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Culture as Sustainability: The case study of Govardhan Ecovillage and Vedic culture in India

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Culture as Sustainability:
The case study of Govardhan Ecovillage and Vedic culture in India

by

Danielle Lella

Submitted in partial fulfillment
of the requirements for the degree of
Master of Arts Geography, Hunter College
The City University of New York

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Thesis Sponsor:

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December 24, 2018 __________________ Dr. Marianna Pavlovskaya
Dedication

To the magnanimous devotees of Govardhan Ecovillage, my devoted husband and my most dear and beloved teacher.
Acknowledgments

I would like to offer sincere thanks to my advisers Dr. Mohamed Ibrahim and Dr. Marianna Pavlovaskya for their patience, guidance and encouragement. I would like to offer my deep gratitude to those who provided extensive edits, feedback, support and well-wishes: Kapish Singla, Steven Rosen, Anna Cooperberg. and, most significantly, the immense amount of time, energy and support given by my dear and loving husband David Bartolone.
Abstract

This project investigates the relationship between sustainability and Vedic culture of India practiced by Govardhan Ecovillage (GEV) by combining approaches from cultural geography, political ecology, ecological economics and post-development theory. The ethnographic case study seeks to understand how holistic sustainability is embedded in the ancient spiritual culture of India. I employ grounded theory for my research methodology which reveals three key themes that explain fundamental and interrelated dimensions of Vedic culture as sustainability. These three dynamics contribute to the understanding of what cultural features of a society are determinants of its sustainability or unsustainability.

Key words: culture, ecovillages, sustainability, sustainable development, spirituality, global crisis, climate change, socio-economics, cultural geography, political ecology
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Chapter 1
Introduction

We live in a world that is on the cusp of chaos in all spheres of society. Everything about our systems of energy and food production, product manufacturing and consumption, water use and scarcity, and seemingly endless toxic waste are all pushing up against the limits of resource availability and surpassing resiliency capacity of ecosystems. Ecological degradation is rampant, with unprecedented biodiversity loss, resource exploitation and unregulated pollution that degrades our land, air and waters. All this is set in the scene of unhinged climate change as temperatures continue to rise and we abruptly shift into new climate regimes (Archer and Rahmstorf 2014).

Socio-economic and political issues are just as foreboding. Social unrest is heightening with political upheavals and corruption, pervasive poverty and wealth inequalities, human rights atrocities and mental health issues at all-time highs as more and more people feel alienated and without a sense of community. Our political economy rests tenuously on energy intensive systems powered by finite fossil fuels and unfettered growth that fail the majority. With peak oil on the horizon, we are counting the days to the combustion of our current affairs (Korten 2006, Strasser 2013, Jackson 2017).

Perhaps the most disconcerting is that we have known about these environmental, economic and social issues since the paradigm of sustainability was first addressed by world leaders at the Brundtland Commission over 30 years ago (Robinson 2004). Contemporaneously, modern development theory of top down economics was exposing itself as ineffective, even deleterious, after several decades that left many developing countries still enmeshed in extreme poverty. A call for bottom-up, community-driven development where people participate in their own development plans and implementation was seen as a critical component of development (Havnevik 2007).
And yet, here we are today nearly three decades later still having yet to achieve an equitable, just and healthy social world wholly dependent on finite ecological systems. How did we get to such a state of affairs when sustainability was recognized many years ago? Is there any way to save this planet despite our high-speed trajectory careening towards societal collapse?

We need to move beyond the normative explanation of the lack of political will, or waiting on the market to solve it, or a breakthrough of technological ingenuity, or a call to action for individual behavioral and lifestyle changes. This is a global systemic crisis where all environmental and socio-economic problems are deeply entwined due to their causal connections. They did not arise independently and therefore they cannot be addressed separately (Strasser 2013).

We must look at these issues more as symptoms of a deeper problem. What is the nexus of these systematically linked issues of unsustainability? The subtle undercurrent of all of them reveal a common denominator within the culture of modernity. The underlying prevailing assumption that has gone unchallenged for at least the last century is an ideology of infinite economic growth in the name of human progress and development (Kagan 2012). A culture that promotes materialism for prosperity and a separateness of humans with nature, and even humans with humans, is unsustainable for both the wellbeing of the people and the planet. It is also one of the largest socially constructed myths of our time namely because perpetual growth does not account for the biophysical boundaries of the ecosystems that sustain a materials economy (Rees 2010). Simply put, we are entrenched in a culture of unsustainability.

Therefore, we find ourselves not just at ecological and socio-economic breaking points, but at a planetary crisis of culture; one that requires a complete transformation from a culture of unsustainability to a culture of sustainability. Radical changes to our society are upon us whether we go willingly, or lest we be forced to. Many are waking up to the root of the problem and no
longer waiting for world leaders and market solutions to make dire changes. These individuals are going beyond driving their hybrid, religiously recycling or buying organic. There are substantial movements of people intent on being the change they wish to see in the world (Mychajluk 2017).

Ecovillages are one such movement wherein sustainable society is being lived into existence. Ecovillages are model communities of sustainability which intentionally create an alternative society and culture from the ground up. They are effectively micro-societies making them the ideal laboratory to study paradigms of sustainability (Liftin 2014).

I investigate one such ecovillage, Govardhan Ecovillage, located in Maharashtra, India outside the city of Mumbai. Govardhan Ecovillage is a model sustainable community and spiritual retreat center that welcomes international guests year-round. Established in 2003, Govardhan Ecovillage aims to demonstrate how rural villagers can live in harmony with the environment while simultaneously realizing self-sufficiency and improved quality of life. Specifically, Govardhan Ecovillage has designed and developed a model of sustainability based on the ancient spiritual culture of India synthesized with modern science and technology.

In order to understand the current culture of unsustainability outside of ecovillages, it is important to trace the historical roots of modernity and how the model of economic growth has intertwined itself within society. I begin first with setting the scene of the current global systemic crisis. I look at the rise of sustainable development in the late 1980s, and how its ambiguity and compromised definition originates in a culture of modernity that has placed unlimited economic growth above all else. I then define culture and sustainability in a more rigorous way and find that sustainability is actually embedded in a strongly held and invisible cultural worldview that shapes reality and the relationship of humans and nature.
From there, I examine the inherent trappings and flaws of this growth-centric ideology giving rise to pandemic unsustainability, leaving no realm of the ever-globalizing world untouched. By deconstructing the implicit culture within the modern social, political and economic status quo, I reveal that the underlying values, beliefs and ontology of a society are fundamental to the spatial patterns and processes of the global crises humanity faces today. This will lead to the dire need of restructuring society first from within and then without by addressing our unsustainable culture as the root of the global systemic crises. Drawing from the traditions of cultural geography, political ecology, ecological economics and post development theory, I examine what cultural perspectives are truly needed to undergo a societal transformation.

I then investigate how ecovillages offer a guiding light of knowledge on the pathway towards realizing an alternative sustainable society. My ethnographic research of Govardhan Ecovillage attempts to reveal how Vedic culture can lead to holistic sustainability.
Chapter 2
Research Objective and Framework

2.1 Problem Statement

It is both prudent and imperative to learn from visionaries and movements that are pioneering viable sustainable alternatives given the grave unsustainability of current global institutions, systems and structures. Ecovillages offer a framework into the design and implementation of sustainable communities being built from the ground up. There is growing literature on ecovillages studied with regards to practices, techniques and living and working dynamics. However, despite being a storehouse of insight into how to re-envision and rebuild society, ecovillages have not been studied with the intent of understanding the underbelly of their cultural makeup, and how an alternative set of beliefs and values play a role in a sustainability transformation.

Likely this is because sustainability, as depicted by the oft-cited venn diagram of the overlapping economic, environmental and social dimensions, often fails to include a cultural element, or at minimum couches it within the social element (Lozano 2008). However, in the last decade culture is increasingly being recognized as a vital component in sustainability. To some it is seen as the fourth pillar of sustainability to be weighed and balanced alongside the social, economic and ecological dimensions (Hawkes 2001). To others it is even more profound. A small pool of research is emerging dedicated to examining culture as being foundational and precursory to sustainability.

