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Towards An Agreed Definition Of Sustainability: Exploring The Concept Of Sustainability In Amherst, Massachusetts

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TOWARDS AN AGREED DEFINITION OF SUSTAINABILITY:

EXPLORING THE CONCEPT OF SUSTAINABILITY IN AMHERST, MASSACHUSETTS.

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Table of Contents

Abstract

Many educators agree that to learning about sustainability and discussing about it's implications on values, ethics and the role of humans are essential. With so many moving parts it is difficult to determine a sustainable assessment to encompass the changing world. The time has come for us to ask reflective questions about what exactly sustainability means. How has the term sustainability been used worldwide? What was the goal of sustainability and what is the result? Is there a better alternative to achieving this goal? By identifying the characteristics of best practice for sustainability, we take a step towards understanding the concept of sustainability and the processes embodied in it. I argue that there is a need for a universal understanding of sustainability. Although the quest for subjectivity has spread throughout the development context, the need to be objective in speaking the universal truth is vital to overcoming ideological differences. This paper identifies the barriers to having a shared meaning of sustainability. Such understandings are important in re-evaluating the definition and tools used in achieving sustainability. Given the barriers and difficulties that prevent a shared understanding, the paper then explores the well-being framework as the alternative to realize the benefits that would are derived from adopting a universal meaning of sustainability.

Introduction and Statement of Research Question:

Many educators agree that to learning about sustainability and discussing about it's implications on values, ethics and the role of humans are important. With so many moving parts it is difficult to determine a sustainable assessment to encompass the changing world. The time has come for us to ask reflective questions about what exactly sustainability means. How has the term sustainability been used worldwide? What was the goal of sustainability and what is the result? Is there a better alternative to achieving this goal? By identifying the characteristics of best practice for sustainability, we take a step towards understanding the concept of sustainability and the processes embodied in it. I argue that there is a need for a universal understanding of sustainability. Although the quest for subjectivity has spread throughout the development context, the need to be objective in speaking the universal truth is important to overcome ideological differences. This paper identifies the barriers to having a shared meaning of sustainability. Such understandings are important in re-evaluating the meaning and tools used in achieving sustainability. Given the barriers and difficulties that prevent a shared understanding, the paper then explores the well-being framework as the alternative to achieve the benefits that would be derived from adopting a universal meaning of sustainability.

In more recent times, discussion about sustainability and issues surrounding it have received more attention both locally and globally. Many people have stressed the need to understand development as a multidimensional phenomenon that involves and affects many aspects of people's lives (Boarini, Kolev, & McGregor, 2014). The paper argues that there is a need for a universal understanding of sustainability. Although the quest for subjectivity has spread throughout the development context the need to be objective in speaking the universal truth is important to

overcome ideological differences. It then identifies the barriers to have a shared meaning of sustainability. Given the barriers and difficulties that prevent a shared understanding, it then explores the well-being framework as the alternative to achieve the benefits that would be derived from adopting a universal meaning of sustainability.

In assessing the development of a place, modern views are beginning to recognize that current well-being and its long-term sustainability are the primary goals of development and that this concept better represents the human experience (Boarini et al., 2014). Recent development literature is in agreement with the view that well-being includes the satisfaction of needs and wants and the quality of life that people experience. The call to accommodate different measures of well-being has been supported by major stakeholders in the development arena who are calling for a multi-dimensional notion of human well-being (Boarini et al., 2014). More recently, the open working group on Sustainable development goals has proposed a set of universal and multi-dimensional goals that will set a foundation for the discussions that will lead to an accord on the development agenda (Boarini et al., 2014). Also, the adoption of the 2013 United Nations Resolution on Happiness indicates that a focus on GDP alone is not adequate to measure and promote human prosperity (Boarini et al., 2014).

This paper researches the need for having a universal concept of sustainability that will help to indicate the conditions in different contexts accurately. It explores the barriers that prevent an agreed upon definition of sustainability and how it affects society. For a better understanding, the paper asks the following questions, how has the term sustainability been used worldwide? What was the goal of sustainability and what is the result? Is there a better alternative to achieving this goal? It then examines the well-being framework as an alternative concept to sustainability.

The Barriers to Sustainability

Defining Sustainability

Sustainability science, sustainable development, and sustainability lack standardized definitions and are used interchangeably in most literature. Hence is it important to make clear the differences. The BRUNDTLAND report defines sustainable development as: "*a development that satisfies the needs of the present generation without compromising the capacity of the future generations to satisfy their own needs.*" (Pérez, & Llorente, 2006). Shahudu (2016) defines Sustainability as: "*as a problem inspired, disciplinary science of systematic enquiry into the interconnections and relations between the past, present and future of life and its support systems, with the goal of keeping the productive capacity of life support systems in harmony with the demands placed on them, at all times*" (Shahadu, 2016).

