billions of people, our responsibilities must come together as a collective whole. I describe these collectives as groups of people who share commonalities; these particular groups are stakeholders, and affected parties, such as future generations and surrounding community members. According to the book *Cities and Biodiversity Outlook*, stakeholders and interest groups should come from all divisions of sectors, as they play significant roles, with differing knowledge and management capacities (Cities and Biodiversity Outlook 2014). The purpose here according to this source, is that different levels of actors such as educational institutions, environmental sectors, and planning allows for an increase of interest and knowledge, permitting for a possibility of building relationships with First Nations groups, NGOs, scientists, citizens, and governments (2014). The main point here is that there are benefits to having diverse approaches; good governance allows for different perspectives to interact, as collective groups steer societies towards a better future. Cities and Biodiversity highlights that solutions for preserving biodiversity can begin at the local level; exchanging perspectives may provide useful insights for urban biodiversity from the local to global viewpoint (2014). In order to thrive and be successive at a global level, biodiversity and sustainability emerge at the local level; the book emphasize that the solution must begin from a local perspective, as biodiversity concerns begin from a local perspective (2014). An example given by Cities and Biodiversity is that local communities must be able to adapt to the best solutions that fit their local needs, engage and understand new practices, and be able to implement the new institutional means to sustain these efforts (2014). A particular instance this source describes is the AICHI initiative to implement the practices and innovations of traditional knowledge relevant for conservation and biodiversity; by including the participation of indigenous and local communities within the convention from a respected level, they are allowing significant knowledge and input (2014). Traditional Ecological Knowledge provides important insight on sustainability, as its practices are known to be ecologically inclined, as indigenous communities have sustained their surrounding natural environments for centuries, noted in years of oral and written histories, which is why their integrated partnership and participation will be incredibly effective.

There are many doubts over transitioning into a sustainable city, as there are many obstacles; this can range from conflicting perspectives, and lack of funding and prioritization. Cohen acknowledges that the shift into a sustainable city is a paradox; he recognizes that urban cities are trying to build onto an environment while making minimal damage, as they are successful due to the exploitation of nature. (2018). The argument is that population densities are only growing within urban centres, and so this concentration creates issues in terms of an increase of unstable energy consumption and flows that surpass the natural equilibrium. As noted previously, success derives from the

collaboration and partnership of different groups and stakeholders; however, with numerous perspectives there is certain to be a difference in outlook. One going debate is how sustainability can be implemented within different interest groups in relation to the environmental, economic and social well being of the city; it is difficult to create harmony amongst numerous perspectives. Cohen fears that the gray scale and broadness behind defining sustainability upon several groups will cause concern of losing its meaning and achievability (2018). The solution is to integrate and strengthen the individual commitment towards sustainability, in order to allow collectives to achieve sustainability together as a whole; this way, values are instilled within the individual, in hopes that they will be reinforced when they are placed in group settings.

A new take on urban sustainability planning has emerged in the last decade in order to adapt to the urge for cities and its inhabitants to change towards a more environmentally committed future. I will refer to ideas that suggest the possible ways in which integrated planning, policy development and decision-making can be integrated in order for change to occur. The authors Robinson et al. focus on concepts of connecting sustainability to cities through social imperatives: by bridging the gaps between our modern day problems and potential solutions, instilling knowledge in educational systems, and through local government involvement (Robinson et al 2012). Robinson et al. refer to the transformations of how perspectives of sustainability have changed, and how this change must be applied; the authors explain that cities consume 75 per cent of the world's energy and produce 80 per cent of its greenhouse gasses, yet we continue to struggle with answers for how to instill change (2012). Throughout history, the concept of efficiency had detrimental impacts on the environment, as groups strived for economic growth and wealth of their companies; however the perspective has shifted from exploitation to conservation. Robinson et al. comment on the lack and slow progressive movement towards sustainability due to institutional inflexibilities towards change; this change has developed from models of thinking and planning, to the improvement of action (2012). Large companies and institutions are some of the biggest leaders of energy consumption and greenhouse gas contributors in cities, and their contribution and participation is crucial towards influencing change and incorporating power towards change. Although change has never been one to be simplistic in its efforts towards sustainability, according to Robinson et al., an integration of conflict management will bring forth a mutual understanding of issues and potential approaches for change within the hierarchical tier of positions, rather than relying on administrative power to apply change (2012). The idea the authors are trying to impart is that placing power on one group will always place a fragmentation between all groups; and so the importance of consultation, and shared-decision making are crucial in terms of policy planning in order to bridge the gaps between different interests and groups. In other words, all interest groups must be involved in all aspects of decision-making, and power must be allocated amongst all groups; in other words, there is to be a mutual partnership with groups involved. Examples of such groups that can lead this change towards sustainability range from local members of parliament, educators, or NGOs; each of these groups can work together to spread awareness and education on sustainability, in hopes to enact bigger changes.