2.2 Theoretical Framework

Investigating Cultural Sustainability is a research network supported by the European Cooperation in Science and Technology (COST) with the objective to increase the understanding of the role of culture in sustainable development for policy makers. The research group is comprised of 100 researchers from over 25 countries across a variety of disciplines ranging from
the social sciences to the natural sciences. The conclusions of the group from the period of 2011–2015 were published in a report called “Culture in, for, and as Sustainable Development” which outlines an interdisciplinary theoretical framework for explaining the complex interplay of culture and sustainability. Cultural geographer Katriina Soini, a lead author of the report, continues to publish on culture as a fundamental precondition to realize sustainable development (Soini and Dessein 2016, Dessein et al 2015).

The report presents three concepts representing the relationship of culture and sustainability. The three can be understood as three levels of roles culture can play that move from passive, compartmentalized and anthropocentric to active, holistic and ecocentric (Dessein et al 2015):

1. **Culture in sustainability:** This level of understanding considers culture as a fourth pillar of sustainability parallel with the ecological, social and economic aspects. This place the cultural dimension as a single component in tandem with the three other pillars that co-support/strengthen sustainability. This level of representation is seen as less dynamic and more inert. Public discourse on culture and sustainability dominates at this level, arguably rendering sustainability as vague and non-operational.

2. **Culture for sustainability:** This level of understanding views culture functioning as a mediating role between the three pillars of sustainability. This means culture connects, regulates and balances all three aspects, translating into pragmatic approaches towards realizing sustainability. This level of representation plays a more influential role than the first (i.e. problem-driven, focusing on policy, technological fixes, behavior changes).

3. **Culture as sustainability:** This level understands culture as an overarching and essential foundation of the three dimensions of sustainability. This means that sustainability is embedded in culture and therefore society necessitates a cultural transition in order to
transform into a holistically sustainable one (i.e. solution-focused calling for new motivations, values, and worldviews that are intrinsically sustainable).

‘Culture as sustainability’ is an all-encompassing perspective that is dynamic and operational because its aim is a societal transformation; one where sustainability is a constituent of culture. ‘Culture as sustainability’ integrates the ecological, social and economic dimensions so that their distinctions fade and they are regarded as a whole. This level regards culture as the society’s paradigm that motivates human decisions and actions. Sustainability or unsustainability is thus seen as embedded in the existing cultural substructure of society comprised of deeply held worldviews, values and meanings (Dessein et al 2015).

The third representation refers to a fundamental paradigm shift, in which development as such is considered to be a cultural process. In this way, sustainability is no longer seen as a set of options that can be chosen or denied, or which can be integrated or not, but rather it becomes an inseparable part of a culturally embedded development paradigm that is largely shared among policy-makers, citizens, public and private institutions, and so on...Thus, culture can be considered not only as a structural component, but as a necessary agency in the transformation towards a more sustainable society. (Soini and Dessein 2016, 167)

‘Culture in sustainability and ‘Culture for sustainability’ are less dynamic and limiting because they position culture as a dependent variable to factor, whether as a stand-alone element to balance or a mediator at play. They both do not account for or acknowledge the subtle potency of the inner dimensions of culture (Dessein et al 2015).

2.3 Defining Culture

In order to discuss transforming culture from one of unsustainability to sustainability it is necessary to next define culture which, like sustainability, has been riddled with its own ambiguity. Moreover, as many scholars and international organizations have attempted to conceptualize and analyze culture and sustainability, the concepts have been revealed to be interlinked and their definitions inherently entwined (Soini and Dessein 2016).
Culture is a nebulous concept that is hard to pin down since its meaning is defined differently depending on the context. For ease of conceptualization, culture can be boiled down to three levels of meanings (Horlings 2015, Soini and Dessein 2016). Firstly, a society’s culture is often defined by its arts, heritage and diversity. Though significant, these are only surface-level representations, visible expressions of subtler, deeper meanings of that culture. For the purpose of this research, culture is defined as the following two meanings.

L.G. Horlings identifies ‘personal values’ and ‘collective values’ of culture as the inner dimensions of sustainability (2015). External expressions such as behaviors, patterns, traditions, conventions and lifestyles of society are its collective cultural values. Personal values are comprised of motivations, convictions, intentions, and symbolic meanings of individuals that make sense of the world. In short, personal values form collective values in a society (Horlings 2015, Soini and Dessein 2016).

Therefore, a society’s collective external representations emerge from a society’s underlying worldview, or lens through which the society predominately understands reality. This deeper meaning of culture encapsulates all the fundamental understandings, beliefs, assumptions, values and philosophies of a society (Hawkes 2001, Strasser 2013). This profound and invisible meaning of culture as the bedrock of society will be used as the overarching and foundational definition of culture for this paper.

The unseen yet potent undercurrent of what people think, do and say is a matter of ontological perspective. The ways in which people define and perceive reality gives birth to values, motives and attitudes and creates social structures, including the political economy. Furthermore, they establish how society exercises its pursuit of happiness, fulfillment and prosperity. In other words, the societal systems, structures and ways of life are the “lived embodiment” of strongly held worldviews about reality (Strasser 2013). Therefore, worldviews
about the purpose, identity and meaning of humans, the environment and their relationship shape
the way sustainability is enacted (Strasser 2013, Hawkes 2001, Hall 1980). Ecological, economic
and social dimensions are mere expressions of the culture. Culture thus must rest outside the
sustainability model as a driver and influencer of the three dimensions of sustainability. As Tim
Strasser propounds the three dimensions are “already a culturally mediated choice, based on
assumptions of what sustainability means (2013).”

Therefore, we are in need of a complete overhaul of our internal worldviews that will
allow for us to breed a culture as sustainability. As Paul Hawken puts it, “sustainability is about
stabilizing the currently disruptive relationship between earth’s two most complex systems -
human culture and the living world (2008).” Sacha Kagan’s definition of sustainability further
elaborates that

sustainability can be understood as the search for alternative sets of values and
knowledge of the world, reforming the ways we know reality, thereby founding an
understanding of ‘patterns that connect’ the economic, social political, cultural and
ecological dimensions of reality. The cultural dimensions has thus a foundational value
for the whole search process of sustainability. (2012, 15)

Given we are in need of a cultural transformation from the inside out, it is essential to
study the cultural substructure of ecovillages which are intentionally enacting new models of
society. This is best studied in an ecovillage that has clearly defined culture. Govardhan
Ecovillage is grounded in the ancient spiritual tradition of India which will be referred to as
Vedic culture or Gaudiya Vaishnavism rather than Hinduism, respecting the terminology of the
adherents. Vedic culture and Gaudiya Vaishnavism will be expounded on later in greater detail,
but some significant foundational principles are interconnectedness between all of life,
sacredness of nature, and voluntary material simplicity in the pursuit of self-realization and
spiritual fulfillment. There is much insight to gain on how culture can lead to holistic
sustainability from a unique community like Govardhan Ecovillage where the culture’s ontology and values are clearly defined and act as the guiding principles in its sustainability model.

For the culture and sustainability analysis I will use Dessein et al conceptual framework with particular focus on the most profound aspect, ‘culture as sustainability (2015).’ In the literature review I provide an extensive analysis of culture and sustainability. I posit that sustainability, or unsustainability, is embedded in culture and therefore culture plays an independent, precursory and foundational role in manifesting holistic sustainability.

2.4 Research Questions

Govardhan Ecovillage is a full articulation of the ancient Vedic culture of India that aims to achieve holistic sustainability. This research attempts to understand a how community centered on ancient Vedic culture is integral in attaining holistic sustainability, and to generally demonstrate how the cultural substructure of societies constricts or enables sustainability. I locate and analyze Vedic culture as sustainability in the individual and collective motivations and endeavors of Govardhan Ecovillage. To understand this relationship between Vedic culture and sustainability, I attempt to answer the following questions: what are the ontological beliefs, explanations, perceptions and values of Vedic culture, and how does it shape and inform the individual community members’ understanding of nature and sustainability? How are Vedic culture principles employed in its sustainability model and strategies? How is Vedic culture intrinsically sustainable?

I entered the research with these preliminary questions, and they evolved and were refined as I employed grounded theory for my data analysis methodology. Grounded theory allows for themes to emerge from the data itself about the relationship between Vedic culture and sustainability. The purpose of this field research is to a.) investigate the process of Vedic culture as sustainability; b.) to identify Vedic culture’s beliefs, values and characteristics that
inherently breed sustainability; c.) examine Vedic culture lifestyle and everyday practices of sustainability.