Sustainability includes classroom dynamics, decision-making process, organization structures, strategic planning and collectively working towards an envisioned society (Moore, 2007). The international alliances working in the area of sustainable development have set up scenarios for change, but the new discourse on sustainability has placed accountability in no-man's land (Pérez, & Llorente, 2006) Definitional challenges within sustainably raise the question in two areas, conceptual usages and clarity (Shahadu, 2016). As a result of the ambiguous nature of the concept, it is sometimes difficult to put into practice. It has been widely accepted that sustainability consists of three pillars – environment, economy, and society. This approach has led to the debate on the connectedness of the three components. The weak sustainability approach assumes that different types of capital (economic, social and environmental) are substitutable while strong sustainability

suggests that social and economic capital is derived from environmental capital (Wilson, & Wu, 2016).

History of Sustainability

The introduction to the term sustainability first came into existence in the institutional debates of the Rio Summit and became validated as an internal strategy for institutionalizing ambiguity and calming social protest (Pérez, & Llorente, 2006) This concept has become more relevant ever since the publication of Our Common future (Mittler, 2007). It has emerged as an interdisciplinary science to explain the connections between human and nature. The Brundtland report set the stage for the need for sustainability. The report recognized the environmental changes resulting from human interaction and management of resources in the environment posed a threat to the continued existence of life support systems, and that depended on them. (Shahadu, 2016). The report led to the birth of sustainability as a field of research and practice. The discourse on sustainability is about the change in the way humans think. The shift in discourse requires us to revisit old assumptions and tackle the questions relating to the human condition (Orr, 2002).

Issues with the definitions

Researchers are working on making the science of sustainability clearer have not been paying attention to issues of definition. Sustainability requires a focused definition that is specific enough to be distinctive and significant but broad enough to include all domains in the field (Shahadu, 2016). Lamm (2013) points out that people view how the world works differently and that most of us have a mental map of the world in our minds and this affects our perspectives and thus our

policies (Lamm, 2003). Many sustainability theories have been defined with regards to the attitudes to community, economy, and technology. Some of these theories can although very sophisticated can help understand the continually growing literature on sustainability. These supporters of the methods, however, fall into two sections. The first is the divergence on the issue of 'final vocabulary' used to describe the relationship between economy and environment. To them, the economy creates value, and although there are side products such as waste, it is not important. The second supports the view of the economy as a sub-system of the ecosystem. Human activities are limited by the biophysical environment (Mittler, 2007).

Andreotti's tool called HEADS UP takes the contribution from research to discuss strategies that focus on global initiatives. The tool, which directs our focus to the problem of educational initiatives glosses over the complexities of sustainability issues and can be used to identify various patterns of thinking. Sund (2015) highlights how policies and practices concerned with global sustainability issues can sometimes reproduce and challenge these patterns. On the one hand, cultural diversity needs to be promoted given our different lifestyles. On the other hand, creating universally agreed ethics is required to have a shared vision for sustainable development (Sund, 2015). In some cases, the discourse of sustainable development has helped to successfully water down the sensitization, consciousness-raising, and denouncement that concerned individuals have built over the past years (Pérez, & Llorente, 2006). According to Orr (2012), true sustainability will not come from surface changes but form a more in-depth process that involves the evolution of man (Orr, 2002).

Literature Review

The need to create a universal meaning for sustainability and to incorporate sustainability assessment processes is a major issue in the society. Many authors believe that gap in our understanding is now more about functional, value-based and intangible questions concerning the social, economic and environmental elements than about the bureaucratic aspects promoting sustainability (Audouin & Benita de Wet, 2012). The key challenge that prevents us from achieving a universal agreed vision on sustainability concerns a change in the way we live individually as well as collectively, rather than reforming the already created policies. Such integration will support the discourse that promotes the advancement of society based on collective goals not and individual entities.

This literature review examines significant literature in four general areas: (1) Society as an Institution and as a barrier to sustainability; (2) The role of the economy as a barrier to sustainability; (3) Environmentalism as a barrier to sustainability; (4) A way to assess sustainability. The mainstream concept of social-ecological systems is divided into social, economic and environmental elements are as a result of way knowledge has evolved. Wilber argues that the separation of these elements is necessary so that each can develop on their terms. However, the disciplines have become so dissociated from one another that integrating them to address issues of sustainability is extremely difficult (Audouin & Benita de Wet, 2012).