The concept of policy will only go as far as the mindset of the individuals that follow suit; following the implementation of sustainability integrating within policy planning, educating the public will increase as population numbers in cities continue to rise, and the challenges associated with accomplishing a healthy ecosystem and environment will also continue to rise. This issue of continuous increase in populations brings into light on what is needed to change the ways of individuals, in order for future generations to enjoy the resources available today. Vancouver's Greenest City Action Plan 2020 is an example of an urban policy strategy to reduce carbon emissions. Urban policies and those behind it, lead the changes that aspire to shape the city and its inhabitants by enacting sustainable changes and lifestyles. The authors Affolderbach and Schulz describe this leadership as a form of competitive positioning that places cities as green leaders in sustainability initiatives and transformation from a local and global perspective (Affolderbach and Schulz 2017). By being deemed a "green city, smart city, blue-green city, and livable city," Affolderbach and Schulz state that it places cities within the position to mitigate climate change, because they are considered to be responsible for high levels of greenhouse gasses; this position is described as a responsibility placed upon municipal governments to act as agents of, and drivers behind sustainable development plans (2017). Affolderbach and Schulz's paper discuss the Greenest City Action Plan (GCAP), and how it is used by policy makers and other recipients to position the city within a local and global sustainability context (2017). The idea of urban sustainability strategies aspire to manage natural resources and land use, which is used and altered by city inhabitants. According to Affolderbach and Schulz, the city of Vancouver as a "green city," strives to stay on the "leading edge of sustainability" by cutting the city's C02 emissions by 2020 by 33% below the 2007 level and by making the city's energy supplies 100% renewable by 2050 (2017). Many skeptics have criticized the ambitious scope of the GCAP, as it demands a large-scale participatory process, which involves wide public support and engagement with the plan. Affolderbach and Schulz explain that the framework of the plan surrounds municipal action, which includes goals such as 'economic development,' 'green jobs,' and investment on infrastructure, and puts an emphasis on the importance on the quality of life (2017). Therefore Vancouver's concept of policy and decision-making acknowledges the importance of livability for the current and future residents of Vancouver, in hopes to enhance resident engagement into reducing their ecological footprints.

By tracking the development and engagement of citizens through their participation, local identity can be achieved by attracting considerable worldwide attention, in hopes to pose as an example for other cities to follow suit. The Greenest City Action Plan hopes to inspire others globally to follow their sustainability efforts, such as their local food movements, sustainable education and implementation of green spaces throughout the city. Affolderbach and Schulz introduce the example of Vancouver as a potential leader in green building policies and practices that may provide awareness for a wider audience and scope (2017). An example of an initiative being enacted within Vancouver's GCAP, is the local food movement, according to the author Hilde; it is comprised of food production, processing, distribution, consumption, and waste management activities (2012). Hilde discusses the number of initiatives that are underway in Vancouver in regards to sustainable food; this involves a sustainable food system within the city, by making the proper connections between stakeholders within the chain, to ensure a more sustainable connection and flow between food and consumers (2012). To further explain, this initiative of eating 'local food,' is comprised of a plan to