2.5 Research Argument and Rationale

The findings of my field work contribute to the understanding of how Vedic culture of India can be integral in achieving sustainability. The research demonstrates how the economic, social and ecological dimensions coalesce under Vedic culture. I argue that Vedic culture as the bedrock of Govardhan Ecovillage successfully drives holistic sustainability.

One of the most interesting phenomena of ecovillages to the field of geography is their scope of cultural impact and influence through spatial diffusion. Cultural transformation is a process that begins within a particular place and evolves over time, potentially generating the traction to spread to a larger scale. A common misconception is that ecovillages are isolated conclaves of utopia. However, as my study will suggest, ecovillages must and do engage with the surrounding bioregion while experimenting and devising viable solutions to live sustainably. Ecovillages explicitly endeavor to spread their ideas, practices and innovative solutions making them both demonstration sites of radical change and dissemination sites of knowledge (Strasser 2013).

Geographic landscapes are shaped by the interlinked social conditions reflected upon them. It is significant therefore for geographers to study cultural landscapes, whether large or small scale, that have been affected, influenced or shaped by human societies, and how the environment impacts people as well. This interaction is essential to examine in order to better understand and address the vast and complex challenges humanity faces.
Chapter 3  
Modern Western Culture as Unsustainability

Before delving into the particulars of the case study it is important to examine the current global systemic crises that humanity faces and how we arrived here. This will illustrate how culture is a crucial foundation to a sustainable society, and how to identify a culture that breed sustainability. From here, it is significant to investigate a local village with a specific culture such as Govardhan Ecovillage in order to examine how it produces sustainability, and what aspects are potentially scalable to effect change on a regional, national and even global level. In this way the local illustrates a possible alternative pathway society at large must undertake to transition towards a sustainable civilization.

3.1 Current Global Systemic Crises

Scientists are already observing abnormal changes in species behavior and ecosystems due to the effects of .9 degree Celsius increase in global temperatures (NASA 2018). Flora and fauna are escaping to higher latitudes and altitudes and changing migration patterns. These modes of adaptation for many species is insurmountable leading to either a decline in population, vanishment from a region, or extinction all together (Archer and Rahmstorf 2014).

In the last century, sea level has risen eight inches, the highest rates found in the last two decades, and the rate is increasing every year (Nerem et al 2018). Oceans are trapping the majority of the heat and carbon dioxide leading to acidification; the surface ocean is about 30% more acidic since the Industrial Revolution (Levitus et al 2017, NASA 2018). Ocean productivity is also dropping, most dramatically seen in the bleaching and dying coral reefs. Half of the world’s coral reefs have died-off in the last 30 years, and scientists expect 90% to disappear by 2050 (Howard 2016, Tanzer et al 2015, Hughes 2018).

A rise in temperatures are intensifying storm power and frequency due to an increased availability of water vapor and heat energy. On average, global precipitation has increased in
already wetter parts of the world and decreased in drier. Seasonal rainfall has also shifted as deluges come in shortened time spans during the wet seasons, and dry seasons are elongating with higher incidences of drought (Archer and Rahmstorf 2014).

Annually from 1993-2016, the Greenland ice sheet lost on average about 280 billion tons of ice and Antarctica lost nearly 120 tons (NASA 2018). Mountain snow and ice are declining in most areas, leading to increased water shortages for people and livelihoods dependent on rivers fed by these freshwater sources (Archer and Rahmstorf 2014).

Tundra permafrost is thawing out. Lakes and rivers are warming, and algae blooms are abundant. Heat waves, droughts and forest fires are on the rise, while pests, ticks, insects and mosquitos are expanding their range, ravaging forests and threatening human health (Archer and Rahmstorf 2014). Savannas, grasslands and Mediterranean ecosystems are decertifying while desert ecosystems’ rich endemic species are highly susceptible to extinction. The transformation of global vegetation cover will result in the land biosphere shifting from a carbon sink to a carbon source in the second half of this century (Archer and Rahmstorf 2014).

Furthermore, human activities of modern industry, transportation, deforestation and farming practices, in addition to habitat fragmentation from urbanization and suburbanization, have pumped large amounts of pollution into our waters, air and land, further disrupting ecosystem systems and habitats leading to biodiversity loss and extinction (Archer and Rahmstorf 2014).

Ecosystems have shown resilience in the past to climate changes, however it has been at the expense of notable extinctions. What’s more, the natural changes previously spanned across millions of years, while the changes we are seeing today are occurring at a rate 50 times faster. We have already exceeded the maximum observed temperatures in the last 2 million years (Archer and Rahmstorf 2014).
We are surpassing resiliency capacity of ecosystems by crossing critical thresholds (Archer and Rahmstorf 2014). According to the Planetary Boundaries updated report published by Stockholm Resilience Centre in 2015, anthropogenic activity has already exceeded the safe operating space of four of the nine critical biophysical boundaries. The four include excess nutrient loading (nitrogen and phosphorus), biodiversity loss, land use and climate change. Crossing these thresholds means we have already critically undermined the integrity of ecological systems (Steffen et al 2015).

The latest report from the United Nations Intergovernmental Panel on Climate Change (IPCC) reveals a dire forecast for the coming decades (Masson-Delmotte et al 2018). Previously an increase of 2 degrees Celsius above pre-industrial levels was the anticipated threshold in which the most severe effects of climate change would be seen. Now an increase of just 1.5 degrees Celsius is the new marker to usher in stark social and economic damages, most notably in food shortages, massive coral reef die-offs, increased wildfires and approximately 50 million coastal residents displaced by flooding, hitting global economies with USD$54 trillion expense (Masson-Delmotte et al 2018).

Although large uncertainties exist in future predictions, specifically the level of severity, one thing is for sure: as we continue to emit greenhouse gases into the atmosphere, global temperatures will continue to rise and disrupt biophysical systems. We are already locked in to at least a 3 degree Celsius increase if we continue with business as usual (Archer and Rahmstorf 2014).

It is no mystery that relentless economic activity, and its incessant need for materials, energy and land, has led to the unprecedented global ecological destruction. With willful allegiance to endless growth, the economic system trashes the ecological systems it depends on and burns up the finite fossil fuels it runs on. The life expectancy of all identified oil and natural
gas reserves in the world is roughly 50 years and over a century for coal (British Petroleum 2018). About 90% of all United States transportation energy needs, which have major implications for food production and distribution as well as medical care, rely on petroleum (EIA 2018).

The current economic system is more than just ecologically unsustainable; it is failing the majority by its inability to deliver economic stability and secure livelihoods. There is ever increasing wealth disparities in the world, with more and more of it landing in the laps of the already rich and evading the pockets of the world’s poorest. The top 1% of the world’s population has nearly doubled their income share over the last half century, currently raking in 20% of the global income while half of the world’s population earns just 7% (Jackson 2017, 5–6).

Three billion people worldwide live on less than USD$5 a day and over 730 million live in extreme poverty living on less than USD$1.90 a day (Jackson 2017, 4, World Bank 2018). Although extreme poverty has decreased by 35% since the 1990s, the wealth hasn’t benefited everyone equally (World Bank 2018). Wealth inequalities within developing countries have increased by over 10% within the last 20 years and for developed countries it is 9% higher (Jackson 2017, 6). Typically, those most stricken are the rural poor in the agricultural sector with little education (World Bank 2018). As ecologists Madhav Gadgil and Ramachandra Guha put it, our world is made up of an “island of prosperity” and “oceans of poverty (2005, 34).”

In the following sections, I expand on the globalized crises within bio-systems and socio-economic systems to demonstrate later in my research that ecovillages offer viable alternatives that address the increasingly depleted and degraded resources of the earth and the unjust and failing political economy.
3.2 The Lost Years

In the face of these immeasurable challenges confronting humanity today, as far back as the 1980s there was a growing global spotlight on ecological degradation and socio-economic issues related to economic development with grave warnings for the future. Shortly after climate scientist James Hansen’s powerful revelation of climate change, in 1987 leaders from the United Nations World Commission on Environment and Development (WCED) congregated to discuss the world’s state of affairs. From that meeting the paradigm of sustainability as we know it today emerged and a report was produced called “Our Common Future,” (also known as the Brundtland Report), which sought to address sustainability and development as one issue. It was thought that economic development necessary to alleviate poverty should abide by practices that are environmentally responsible (World Commission 1988).