Society as an Institution

The perspective of the human-nature relationship and all that constitutes its development influences the sustainability ethics of a person. Comprehension of such underlying values that influence a person will enable us to create context-specific sustainability goals. From a socio-psychological perspective, researchers have highlighted three factors, specifically (1) the social setting in which an individual is placed; (2) the social-environmental values the individual holds and: (3) attitudes towards specific behaviors, which have been presented as indicators to differentiate the various levels of commitment to environmental action (Lee, 2011). Kahle (2011) states that values shape the experiences and learning process of people and are helpful in predicting the individuals at both the societal level and individual level. A framework that was developed classifies values into five dimensions: (a) man-nature orientation; (b) man-himself orientation; (c) relational orientation; (d) past-time orientation; and (e) activity orientation. (Lee, 2011). The role of social and cultural systems in the dynamics of the human being is well-known. For this discussion, culture can be defined as a mix of symbols, beliefs, languages, and people (Pizzirani, 2014). Culture's broad range of meanings and usages depicts the inbuilt complexity as a result of its dynamic nature, yet they provide the framework, make the rules that either support or prevent the achievement of sustainability. Social systems and cultural norms can act together to create open and real institutions that encourage the rule of law, uphold the values of the society and create accountable governments (Boarini et al., 2014). For Habermas, the key to understanding the process is in the notion of language and the potential of communication. He sees language as the center around which humans unify to reduce irrationality. Hence, the power of system media to influence the world is at the core of the crisis facing the modern society. The system media represent only their sphere and do not include all other perspectives. The system media cannot make decisions, but

it can influence the decision. This power according to Habermas is unbalanced regarding effect and influence (Fergus, & Rowney, 2005).

Another challenge to achieving sustainably lies in the education system. The kind of education needed has nothing to do with GRE Scores or SAT or having the skills needed to reinforce the human culture. The type of education being advocated for promotes the study of the relationships between energy, environment and economics and how these disciplines apply across all field of knowledge. In other words, we should focus on education that generates new knowledge (Orr, 2002). Little attention has been paid to the cultural and psychological transformation that will be necessary to make societies sustainable (Milbrath, 1995). Fotch (2008) underlines how Baumgartner and Hogger about lost traditions that connect the individual, social and spiritual life-worlds. These traditions that helped in ensuring that accountability and transparency was a communal affair. Western-style consumerism, individualism and short-term profit seeking have negatively affected the communal obligations and cultural traditions tied to natural resources. Fotch (2008) also points out how Baumgartner and Hogger suggest that physical, social, historical, cultural, spiritual and political component of a family should be incorporated in development policy (Focht, 2008). Sustainability will need to reconcile between the culture of growth and the culture of limits (Lamm, 2003).

The Role of the Economy.

According to Klinsberg (2006), we should re-examine the criteria's commonly accepted in measuring economic development (Pérez, & Llorente, 2006). These criteria commonly used include –annual growth rates, per capita gross product, inflation rates, etc. These models have proved to be

inefficient with regards to creating a foundation for a truly equitable economy that takes into consideration excluded territories and creating a model that is respectful in the use of natural resources and the ethics of sustainability (Pérez, & Llorente, 2006). Measuring sustainable development using per capita economic growth regarding GPD (Gross Domestic Product), does not take into account that economic growth exploits social and natural capital. By associating development with sustainability, the limitations placed on exploitation are removed and are used in favor of economic growth. It has been noted from the Rio texts that pressure from the economic sectors of society to accept economic growth an imperative making it seem like a solution and not a problem. In this way, the idea that growth is essential is validated (Pérez, & Llorente, 2006).

The reports that the UN itself publishes on the evolution of generic indicators are critical towards universal declarations:

"Achieving sustainable poverty reduction requires dynamic processes through which poor countries and poor people can produce their way out of extreme deprivation. But in our highly unequal world, greater equity would provide a powerful catalyst for poverty reduction and progress towards the MDG (Millennium development goals). The picture is not encouraging. If current trends continue, this will create large gaps between MDG goals and outcomes. The gaps can be expressed in statistics, but behind the statistics are the lives and hopes of ordinary people. Human costs can never be captured by numbers alone, Human development gaps within countries are as stark as the gaps between countries. These gaps reflect unequal opportunity – people held back because of their gender, group identity, wealth or location. Such inequalities are unjust. They are also economically wasteful and socially destabilizing" (UNDP, 2005, pp. 2-3). (Pérez, & Llorente, 2006)

For the economy to be sustainable and promote the well-being of its people, it needs to be resilient and effective. This includes the ability for the economic system to preserve and renew economic capital, to address the macroeconomic imbalances and foreign indebtedness, to secure the transparency and stability of the financial system, develop an effective style of contract and ownership law and to ensure adequate tax resources to provide public goods and public investment (Boarin et al., 2014). Egotistic values in people prompt them to either protect aspects of the environment that affects them or oppose the protection if it costs them personally. According to the rational choice theory, people endure the costs of protecting the environment when benefits exceed those costs (Lee, 2011).