increase a circulation of local supply and demand in Metro Vancouver, while minimizing the overall ecological footprints involved in the process. The main idea is to intend for farmers, local businesses, production, citizens, to create a connection with one another as a sustainable system; a reformation of "sustainable food," involves city inhabitants to purchase food from farmers markets, food hubs, and community gardens, which promotes seasonality and locality. The author Mador writes on the disconnection that British Columbians have with their food, which ushers the government to enact policies to establish the foundation for healthy eating and overall making sustainable choices (2012). The "buy local" initiative promotes locally grown and purchased food from local area farmers and small-scale food producers, in order to create a conversation on reducing the distance of where food is grown. According to the author Terri, promoting locally grown and purchased food reconnects local producers with consumers through food cooperatives, community supportive agriculture (CSA) programs, farm-to-school linkages, farmers' markets, and food delivery services (Terri 2010). This reconnection allows people to readdress the means of 'healthy eating and living lifestyles', which benefits the circulation of demand and supply.

Within Vancouver's Greenest City Action Plan, the target is to increase-city wide and neighbourhood food assets by a minimum of 50% over 2010 levels; as referenced by The City of Vancouver, what we eat has deep ties and connections to how we relate with and treat Earth's natural systems (The City of Vancouver 2012). As stated above, there is an emphasis on creating a sustainable food system, because it involves the process of how we grow, transport, and consume our food. The City of Vancouver states that the overall centrality of food has been grounds for sustainable communities for millennia (2012). To further explain, the fossil fuels used to transport food overseas, and the amount of energy that is used to store these products creates a lot of greenhouse gasses, and the call for local food has been urged more than ever. According to the City of Vancouver, this particular definition of "local food," is to shorten the distance between farms to plate as much as possible (2012). The stronger the local food system means an overall bigger reduction in ecological footprints for a longer period of time.

In regards to sustainable education, the initiatives in Vancouver have grown immensely within the last decade. The "Think&EatGreen@School (TEGS)" organized

by The University of British Columbia is a four-year lead experiment in sustainability and experiential learning that collectively involves UBC, the Vancouver School Board, and other involved community organizations. The authors Rojas et al. explains that the intention of the project is not to change the way students eat at school, but to revolutionize how they learn about the food and the environment (Rojas et al. 2018). Rojas et al. describe TEGS as a "learning through experience" program, that allows children to work with their hands, and experience food from every aspect of the food system; this ranges from working in gardens and composts, and in the kitchen (2018). Sustainable education ensures that children are instilled with the knowledge of the value of food, and the environment, through a more hands-on educational experience. Sustainable education allows children to learn about the environment through building an appreciation for the complexity of food systems by changing the existing ways they understand food; they are able to work in community gardens and kitchens alongside educators, while understanding natural food systems and nutrition. Rojas et al. emphasizes that the contexts in which we eat and relate with food are educative, and introduces the concept of 'food literacy,' and involves: educators, students, parents, urban farmers, chefs, community gardeners, food advocates and scholars (2018). Key achievements stated within the work of Rojas et al. are the increase in educator and student knowledge, creating an institution engaged in more than 100-hands on learning in the gardens and kitchen, in order to shape future generations to make more sustainable and healthy choices (2018). One of the biggest connections that local communities can make is to collaborate participants and assets. An example would be managing a bigger presence of neighbourhood food networks, and allowing these programs and networks to be more attainable and approachable to individuals. Food assets such as community kitchens, farmers markets, urban farms and hubs can work in collaboration with school programs in order to create an educational and hands-on experience for youth and other community members.

A third initiative in making Vancouver a more sustainable city is through the notion of implementing more "green spaces," within the city. An example of a model city that has excelled in greening their city is New York, through their creation of PLANYC; New York has acted as an ideal for other cities to follow suit in 'greening' their spaces.