Thus, the popular term sustainable development was birthed along with its most commonly referenced definition: development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Robinson 2004, World Commission 1988). Since then sustainability has often been characterized as three pillars: social justice, environmental protection and economic prosperity (people, planet, profit), which are said to be mutually reinforcing and compatible (Boström 2012).

Many have criticized this prevalent notion of sustainability over the years for a myriad of reasons. Aside from being anthropocentric, prioritizing mankind’s needs and neglecting to acknowledge the intrinsic value of nature, the definition is thought to be elusive and vague in its specifics and direction, rendering operationalization and implementation of policy futile. Critics have claimed this notion has allowed political and commercial opportunity to profit from the large margin left open for interpretation and subsequent application. This is likely responsible for the insidious pandemic of cosmetic environmentalism and superficial social responsibility
from industry and government alike, which distracts from genuine progress and creates false credibility (Boström 2012, Robinson 2004).

More profoundly disillusioning and grave for most critics, however, has been the promotion of environmental stewardship in tandem with continued economic expansion. Allowing economic growth to remain unquestioned has created delusions and dissonance with the reality of biophysical and social limitations that must constrain that very growth. There are enormous challenges confronting the very essence of the economic growth imperative. The limits to growth are twofold: increasingly scarce and degraded ecological resources coupled with a rising global population aspiring for a western standard of living, set to hit eight billion in a few more years and ten billion by mid-century (Jackson 2017).

Nevertheless, the Brundtland Report called for five to tenfold increase of global economic activity with added (but undefined) environmental principles (World Commission 1988). This was further backed by the Stern Report of 2007 commissioned by the UK Treasurer which concluded that climate change can be resolved while maintaining economic growth with simply a small preemptive toll (about 1%) on the Gross Domestic Product (GDP). The United Nations Environmental Programme (UNEP) also promoted green growth, citing it as an even faster vehicle for growth than “brown growth,” or conventional economic growth (Jackson 2017, 18).

This logic surmises that economic value can grow without extracting more resources and polluting less. With green growth, the market is free to expand so long as certain sustainability principles and practices are applied. Green growth is justified by the concept of decoupling economic value from materials throughput. It rests on the faith that technological innovations will deliver us critical breakthroughs in efficiencies that are less polluting and energy intensive will allow for more economic value for less ecological impact (Jackson 2017).
Without a doubt, pursuing such technologies like clean renewables is essential. However, decoupling at the level required relies on untapped and unlimited human ingenuity. If we continue to seek ever expanding economic growth then we have to continually offset that with greater and greater efficiencies, which at a certain point hits a wall of absolute limits of efficiency (Antal 2014, Jackson 2017). Moreover, we are nowhere near that level of decoupling. Although we may be able to achieve a certain level of relative decoupling, we are simply not reducing our environmental activity and impact to the degree we are continually ramping it up. In fact, decoupling rates are slowing, meaning material consumption and economic output are more strongly tethered than ever (Antal 2014, Jackson 2017).

Global resource intensities (i.e. extraction levels of iron ore, bauxite, copper, cement, phosphate rock) have actually risen faster than GDP since the 1990s (Jackson 2017, 95). And though carbon emission intensity has declined since 1965, absolute carbon emissions have risen since 1965 (Jackson 2017, 90). Any efficiency gained in one country is immediately flooded out on the global scale by the aggregate of every expanding economy (Jackson 2017).

There are rapidly emerging economies that are following a Western economic growth model yet have pitiful environmental regulation. More than half the world’s population lives where consumption is rising rapidly, and more people enter into middle class lifestyles that mimic those in developed countries. With a growing global economy increasing carbon emissions at more than 2% on average per year, we are far off from these lofty targets (Jackson 2017). Global greenhouse gas emissions in 2018 are set to hit a record breaking 37.1 billion metric tons which is a 2.7 percent increase from 2017 levels (Le Quéré et al 2018).

It is important to note that Burgeoning economies like China and India often become the point of contention in climate change talks because of their surging carbon emissions. The developed world on the other hand often times has stagnant or declining national carbon
emission. However, this is misleading because the globalized economy is predominantly fed by goods manufactured in the developing world and consumed by the developed world. So, although developed countries’ territorial emissions may be on the decline, the more accurate account of the developing world's carbon intensity is illustrated in developed countries' material footprint, which factors consumption rates and increased by 50% from 1990–2008 (Jackson 2017).

Meanwhile since the 1990s there have been a string of international meetings, reports, speeches, negotiating, and, at times, agreements like the Kyoto Protocol and the Copenhagen Accord. Decades of talk have culminated in the current Paris Agreement which, despite receiving global acclaim for garnering the commitment of 200 signatories to maintain global temperatures from rising 2 degree Celsius above pre-industrial levels, it lacks in any substantive action. There are no emission targets or set timescale, and the means to pay for this low-carbon transition was left unaddressed. Moreover, pragmatically, this is both an ambitious and preposterous goal given current carbon emission intensities. The current emission level is about 2,000 billion tonnes of carbon. This affords the world a carbon budget of about 350 billion tonnes in order to not exceed the 1.5 degrees Celsius limit, giving at most 10 years left before the 1.5 degree Celsius target is breached (Jackson 2017).

We simply cannot keep pace with the Paris recommendations to significantly decrease environmental pressure and decarbonize the world, because we do not have the right economic model to do so. The notion of market-based solutions saving the world from the ecological crisis it created in the first place has been tried and tested over the last several decades, with nothing to show for itself but increased ecological destruction. We are still degrading our biodiversity, undermining the integrity of our land, air and water. Although in theory markets can inspire technological innovation for things like renewables, in reality that same logic has worked in the
opposite direction. With easily available resources exhausted, we are now extracting harder to reach fossil fuels such as oil found in tar sands and the deep sea, and tight oil and gas through fracking and mountaintop removal—all increasing the environmental impacts per unit of production which is by definition the opposite of decoupling. Collectively, fossil fuel companies have already laid claim to different reserves around the world amounting to 2,795 gigatons of carbon dioxide, representing roughly USD$27 trillion of assets. If all these fossil fuels are burned, it would put five times the amount of greenhouse gas emissions in the air than is permitted to remain under the 2 degree Celsius limit (Klein 2015).

With all these barriers to decoupling and continued rampant carbon emissions and environmental destruction, green growth becomes more and more a pipe dream. It calls us to question the model itself and its fundamental assumption of never-ending growth. There are aspects of the human experience that seem to have unlimited potential and while creativity may indeed be one of them, risking our future on a bet that we are clever enough to one day solve this puzzle of running an infinite economic system dependent on a finite planetary system is impossible to reconcile. As John Robinson states, you cannot “square the circle (2004).” It simply defies basic arithmetic (Jackson 2017).

By not acknowledging the irreconcilable contradiction of perpetual growth in a closed system constricted by finite resources, economic growth has remained unchallenged in its power and position, thus in control of the sustainability narrative (Robinson 2004). The terms sustainability and sustainable development have been plagued by this unchallenged assumption, which has resulted in the intractability of actual sustainability. This pseudo sustainability is largely why so much stagnancy and complicity has blemished the last 30 years, time which could have otherwise been spent making substantial changes to society and potentially prevented the even more perilous state today (Robinson 2004).
Therefore, if the real culprit is endless consumption as a function of the growth imperative, what makes us so allegiant to a model that is leading to our demise? Why are we not considering alternatives? How can we assume that economic growth is the only path to prosperity when we have not even considered or conceived of other options? There is a deeply rooted collective denial in the political economy that insists on perpetuating growth at all costs despite the destructive effects that it has on people and the planet. This is where society has to question more than just the economic model itself which is inbuilt with unsustainability.

We must go beyond simply questioning the primacy of growth and explore which priorities and goals of human society have given rise to such a flawed paradigm. Socio-economic systems are borne out of and reinforced by the worldview and values of our culture. This explains why sustainability efforts over the last few decades have failed to actually create sustainability, because modern Western culture has been left unchallenged in its hegemonic beliefs regarding the human experience and relationship with nature. Thus, it is important to deconstruct the culturally-held notion that economic growth is the only pathway towards prosperity.