When the principles of sustainability were introduced, they were intended to focus on the society's objectives and direction, especially in the western society. This was meant to be achieved through understanding the process and framework of other cultures, with the goal of questioning the dominance of the instrumental rational paradigm and its influence on mainstream development. However, at the Rio summit when an increased level of commitment was needed, they were unable to agree beyond the consensus that it was a good idea to think about the future. These difficulties were a symptom of the fundamental difference in reasoning capability to create knowledge. At the root of this was the power of dominant paradigm, where instrumental rationality and the cognitive framework of neo-classical economics dominated the validity and creation of new knowledge. (Fergus, & Rowney, 2005). The lack of imagination may be a result of the deep psychological investment that people have in the role they have chosen in society (Milbrath, 1995).

The State of Environmentalism

It is important to consider the role of the ecosystem at a broader level. With the knowledge that the economy, society, and environment work together to create the ecosystem, this interrelation can either sustain and promote the well-being of the people or undermine it. (Boarini et al., 2014). Internationally, the field of environmental ethics is different from environmental assessment. While the former is more valued based, the latter is more procedural and mainstream. Environmental ethics are defined as loosely integrated sets of values and principles used by people in different contexts to make decisions relating to the environment (Audouin & Benita de Wet, 2012). The focus on procedural aspect in the environmental assessment sphere reflects the dominant worldview in which objectivity and instrumental rationality are more emphasized than value-rationality (Audouin & Benita de Wet, 2012). Moreover, the best available data to determine the global limits to resource use are unreliable, as many countries do not collect this type of data. And, given that the environment is a dynamic system, and the interaction of man between different resource changes, we must accept the limitations of scientific knowledge (Mittler, 2007).

In the UN's report on the Millennium objective in which the organization itself advises those good intentions itself are not sufficient to guarantee the protection of the environment. One constraint to achieving this goal of protecting the environment is the lack of engagement with the underlying environmental values of the participants in the process. In the environmental assessment procedure for most places, it is assumed that the views and values of the stakeholders are incorporated in the process. If an environmental assessment is to promote defined sustainability goals, an in-depth understanding of the various perspectives of stakeholders is required for the social and ecological system. (Audouin & Benita de Wet, 2012). This understanding will facilitate the debate around local definitions of sustainability. Here the aim is not to understand the meaning

of sustainability but to understand what it means to different stakeholders and the implications of the meaning for the ecological system (Audouin & Benita de Wet, 2012).

Environmental beliefs are different between cultures. Hence the solutions to the issues so not be universal but unique to various areas ranging from local to national depending on the relevance of the issues. One could make a case that culture is tied to environmental sustainability given that humans have a relationship with the natural environment (Pizzirani, Mclaren, & Seadon, 2014). Environmental values, especially for committed environmentalists are different. These individuals place more emphasis on unity than personal wealth. The values expressed understand environmental behavior as a relation between environment and cultural context. The dilemma occurs when an individual has to choose between acting by one's interest or the interest of a group (Lee, 2011). We need more accurate models to explain the effects of human enterprise on the biosphere (Orr, 2002). The use of the word socio-ecological systems instead of environmental assessment is a positive step forward. This notion of a system indicates the inseparability of the social and ecological aspects (Audouin & Benita de Wet, 2012). Gibson (2012) notes that the current trends are leading towards unsustainability and efforts to slow down the process is inadequate since it does not focus on the interaction between the social economic and environmental. He argues that the human race is trapped in a vicious cycle of ecological degradation and resource exhaustion. (Bond, Morrison-Saunders, & Pope, 2012).

Assessing Sustainability

Any measure for measuring sustainably must adhere to Holland's assertion that "nature ought not to be substituted where it can be substituted." In other words, social and economic gains cannot

come at the expense of natural capital (Wilson, & Wu, 2016). However, given that assessing strong sustainability is difficult to measure because of its interconnectedness between its components, it must allow for some level of substitution while also limiting the growth of one form of capital at the expense of the other (Wilson, & Wu, 2016). The difficulty as identified by Schumacher (2002) is that human problems are not solved by rational means alone.   These are called divergent problems formed by the tension between opposing perspectives that cannot be solved but transcended (Orr, 2002).