The author Campbell writes on the context of PLANYC, which represents a local sustainability initiative that engulfs competitive, global cities engaging in city imagemaking through sustainability planning and investments in the quality of the environment (Campbell 2017). Campbell emphasizes that the practices of local politics is crucial in regards to understanding municipal sustainability planning (2017). Often times, government and municipal decision-making processes tend to be quite opaque, and a call for a more formalized process of public engagement and input is needed. According to Campbell, Mayor Bloomberg was notably named the "green mayor," because of his infamously known work for PLANYC (2017). Campbell continues on to explain that PLANYC includes a focus on infrastructure development, land use planning, economic development and support for a retransformation of the city in competition of other cities around the world (2017). A more notable initiative was MillionTreesNYC, which is a campaign revolving around the plan to plant and maintain one million new trees between 2007 to 2015; it had become recognized worldwide as a model for urban forestry proposals. According to Campbell, alongside the initiative to plant and maintain one million trees, it was especially important for New York City to increase its biodiversity, especially with the initiative to restore and reforest a more healthy and nourished environment for trees and other natural life (2017). The initiative of the MillionTreesNYC was more than just planting trees, but was created to cultivate the support across leaderships in government positions, alongside civic groups, and the public in order to have the support for a more sustainable city. The creation of this campaign was also made to form a cooperative "hybrid government" that balances the roles and responsibilities of municipalities, and participants across cities in hopes to attract education through engagement and participation; the message is that planting trees has benefits to socially, economically, and environmentally. According to Campbell, trees help clean the air, cool our streets, and by capturing and storing storm water (Campbell 2017).

There are many benefits to implementing green space amongst urban cities, and Vancouver has paved its own way through its GCAP. According to the City of Vancouver, a target within the GCAP includes "access to nature," stating that all Vancouver residents live within a five minute walk of a park, greenway or other green space by 2020 (City of Vancouver 2012). Secondly, the City of Vancouver also plans to plant 150,000 new trees by 2020. Much like New York City, the City of Vancouver also sees the social, economic and environmental benefits of green space; it has planted an average of 2,000 new street trees each year for the past 20 years (2012). The overall purpose of this plan is to grow and enhance the urban forest in Vancouver, which contributes to the overall increase in wildlife habitat, minimization of storm water runoff, and increased food production. According to the City of Vancouver, notable key factors for success demands public engagement, because of the implementations that occur at a local level; participation is asked of local community groups, residents, schools, businesses and staff (2012). Nature and overall green space has been particularly contributive to creating a sense of "community," by benefitting individuals from a social and health perspective. The City of Vancouver has stated that green spaces have shown to be physically and emotionally healthy to the health of others by reducing blood pressure, cholesterol, and stress (2012).

A "green city" involves the incorporation of the social, economic and environmental well being of a city and its inhabitants, without degrading the environment and its natural resources. There are many fundamentals involved in the succession of a sustainable city, and involves the participation and collaboration of many groups. There is an urge for municipal and government transparency in policy and decision-making processes, as well as for public participation and engagement in order for initiatives to be successful. These initiatives range from educational programs, increase in community food assets, and incorporation of green spaces. The importance of public participation is crucial, because of the level of local implementation of these features within the city; the generality of urban sustainability involves inhabitants to live harmoniously with nature, rather than destroying and altering it. The transition to a green city also captures a globally competitive aspect, as cities compete with one another to be deemed and rank successful "green cities." The author Cohen emphasizes that sustainable development does not only involve a preservation of wilderness and nature, but also includes a healthy social and economic aspect for citizens (2018). The three initiatives of sustainable education, local food, and green spaces do not only circulate around the importance of the environment, but also emphasize the social wellbeing of individuals; one example would mentioned is that an incorporation of green spaces in cities have been proven to alleviate stress, and improves the overall mood of citizens. Vancouver's Greenest City action plan promotes an overall healthy, prosperous and resilient environment, and calls for the collaborative effort of communities to work together in order to create a better life for future generations. According to the GCAP, Vancouver has one of the smallest per capita carbon footprints of any city in North America, and has proudly been able to call itself a "green city" with aspirations to continue to become more sustainable (2012). The choices behind educating ourselves, and making appropriate choices through our eating and living habits are decisions we can make to become more sustainably committed citizens.

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