3.3 History of the Separation of Humans and Nature

In this section we will demonstrate how since the Industrial Revolution culture has been defined by the ideologies of relentless economic growth, rendering modern lifestyles utterly unsustainable as outlined in the first section. (It is important to note that, though it won’t be covered in the scope of this paper, there are other modern Western ideologies that have offered different perspectives of human-environmental relationship. Nonetheless, perpetual growth has remained hegemonic and has come to define modern Western culture).

To contextualize the research, I will begin with a background of the ascension of the culture of modernity, dominated by economic-growth which has been left unchallenged and
accepted as an axiomatic truth. To understand why we have kept fidelity to economic growth necessitates a look back in history to root out where these modern assumptions and precepts began.

We will then look at the modern manifestation of economic growth with a focus on its pathologies. We will end where all roads lead to, the inner dimension of culture. As it turns out we are deeply entrenched in the growth imperative because of allegiance to beliefs, assumptions and values of two fields often understood to be diametrically opposing: religion and science. They have contributed to the rise of a culture profoundly misaligned with who we are as social, communal human beings a part of and dependent on a whole earth system.

Before the scientific revolution, European society was naturally structured as one of interdependence; society was centered around cooperation of community, and daily life always provided an immediate connection with nature which was seen, much like pagan beliefs, as a nurturing mother providing all of mankind's needs. However, nature was also seen as the image of a wild, untamed woman filled with dangerous unpredictable prowess in the form of storms, droughts and chaos. This second projection of the female sex onto the external world became a core concept of the modern Western worldview which will be revisited later in this paper (Merchant 1982).

Despite some minority movements like the Franciscans who demonstrate a love of nature, the predominating Judeo-Christian theology has long held the belief that humans are superior to animals and nature. The earthly realm is external to God’s heavenly domain has been relegated as a temporary place devoid of spiritual value. This worldview holds fast to the duality between the sacred and the profane, breeding an assumption that humans and nature are separate. In this view, nature is stripped of any inherent sacredness and understood to be man’s object to dominate and exploit (Strasser 2013).
With the dawn of the Scientific Revolution in the sixteenth century a similar placement of humans above nature was reinforced. With the advance of science and technology, nature was seen to be controlled and manipulated for optimizing productivity and benefits for human development. New machinery emerged that could mine, deforest, pump, chain and harness nature’s resources allowing for economic activity to ramp up, new markets to open, and commercial society to spread (Merchant 1980).

The whole of nature was reduced to individual parts, or resources, that were measured and valued by their utility, failing to take into account ecosystem dynamics, limits and the repercussions of environmental externalities (Strasser 2013). This resulted in a slew of mechanistic concepts such as maximum sustained yields, utilitarianism, and ecosystems services, where nature is quantified, commodified and valued by the market (Robinson 2003, Horlings 2015).

Thus, the roots of the separation of humans and nature ironically were co-emphasized by the two leading influences on people’s worldviews: religion and science. Despite diverging ontological understandings of the world, both religion and science have paved the way for the reductionist thinking of the dualistic conception of humans and nature. Whether it be in the name of scientific progress or divine superiority, the dominant discourses have laid the foundation for the modern hegemonic paradigm of the separation of humans and nature. Everything from how society organized to human development and growth, the individual’s pursuit for prosperity by lording over nature was birthed and cultivated. To this day the greatest cognitive dissonance rules all; we have a culture based on the premise that humans are independent from nature, paving the way for a mechanistic and materialistic worldview which suits well for a relentless economic growth model.
3.4 History of Materialistic Worldview

In the seventeenth century, Thomas Savery created the world’s first steam engine which would ignite the industrial revolution. By the nineteenth century it was a perfected machine, burning coal to produce heat and continuously fuel a mechanical driving force to supply power for nearly all areas of industry and life: mills, mines, factories, railways, electricity, steamships, and agriculture fertilizer (Everett 2012). Coal demand along with populations grew exponentially in countries like the UK, USA and Germany with coal production only finally peaking due to the First World War. The dominance of coal was then eclipsed by the oil and gas industries in 1950. With the introduction of the first mobile car and the Wright brothers first flight in the early twentieth century, both running on gasoline, land transportation would be revolutionized, and airfare would take flight (Everett 2012).

During this period, not only was there innovation in transportation, but commerce, technology, infrastructure and industry revolutionized individual consumption patterns per capita. Material comforts, conveniences and possessions such as cars, domestic appliances and bigger homes have all typically been associated with development (Goldemberg 2012). The growth of the world’s energy consumption since 1850 has grown forty-fold. This growth is paralleled with both the world’s GDP increasing fifty-fold and the world’s population increasing six-fold (Everett 2012). GDP has become the standard metric for development which is purely based on economic activity and necessitates perpetual growth. It also values only what is created in monetary terms. Higher and higher incomes will allow for more and more choices to purchase goods and services and thus improve the quality of life. Subsequently the conventional measurement of this growth centric prosperity is the GDP. Continual rise in GDP has become the single most important policy goal in the political economy (Jackson 2017).
3.5 The Flawed Market

In the twentieth century, efforts across all sectors of society were aimed at prioritizing unforeseen revolutions in science and technology. By the 1950s, the aim of political and economic policies began solidifying as economic growth (Rees 2010). The growth-centric model was further etched in stone in the early 1970s defined as neoliberal policies, a set of political and economic principles and practices that aim to open world markets and allow entrepreneurial freedoms that create additional sources for capital investment and accumulation. The effects of these policies include 1.) privatization of public sphere; 2.) deregulation of corporate sector; 3.) lower corporate taxes (paid for with cuts to social spending); 4.) trade deals that provide maximum freedom to multinational corporation (Klein 2015). Hand in hand, globalization integrated international economies through commerce, trade and communication, resulting in neoliberal policy exported to all corners of the world (Harvey 2005). Thus, the ideology of relentless growth for human development at the expense of nature has increasingly become a cornerstone of society in the last century (Kagan 2012).

Despite the supposed societal benefits of neoliberal policies, it has largely led to a decrease in government spending on social services. In turn, this exacerbated such problems as poverty. Rather than wealth trickling down to the rest of society, these policies have increased the wealth of multinational corporations to produce goods as cheaply as possible, sell them with as few regulations as possible, while paying a minimal rate in taxes (Klein 2015). Rampant resource and labor exploitation have precipitated, giving rise to a global economic structure systematically and gravely unbalanced in power and social equity (Escobar 1995).

The failure of development theory was called into question by post-development (PD) academics in the 1980s, revealing the power relationships in development. PD scholar Arturo Escobar’s PD critique found in his book *Encountering Development* exposed Western
development as imposing Western ideologies and agenda onto the developing world (1995). By this, he meant Western development was an exploitation of poverty in the developing world; an act of cultural imperialism as it posited that Western norms and values were superior to the local culture. Escobar explained Western power in terms of more than just wealth and position, but the power in controlling the production of knowledge through creating dominant narratives and discourses in a culture that become unchallenged. Escobar saw that Western development determined how the developing world would develop and live, making the people of these countries mere subjects to manage (1995). In this writing, Escobar was also influenced by Edward Said’s concept of orientalism, which understands other imaginative construction of places and people as uncivilized and in need of adopting western modes of living (1978).

Thus, the Global North has used the Global South as sacrificial zones, appropriating and polluting land and water to extract resources and labor to meet its insatiable material needs. As the atmospheric commons plumes with greenhouse gasses, climate chaos most threatens the geographically and financially vulnerable Global South (Klein 2015).

3.6 The Growth Dilemma

The modern economy has become structurally reliant on growth in order to maintain stability. When growth slows down businesses struggle, unemployment rises, people lose their homes, public spending stagnates, investors lose confidence and a recession takes hold of society. Yet relentless growth is clearly ecologically unsustainable given it relies on exploiting limited natural resources and leaves a trail of pollution to further degrade the environment. Hence the paradoxical dilemma of growth; we cannot stop growth if we are to avoid societal collapse, but we must stop growth if we are to safeguard our ecological assets which society depends on for survival (Jackson 2017).
The economic growth dilemma is not just at odds with the earth and the majority of its inhabitants. Interestingly, the current growth model is turning out to have its own limitations and is shutting down on its own terms. Trends are showing that growth is stagnating in advanced economies. Growth rates are slowing, and labor productivity has been declining since the 1970s (Jackson 2017). This is where the current growth model unravels, because labor productivity is the fuel that powers the engine of economic growth. Productivity is what allows for more to be produced with fewer resources, energy and time, which is essential if economic growth will continue for a rapidly expanding population. Yet economic growth must keep pace or exceed labor productivity otherwise fewer and fewer people are needed to produce the same amount of output, thus resulting in unemployment declines, reduced spending and the onset of recession.