The paradigm of sustainability that emphasizes well-being

It is important to note that the concern for wellbeing does not exclude the core development principles, but it highlights the fact that country policies are failing to recognize how complex and diverse realities of needs and wants matter. The challenge to universalize the OECD (Organization for Economic Co-operation and Development) framework for understanding well-being so it is applicable for people from different countries to define appropriate indicators that measure the various aspects of well-being, in particular, social, economic and cultural contexts (Boarini et al., 2014). This framework is based on integration, comprehensiveness, and strategies, which helps to sort the characteristics of an assessment and the extent to which it contributes to sustainability. It supports the assessment process especially regarding integrating the three pillars of sustainable development

While each of these aspects requires specific interventions, the multiple dimensions of well-being are inter-related. Well-being, therefore, represents an umbrella concept for policy bringing together agendas that are usually competing with each other. (Boarini et al.,2014). GDP links

development with economic growth consequently, with an increase in the goods and services manufactured making social development a result of economic development. (Pérez, & Llorente, 2006). The limit of GDP as a measure of prosperity has been accepted including those who designed the national accounts in the first place (Boarini et al., 2014). Nonetheless, it stills maintains the role as a leading indicator. This doesn't only reflect the features of GDP as a measurement tool but also to the belief that economic growth leads to well being. Some studies have shown that economic growth is not automatically tantamount to the higher well being of people. (Boarini, et al., 2014). . A qualitative look method used to calculate GDP exposes the errors and weaknesses in this concept of an index to evaluate long-term social, cultural and environmental progress. A weakness of this index is that it does not take into account the exploitation of natural resources and the finite nature of these resources (Pérez, & Llorente, 2006). There are many examples to prove that a nation can have an increase in GDP while being ecologically ruined: Bolivia, Colombia, Ethiopia, Ghana, Indonesia, and Kenya (Pérez, & Llorente, 2006).

By changing our perspective on the role of indicators to see them not as mathematical instruments but elements of the thinking process and community practices, we may be able to better understand the roles and applications of the various indicator projects (Holden, 2009). Another reason to for this change is that it supports the development of a richer and more deliberative democracy. Publically shared indicator systems can provide valuable links between government, citizens and the non-governmental sectors creating a synergistic collaboration (Holden, 2009). While they are many ways to measure the universality of the concept the good life, I have been able to identify literature that highlights the domains of well-being that have in common the recognition of the human experience is more than just material living conditions, but nonmaterial dimensions are important.

Given this discovery, a broader measurement perspective is needed; this perspective should focus on measuring all the factors associated with economic prosperity as well as all the components that determine the quality of people's lives. More importantly, revising tools to better measure people's lives has the potential to better inform the decisions of the government and the implementation process of any design (Boarini et al., 2014). Well-being provides the important information on the development of countries and is in alignment with what citizens need and want. In this instance, the interest of a broad range of stakeholders is taken into account through policies. As Hall and Rickard (2006) state, the policies could in turn increase people's engagement with institutions, which can generate a positive cycle of improvements in politics and policy. This standpoint gives rise to new types of indicators founded on theories of sustainable development and sustainability combined with the most recent applications in qualitative methodologies that both combine both objective and subjective criteria in development evaluation procedure. The well-being index combines 39 indicators including health, population, freedom, peace, delinquency, and equity, with 39 other indicators that encompass land health, air quality, and species diversity (Pérez, & Llorente, 2006).
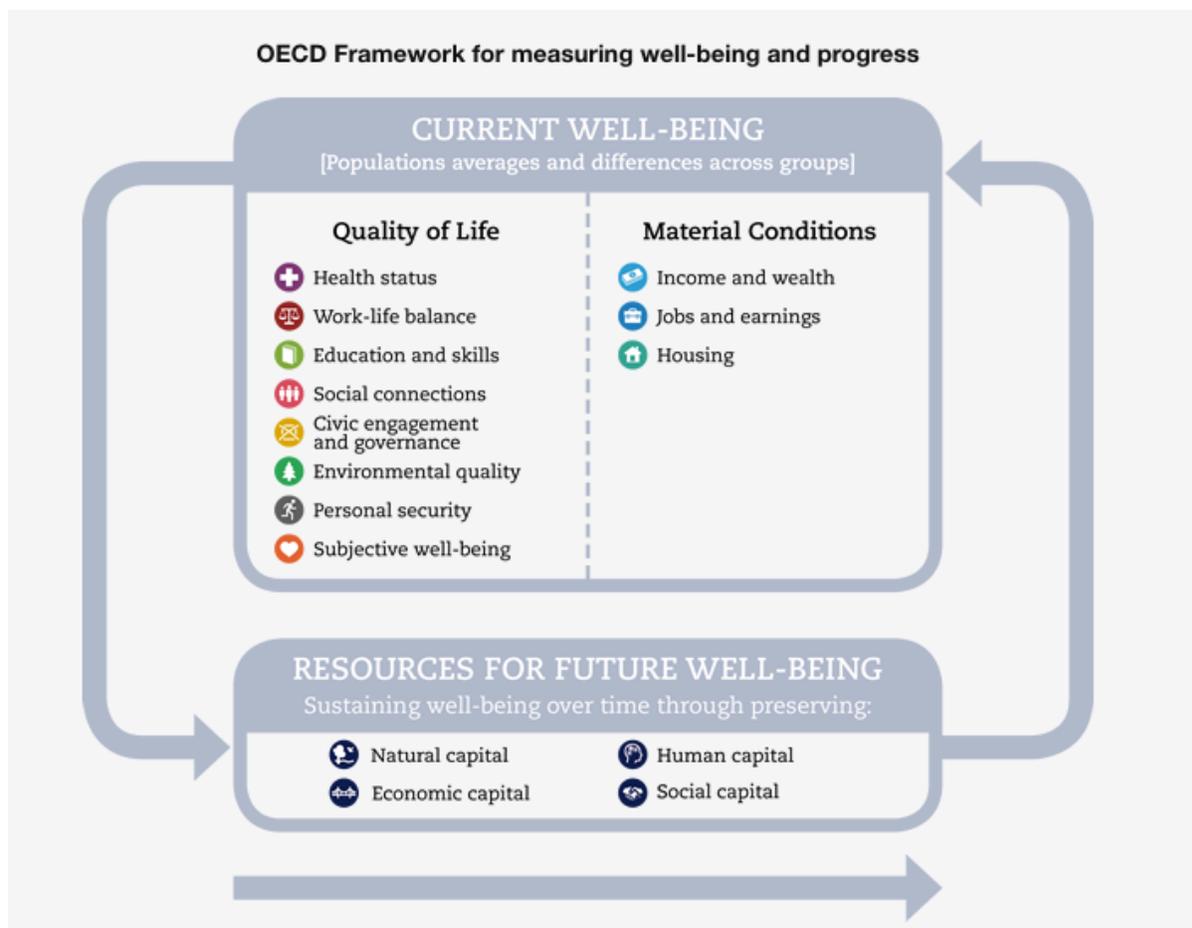
OECD Framework

The OECD well-being framework has four distinctive characteristics; it focuses on people, it concentrates on well-being outcomes, it considers the well-being distribution, and it looks at both objective and subjective aspects of well being (Boarini et al., 2014). Creating a proposal to measure economic assets of the externalities or the natural assets of such as a tree shade, the beauty of a landscape or progress towards conditions that allow us to live in dignity (Pérez, & Llorente, 2006). What motivations are there for people to get involved in indicator systems if it is not guaranteed that their personally selected indicators are taken note of? To cope with the dynamic elements that allow for human-wellbeing, efforts should be focused on developing frameworks to represent the change in subtle nuances, clarifying how these changes in different contexts. The

major challenge facing indicator movements internationally is to successfully incorporate the collection and reporting into the decision-making process.

Conclusion from Literature Review

The literature review has illuminated many factors affecting the creation of a shared understanding of sustainability. Given that the leaders who created the concept of sustainability were from the global north, the foundational framework on which it was created was based on western ideals. Hence there has been a struggle to implement the created concept of sustainability. The lack of incorporation of multiple perspectives has meant that the concept has worked better for some countries than others. Also, some indicators that are used do not accurately measure the well being of some countries. There is a need to create new knowledge that takes into consideration all factors important to creating a sustainable way of living regardless of where you live.