Given that the economic model of capitalism is structurally reliant on economic growth and increased labor productivity, this new economic norm of low growth that seems to be emerging is summoning mainstream economists to the table to discuss the dilemma of perpetual growth.

### 3.7 Redefining Prosperity

The current economic structure has conditioned society to believe that continual growth is the only feasible model for prosperity. Prosperity is seen in a myopic way as being a singular point of focus on economic growth. Society has enshrined wealth and material affluence as marks for success. But is this a sufficient measurement of true prosperity? If the actual goal of an economic model is to assist in delivering prosperity to the population, then it is worth revisiting the definition of prosperity, which has become synonymous with increased consumption.

One of the key arguments in favor of economic growth is that basic entitlements such as health and education are dependent on rising GDP. As it turns out, economic growth is crucial
only up to a certain extent. In the developing world where poverty is dominant, economic growth plays undeniably a critical role within the quality of people’s lives by improving material conditions. Infant and child mortality rates drop, life expectancy and mean years of schooling rise as higher standards of health and nutrition, decent sanitation, proper housing, secure energy supplies are provided. However, the gains from economic growth begin to flatten out, translating to diminishing returns on growth at the level of USD$10,000 to USD$15,000 income per capita. For example, countries like Costa Rica and Chile have a fraction of US and UK incomes. Yet their quality of life on some indices are just as good, if not better (Jackson 2017).

What’s more, if GDP is truly a useful metric of increased wellbeing, life satisfaction and happiness levels should be at all-time highs in advanced economies. As the trends reveal, this is far from the truth. Like increased material acquisition, there too is a diminishing level of return on increased GDP and life satisfaction and happiness. Since the 1950s, average reported life satisfaction and happiness levels haven’t changed much despite income per household tripling. Some advanced economies like Japan and the UK have reportedly declined in happiness over a similar time duration. It is significant to note that although advanced economies on average report higher levels of life satisfaction and happiness than poorer countries, the absolute gains from increased income in poor countries are significantly higher than what is gained in richer economies (Jackson 2017).

Therefore, happiness, education and life satisfaction levels, as well as health indicators, have no statistically significant link to economic growth, especially after a certain point. This raises the question as to why economic growth has become the non-negotiable in the pursuit of prosperity. Furthermore, these statistics drum up questions of morality of how much advanced countries continue to expand and use up resources for dismal returns, while poorer countries could be benefited far more quickly and more substantially with the same (Jackson 2017).
In Amartya Sen’s “The Living Standard” essay in 1984, three key characteristics of prosperity were defined: opulence, utility and capabilities to flourish. The first two—opulence and utility—have their limitations. Opulence appeals to the conventional logic of prosperity being equivalent to materials abundance (Sen 1984). Undeniably food, water, shelter, water and energy are all basic necessities that are critical to a baseline standard of living (more on these below). The snag is that there are diminishing returns on increased material throughput as detailed above. What’s more, at a certain point more is too much and can have a deleterious effect; there are natural plateaus. In short, the relationship between quantity of opulence and satisfaction is highly non-linear.

Utility is cashed out as monetary value placed on goods and service. Utility exchanges are the bread and butter of the marketplace and GDP is its measurement (Sen 1984). This is increasingly becoming a notoriously flawed and grossly inept account of social progress since it does not distinguish between good and bad materials throughput and volume. War, crime, and environmental destruction all add to GDP because they produce an uptick of economic activities (Dietz and O’Neill 2013).

Furthermore, while meeting material conditions is foundational, there are also vital social and psychological dimensions that cannot be neglected in a truly prosperous society. These deeper dimensions of prosperity regarding wellbeing and purpose are inherently connected to culture. Sen’s third concept “capabilities to flourish” gets closer to this comprehensive definition of prosperity. He cites that prosperity lies in the freedoms to pursue health, long life and meaningful participation in society (1984). Jackson elaborates on this by highlighting that the capabilities for flourishing must be bounded capabilities that work within the ecological and social restraints of a finite planet with a growing global population (2017).
Therefore, prosperity is certainly not synonymous with income, wealth or the ability to consume more material stuff. Any meaningful and comprehensive understanding of prosperity must thus include—but also transcend—material conditions, and it also must be contingent on achieving social equity with all current and future populations while maintaining the ecological integrity of which everything is dependent. Prosperity society’s capability to flourish within the ecological limits of a finite planet. It is also a shared vision, one that “is about the quality of our lives and relationships, about the resilience of our communities and about our sense of individual and collective meaning (Jackson 2017, xxxviii-xxxix).”

3.8 Culture of Materialism

If prosperity is more than just a growth-centric economic model, then why has the growth imperative colonized every aspect of our culture? Isn’t culture meant to be aligned with and represent the collective values, principles and beliefs of the entire society?

Politics and economics are inherently value laden and entwined, because they are comprised of subjective preferences, opinions and beliefs about how to organize and govern. Economics is not based on some given physical law like gravity. It is based on a set of assumptions about human nature and behavior. Conventional logic depicts humans in a reductive way as inherently selfish, hedonistic and acquisitive beings. Though human nature contains these individualistic propensities, undoubtedly humans also demonstrate social, altruistic and self-sacrificing behavior (Jackson 2017, Rees 2010).

Yet in order to function, capitalism needs to perpetuate this grossly impartial understanding of human nature. Cultural values have become the ideologies of the political economy. Both culture and the political economy co-produce the incessant pursuit of growth and therefore legitimize it as common sense by those who profit from the capitalist government. The ideological interests of those in power work to manipulate and produce culture of a society to
legitimize their worldview as the accepted cultural norm. This dominating ideology, which justifies the status quo as natural and common sense, is simply a social construct that benefits only those in power. People are born into a culture and indoctrinated into a system that conditions them to act in a certain way that maintains the system.

The production and consumption of novelty reinforcing one another drives the growth dynamic. While the entrepreneur must restlessly innovate, finding newer, cheaper, better goods to sell to keep profits streaming in, the consumer must restlessly demand more and more stuff to maintain social status. The current economic structure has us locked in a rat race of income levels, which form social statuses and perpetuates inequality (Jackson 2017).

Neuro-psychologists explain that humans have a propensity towards meaning and purpose. When there is a consumer culture that has replaced material goods for more intrinsic values of human existence, people tend to imbue their material possessions with a superimposed sense of meaning, using it as proxies for their sense of place and belonging in society. Material possessions become a symbolic language in how people communicate that which matters most to them: identity, community and social status. This phenomenon is most strongly demonstrated in the Global North, and many countries like India and China, which are increasingly adopting western lifestyles, possessions and values, are following suit.

Wolfgang Hoeschele and Miriam Kennet highlight this fallacy that humans have unlimited needs. The market constantly generates new goods and needs so there is a pressure on resources which perpetuates a scarcity mentality (2010). An economic paradigm that poses humans as greedy, self-interested individuals makes us fixated on commodities and capital flow at the expense of what our true human physical needs are, such as clean water and air, and undermines our happiness and healthfulness (Hoeschele and Kennet 2010).
Furthermore, humans have rich, complex lives motivated by social relations and desires for happiness that lie in more than just material acquisition and pleasures. People who pursue intrinsic goals centered on less materialism and more human values such as community, self-acceptance and affiliation are more happier and better environmental stewards than those with extrinsic goals (Jackson 2017, 126).

Just as Western modern culture disregards the interdependent relationship between nature and humans, it also works to deny the emotional complexity of humans as social species by making them individual, self-interested rational actors competing on the market. Not only does this create a disconnect with our relationship and interdependence with nature, but it also creates a fragmentation in humanity, reducing human meaning and purpose to buying and selling goods and services and suppressing social connections (Strasser 2013).

Genuinely nourishing society should provide fertile grounds for connection in community, meaningful contribution to society and happiness. These motivations are clearly part of the human psyche, and a more rounded view of who humans are must include these aspects as well. Though we do have materialistic needs we are also social beings that have the capacity to care. We derive ultimate fulfillment from things that transcend material needs.