Research Methodology

The purpose of this study was to argue that a universal meaning for the term sustainability is needed. Two specific objectives are listed. (1) Identify the barriers to having a shared meaning of sustainability. Given the barriers and difficulties that prevent a shared understanding; and (2) Explore and choose a framework as an alternative to achieve the benefits that would be derived from adopting a universal meaning of sustainability

Based on the literature review of the barriers to a shared definition of sustainability, the research variable included social values, environmental values, sustainability practices and financial values. A total of seven interviews were conducted in total, with six individual interviews and a focus group and all the participants were residing in Amherst. As a result of the complexity of connecting human and natural systems to form a single unit of analysis and the vagueness of the terms "sustainability" and "sustainable development," I chose to us an ethnomethodology framework, and I have inquired about the understanding of the terms sustainability and sustainable development within a local context. I chose Amherst to conduct the interviews because it is a relatively progressive town on issues relating to energy conservation. Hence the ethnomethodology framework was appropriate in a local setting of Amherst because it offered deeper insights into the local specificities, which gave me the opportunity to compare the findings in the literature review, which was more global to the findings from the interviews. As part of the interview process, I asked the participants to define sustainability and sustainable development and to point out the difference and similarities. Based on the data gathered:

Sustainability is an abstract term that can be applied to anything and is used to guide an activity, creation, and maintenance of the environment or a project with the future generation in mind. It encompasses sustainable development.

Sustainable Development refers to the continuous improvement of infrastructure or economic policy. It is looking for ways to make a project better.

The focus group was especially interesting because, by the end of the interview, the participants openly announced that they had changed their definition of sustainability based on the definitions of other participants'. The semi-structured interviews also allowed the participants not only to explore other viewpoints on the subject but encouraged the participants to use their terms and experiences to explain it.

Data Presentation and Analysis

Institutional Review Board approval for the protection of human subjects was attained before the data collection. The data was collected from students enrolled at the University of Massachusetts. To get a different perspective, the study sample was selected from a diverse group of students. The students had to be 18 years of age. The participants were informed that participating in the interview was voluntary and they will remain anonymous and that there were no penalties for not participating.

After gathering and sorting out the data, I analyzed the transcripts and my participant observation notes, and some themes emerged from the research that revealed underlying dimensions of social values, perception of available resources and environmental costs Findings. I used my participant observation to expand on the viewpoints of the participants and the recurring ideas discussed helped create the definitions of how people understood the terms "sustainability" and "sustainable development "As a result of the complexity of the topic, it was difficult to categorize the findings into themes. However, the findings revealed underlying dimensions of social values, the perception of available resources and environmental values. Many of the participants explained sustainability as the guiding principle on how things were meant to be performed and sustainable development as the steady and continuous improvement of a project.

Environmental Values

A lot of emphasis was placed on the environmental aspect of sustainable development, and few of the participants talked about the effects of policies, education, and institutions. When asked ways in which Amherst could be more, there were suggestions such as "I think they should create pedestrian overheads because every time a car has to stop for a pedestrian, all the emissions ad up." Another participant said "I think Umass should ban cars from campus and should have buses run, we have a great bike share program too. They have a lot of unused parking lots and oil from these open spaces flow into the streams and animals drink from that." In this case sustainable given that the university is a pedestrian-centric campus they had developed a certain perspective on how thing should be done. The low consciousness surrounding the effect of policies and institutions on sustainable practices reveal the mainstream thinking that sustainable practices are mostly on connected to the environment.

An interesting find that linked social values to environmental values was that the behavior of a person changed depending on the social values and the available resources. A participant mentioned how in countries like Egypt, Dominican Republic, people have to learn how to be sustainable because that is the only option they have but when his parents came here they complained about how all the did while growing up was hard and they are satisfied with their new lifestyle even though it is not sustainable. When asked about a time in which they had to explain a sustainable practice to someone. About three interviewees told a story that involved their parents, and the emerging theme had to do with the social values. A participant talked about his mother bought paper plates and cups for a party, but they had enough normal plates to use. When he tried to talk to his mother about using the normal plates, she told him to be quiet. Another participant talked about his dad who worked in the fossil fuel industry and how he tried to convince him to adopt green

energy but he father said "fossil fuel is something that people have been using for a long time and they are going to keep using it and that the trend is too slow for people to care about the climate." It was clear here that the generational gap played a big role in their decisions. The other participants did not answer the question, and when I probed more, they told me they had never really sat down to discuss sustainable practices with other people

Perception of available resources

When asked to give an example to a time in which they had to change their lifestyle to be more sustainable, a majority of participants take about going to college and having to pay their bills. A participant said: Yes, when I moved to college, you can't ask your parents for things, you run out of money. Once you move to college, you have to be more resourceful on your financial terms. You have to start buying food instead of ordering food. You save time by cooking a lot of food at once for later instead of wasting your time you could be dealing with other things, so that's the most real form of sustainability.

Another participant said: Living off campus makes life cheaper; it is a little easier on the influx of the cash. There's a lot more money to do things.

A third participant said: Yeah a lot of times I like to save money on things, I always look for ways in which I can reuse things like when I go to the store, whenever I buy things instead of going out to buy a new jar to keep something, I reuse my fancy jars from items purchased at the store.