Westerners have been sold a superficial, surrogate culture which not only fails to represent or fulfill the mental and emotional needs of a human society, but undermines them by extolling such values as individualism, competitiveness and greed for wealth and power as markers of success. Culture has naturally been subsumed by economic growth because it appeals to our most primal, animalistic tendencies of survival and outcompeting (Rees 2010).

This all points back to modern Western culture as unsustainability, which is profoundly misaligned with who we actually are as human beings. We have allowed a set of extrinsic economic pursuits, principles and practices to artificially determine the pathway towards
intrinsic human goals. External, short term material wants replaced internal, long-term, non-material needs and have dominated the cultural narrative. We have misjudged our priorities and, in a sense, built a house with the wrong foundation. We need to re-envision our culture as sustainability first and foremost. And this task requires us to go beyond the political economy which is just one component of an overarching pursuit for holistic prosperity. As an alternative, the political economy as a social construct should be designed and informed from a deeper concern for and commitment to human values, meaning and fulfilment that ensures the genuine flourishing of all people and the planet.
Chapter 4
Inner Dimensions of Sustainability

Can we address the ecological, economic and social crises together? Can we flourish within limits? Can we find a shared meaning and purpose beyond our stuff?

Instead of being solutions focused by critically examining this inner dimension of culture and its deeply seeded values and beliefs that give shape to the external issues, we have been problem driven. The focus has been placed on symptoms of the cultural problem such as advocating for policy changes, market solutions, technological innovations and individual agency. We have been too invested in the “software updates” of economic incentives, technological fixes, efficiency gains, system updates, and policies and regulations (Kagan 2012).

In doing so, we have neglected fundamental changes to the root of the problem by addressing the “hardware updates” of our mindset and undergoing the necessary cultural transformation needed to shift our knowledge of reality, humans and the environment (Kagan 2012). We are essentially preserving an economic ideology that perpetuates unsustainability, calling the symptoms the culprits (Strasser 2013). As a result, little progress has been made in the areas of sustainable development while global trends of energy use, emissions, environmental pollution and degradation, poverty, and wealth inequalities are as strong as ever. As Griffin warns, “the continuation of modernity threatens the very survival of life on our planet” (1988, ix).

Fortunately, there are growing movements of outspoken voices against modern industrialized society in the fields of deep ecology, ecofeminism, post-growth economics and transition discourses such as degrowth and post-development. All of these fields have assumptions about beliefs, values and meaning of life which have implicit cultural implications.
4.1 Deep Ecology

The principles of deep ecology are biocentric, arguing that nature is inherently worthy of respect and has the right to flourish irrespective of its instrumental or utilitarian value. It holds that all living beings are equal in their worth, calling for a radical departure of anthropocentric structuring of human society in meeting human demands. ‘Deep’ comes from a framework necessitating a profound look into the realities of human-nature interconnections that goes beyond just the biology and network of ecosystems, or the concern of conservation and preservation from the environmentalism. Deep ecology holds a holistic worldview, seeing all of existence as complex interrelationships where each living being is dependent on the well-being of the whole (Barnhill and Gottlieb 2010). Govardhan Ecovillage has a similar holistic and ecocentric philosophy as expressed by Vedic culture and will be explored later in detail.

4.2 Ecofeminism

Ecofeminism would criticize deep ecology for failing to challenge the dominant cultural underpinnings of Western patriarchy that results in the exploitation of nature. The hierarchical relationship needs to be dismantled in order to regard nature in the equalitarian and whole terms that deep ecology propounds (Shiva and Mies 2014).

The ecofeminist movement of the early 1970s challenged the hegemonic worldview of human versus nature. It did this by exposing the Western dualism as a split between man and woman wherein women are oppressed along with nature and dominated and exploited by men. Women and nature are linked by this shared oppression under social relations and culture dominated by the patriarchy (Merchant 1982, Shiva and Mies 2014).

Therefore, ecofeminism views the principles of feminism and ecology movements as overlapping since both attempt to liberate women and nature. Ecofeminist Vandana Shiva
believes that women will not be freed from oppression unless all those oppressed, including nature, are liberated from the pervasive patriarchal, capitalist worldview (Shiva and Mies 2014).

As will be discussed in more detail later, Vedic culture propounds that all living beings regardless of gender or species are equally sacred. Moreover, Vedic culture has a deep understanding of the role of earth as a mother personified who should be respected and reciprocated with. Additionally, Govardhan Ecovillage recognizes women as vital members of society and has developed an initiative to empower rural women with healthcare, education, training and entrepreneurial endeavors.

4.3 Post-growth

Enterprise is conventionally defined as a process of accumulation of capital and endless throughput of material resources to maximize profitability. The owners of capital then dictate the division of labor, leading to restricted freedoms of laborers who need work to make a livelihood, but have little say over their wages and work conditions. Investment is predicated on speculation and gambling on the value of commodities in order to reap short term profits. Money is exercised as power by the owners and creators of capital, which are the very financial institutions that have built and lobbied for the unregulated market system of today. This type of economy booms and busts and, as seen most disastrously in the economic crisis of 2008, it can bankrupt society (Jackson 2017).

Jackson offers a picture of how to rebuild macroeconomics that is more equitable and just for all of society using these fundamental building blocks of an economic system: enterprise, work, investment and money (2017). In brief, investment should be seen as a commitment to the future by securing prosperity for all people and the planet (e.g. green technologies, public infrastructure and spaces, healthcare and education, and ecological protection). Money as a
social good should return the power of money generation back into the control of government institutions rather than private financial institutions (Jackson 2017).

More pertinent to the case study—and harkening back to our social and psychological needs to truly flourish in prosperity—Jackson suggests to re-envision enterprise beyond fulfilling material commodities. Enterprise as service is an appealing reframing of enterprise on multiple levels. Service based industries such as healthcare, education, caretaking, community centers, arts and entertainment have an inherently low environmental impact given they are less materially and energy intensive. Additionally, the quality of the service mainly relies on human time and attention. A social and personal service-dominated economy would also have rich employment opportunities. There will always be children, elderly and sick people to tend to; there will always be a need for community building; and there is always a need for recreation and enjoyment (Jackson 2017).

With enterprise as service, work can then be seen as a meaningful participation in society more than just a means of a livelihoods. An individual in service to the greater community feels like they are contributing to society and that brings with it a level of self-dignity, sense of purpose, identity and belonging. It’s no wonder the service industry often yields the highest levels of job satisfaction, which undoubtedly adds to quality of life (Jackson 2017). This gets at the heart of what makes a better, happier, healthier, more connected life for both the consumer of services and the giver of services.

Govardhan Ecovillage is primarily driven by ecotourism which is a service-based enterprise, offering an alternative means of work to the formal materials economy. Moreover, as will be demonstrated in the interviews, this type of employment provides a meaningful participation in society.
4.4 Transition Discourses

Transition discourses (TDs) are emerging in both academia, non-governmental organizations and social movements around the world such as the degrowth and post development movements. Although there is a great diversity amongst TDs they all call for a “radical cultural and institutional transformation—a transition to an altogether different world (Escobar 2015, 453).” Transition discourses are radical ecological and civilizational transformations, envisioning a complete paradigm shift to a new holistic culture.

Even the most secular visions emphasize a deep transformation of values. The most imaginative TDs link together aspects that have remained separate in previous imaginings of social transformations: ontological, politico-economic, ecological, and spiritual. These are brought together by a profound concern with human suffering and with the fate of life itself. (Escobar 2015, 453)

Escobar’s response to post development is for countries to reject Western development agendas and to revert back to local knowledge and local empowerment, allowing for the agency of communities to decide their own means of development based on their own traditions and cultural identities. Ancient Vedic culture of India is Govardhan Ecovillage’s knowledge base for its sustainability model. Additionally, local empowerment for rural development is integral to Govardhan Ecovillage’s pursuit of sustainability, which will be covered in depth later.