It was eye opening to note that people compare unconsciously compared sustainable practices to budgeting. In the case of some participants, they changed their lifestyles because they were moving

to a different place. Therefore, all the resources that were once available to them will no longer be available.

Social Values

When asked about ways in which we can achieve sustainability in the Amherst community, here again, the majority of participants noted that Amherst was already at the forefront of sustainable practices and but included the working together towards a common goal as a way. While many participants provided examples of ways to make infrastructure sustainable in the Amherst area, two participants talked about having after-school programs:

"To me, sustainability could be your community. I don't think this is mainstream thinking. If I am a wealthy individual, how can I give back and improve the place I come from. The way I would contribute is to have after-school programs; It is easier to train someone that is young than old. Anything you want to change, you want to do it forward. Have the program for kids of all classes, provide transportation, do projects with them relating to the community with the right resources. With their parents pushing and them pushing, you change the generation. When I look at Amherst, they are pretty good with a lot of stuff. They took away the bags in some areas from plastic to the paper bag. I would say they need to focus on the community of Amherst and not the colleges. Have programs for the community. Just like the library for Umass but the community."

"I think like some topics could be art, business, and construction and they could all just experiment and do projects. We don't achieve sustainability right away. It's a long-term project.

Another participant said: I think we can do that if people understood more on like what the benefits are of sustainability, cause if there is no pro to it over how we are currently living then there might not be an incentive, so I think the first thing is educating people on why it is important and one way you can do that is, I think I consider that is highly sustainable is recycling, and like those programs have seemed to work in places that you've shown people this is right, recycle works can reuse the material and it brings less waste which is helpful in the long run."

The use of the terms sustainability and sustainable development in the local context can be compared and contrasted with the current literature and the mainstream thinking. From the interviews, regardless of the term used, it was noted that many participants place a high value on environmental protection. Sustainability to them was an awareness of doing things with the environment in mind and thinking about ways to make things more efficient in the environment.

Limitations

A clear limitation that I noticed was that although there as diversity in race, perspectives and income level, the majority of the participants belonged to a certain age group. I believe this was a limitation because compared to an older individual who had experienced changes in the sustainable practices over the years; the insights of my participants were limited. I realize this when a participant said: "fossil fuel is something that people have been using for a long time and they are going to keep using it and that the trend is too slow for people to care about the climate." Another limitation was that there was an already established paradigm of sustainability, which prevented the participants from thinking out of the box. The observation was that although they might have had

other assumptions of sustainability and sustainable development, their perspectives changed by exploring the meanings of the terms.

Conclusion

The popular definitions of sustainability and sustainable development encompass different terms, assumptions, and viewpoints, which create different meanings depending on location and experience. In the process of conducting research and creating a definition, I concluded that viewpoints would always be varied therefore definitions will vary. The paper presented literature review that identified the barriers to achieving an agreed definition of sustainability and explored a possible framework that would allow us to achieve the benefits of sustainability. The research showed the difficulties of clearly understanding and having a single definition of the terms sustainability and sustainable development. The paper argues that there is a need for a universal understanding of sustainability. Although the quest for subjectivity has spread throughout the development context the need to be objective in speaking the universal truth is important to overcome ideological differences. Through the research, I have shown that for the practices to be understood and implemented, working from a locally specific view provides deeper insights into a community. The findings show that the local viewpoints connect to some of the mainstream school of thought on sustainability and sustainable development as environment and infrastructure focused. Also, most of the participants had a general idea of what sustainable practices entailed but didn't have a holistic view of the practices.

In the local settings, words choice matters and the way it is being used is important as the meaning behind them ultimately informs sustainable practices of the locals in the area. As a researcher with a more in-depth knowledge of what sustainable practices entail, it is important for

me to only work with information gathered in the working environment. This helps to understand different perspectives, and I can compare and contrast local context usage and perspectives.

New Knowledge

From my interaction with the participants, it became clear to me that concept of sustainable development and sustainability was not fully understood as most of the participants referred to recycling and composting as examples and there was no effort to create new knowledge and explore other application of the concept of sustainable development and sustainability. It seemed that the media has played a big role in the understanding of the narratives of the terms sustainable development and sustainability. This narrative however true is narrow and incomplete. Hence the need for the commons to create knowledge of what sustainable development and sustainability means to them is imperative not only for the well being of the people in the community but to facilitate better practices between communities. In other words, the spirit of sustainable development and sustainability is constant but the means to achieve them will vary based on location, culture, resources and socialization.

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