The degrowth movement is centrally focused on the ecological predicament which the world is facing, attempting to address the ecological limits by combating global commodity supply chains, markets and competition. Degrowth calls for a radical transformation of the underlying and fundamental values and beliefs that have led to certain production and consumption behaviors and patterns. As will be discussed in detail, Govardhan Ecovillage has a myriad of practices based on a philosophy of simple living to dramatically reduce its ecological footprint.
All in all, society needs a new way of seeing, being and moving in the world that is grounded in a holistic culture that embraces the complex interrelatedness of humans and nature (Kagan 2012). There are growing numbers of people yearning for a new paradigm; one of harmony and cooperation between all people and living in balance with the earth.

Ecovillages are at the forefront of this movement forging the pathway of transformed culture. More than just being advocates for change, ecovillages are stepping out of the enmeshment of neoliberal society and are living a new civilization right here and now, offering pragmatic and meaningful responses to modernity. Ecovillages are intentionally designed communities that are socially, economically, ecologically and culturally sustainable. Typically locally owned with strong emphasis on community participation, ecovillage members seek alternatives to the modern consumerist lifestyle by integrating systems that have minimal ecological impacts and even further aim to regenerate and restore the environment and the relationship humans have with it (Van Schyndel Kasper 2008). Moreover, they are living models of culture as sustainability. An ecovillage like Govardhan Ecovillage therefore is a ripe place to investigate such a cultural transition towards holistic sustainability.
Chapter 5
Research Design and Methods

5.1 Study Area: Govardhan Ecovillage

This field research took place at Govardhan Ecovillage (GEV) located in Galtare, Maharashtra, 108 km north of Mumbai, India on the foothills of the Sahyadia Mountains (Fig. 1). The 90 acre ecovillage rests within a historically impoverished area. Some of GEV’s primary initiatives are sustainable farming, animal care and protection, physical and spiritual health and wellness, water conservation, waste management, alternative energy and, most notably, the Rural Development Program which offers extensive outreach and development to surrounding villages to empower rural prosperity.

Figure 1. Study Area
Source: Danielle Lella
GEV is officially part of the International Society for Krishna Consciousness (ISKCON), a nonprofit religious foundation based in Mayapur, India. GEV land is under the ownership of the ISKCON Trust. As such, the organization has a structured management system comprised of trustees, or Board of Directors, as well as a committee of managers, followed by department heads. Ecotourism and the plant nursery contribute financially along with donations and support from the ISKCON Chowpatty temple in Mumbai.

Significance of Maharashtra, India

Maharashtra, India is a compelling location to study for several socio-economic and environmental reasons. For one, India is projected to overtake China’s population in size by 2024, skyrocketing to 1.5 billion people (United Nations 2017). The majority of India’s population (about 66%) resides in rural villages (World Bank 2018). Farming has historically been the profession of the rural poor who have little to no means of entry to other economic activities beyond cultivating their lands in remote and rural areas. In the state of Maharashtra, 64% of the population relies economically on the agriculture sector, and the state alone accounts for 15% of the country’s total GDP (Udmale et al 2014).

Maharashtra is vulnerable to climate change which has implications for agricultural production and subsequently the livelihood of the rural poor. Maharashtra has a subtropical climate characterized by a summer monsoon season and winter dry season wherein water scarcity is common and drought vulnerability is high (Loo et al 2015). Average rainfall in Maharashtra is about 750 mm annually, received predominantly during the months of June, July, August and September, thus classifying Maharashtra as a Drought Prone Area (Udmale et al 2014). Climatic changes affect agriculture intimately by influencing photosynthesis, humidity, soil moisture availability, transpiration and growth rates and subsequently crop yield quantity and quality. Warmer temperatures coupled with climate variability increases the risk of climate
extremes by impacting the magnitude, frequency, duration and spatial extent of natural disasters including droughts (Udamel et al 2014).

Drought typically occurs in Maharashtra once every five years. Climate change exacerbates this typically natural occurrence. Maharashtra has experienced an increase in the frequency of droughts since the mid 1990s, resulting in longer and more pervasive droughts (Mishra and Singh 2010). As one of the most vulnerable drought-prone countries in the world, India has seen at least one drought per year since the 1960s (Mishra and Singh 2010). The frequency of these droughts has been steadily increasing since the mid 1990s, becoming longer and more expansive over the years (Mishra and Singh 2010). Between 2002–2012, three major droughts (2002, 2009 and 2012) have caused a 0.5% reduction in India’s GDP (Udmale et al 2014).

Furthermore, there is an endemic of small farmers in India losing control of their resources, seeds and land and becoming indebted to multinational agricultural corporations to feed the globalized economy (Shiva 2008). Combined with the abovementioned shifting climate factors that leave agricultural productivity vulnerable, the weight of distress and struggle for basic survival leads farmers to an overwhelming state of hopelessness. Many abandon their ancestral home for economic opportunities in cities. Sadly, almost 50% of Mumbai’s population lives in slums (Singh 2016). The rural to urban migration rate is the fastest in the world (Bhagat 2014), increasing from 21.2% in 2001 to 24.1% in 2011 according to the latest census (Singh 2016).

More gravely, suicides rates are on the rise in India, averaging at 16,000 deaths per year (Merriott 2016). Suicides are disproportionately spread across India, with rural rates almost double than urban rates. Rural farmers in the state of Maharashtra rank amongst the highest suicides per capita (Merriott 2016). During the period of 1994–2005, farmer suicides in the state
of Maharashtra quadrupled from 1,083 per annum to 4,147 per annum (Mercott 2016). A new study from University of Cambridge identified three primary socio-economic characteristics of farmers at the highest risk: those who are small landowners of less than one hectare; those growing cash crops such as cotton and coffee, which are susceptible to global market price fluctuations; those who are straddled with debt of INR$300 rupees (about USD$5) or more (Kennedy and King 2014). Another study surveying the perception of Maharashtra farmers themselves regarding reasons for committing suicide revealed debt as the number one factor, followed by addiction, environmental problems, low produce prices, stress and family responsibilities and government apathy (Deshmukh and Dongre 201). This research supports many case studies which indicate that India’s liberalization of markets in the 1990s has a causal relationship with the agrarian crisis devastating rural farmers (Kennedy and King 2014).

5.2 Ethnographic Research

My ethnographic research, consisting of in-depth interviews, participant observation and field notes, attempts to reveal how the foundational precepts of Vedic culture, in practice individually and exercised as a community, addresses and offers an alternative to the underlying issues rendering modern Western culture unsustainable. I examine how elements of Vedic culture, as demonstrated at both the level of the individual community member and inbuilt within the strategies and initiatives implemented by management, breed holistic sustainability. I assess how spiritual values and principles of Vedic culture informs systems, structures and practices that are ecologically, socially and economically sustainable. Additionally, I will assess how Vedic culture meets intrinsic human needs of identity, purpose and fulfillment. This data will allow for an analysis of the relationships between culture and sustainability and how sustainability is potentially embedded in culture.
The interview questions are discrete as well as open ended (Appendix). Community members were interviewed about their experience living and working within GEV including: motivations for coming to GEV, their role within GEV, their perspective of the human-nature relationship, and the influence living at GEV has had on their quality of life. Three points of inquiry were used in the culture as sustainability analysis:

1. Assessment of socio-economic wellbeing
2. Understanding of Vedic culture’s beliefs, values and meanings both generally and as it pertains the environment
3. Evaluation of overall perception of quality of life socially, economically and ecologically

The interviews with management, including the chief sustainability officer, director of rural development, director of sustainable farming, and the founder and visionary Radhanath Swami, aim at understanding how Vedic culture guides the mission, vision and strategies of GEV.

Lastly, I took field notes while observing and participating in the day to day functions of the community members in the areas of ecological stewardship and spiritual activities.

An inherent assumption in my research design was an expectation of honesty with the interview participants.

5.3 Data Collection

This research took place at GEV over the course of 12 days in winter of 2017. GEV is home to roughly 160 people, both families and individuals. Primary data was gathered via in-person interviews of both key management personnel and community members representing 30 households.
Stratified, non-probability sampling was employed to ensure most occupations of GEV were represented. GEV housing generally clusters families based on occupation or stage of life such as teachers, farmers, or retired members of the community. Within each housing section several households were chosen to be interviewed at random. Community members were requested for permission to be interviewed by walking door to door. Interview participant age ranges are from 18–65 of healthy adults, both English and non-English speaking.

A translator assisted in the interviews with those who did not speak English and spoke only in either Hindi or Marathi (a local dialect of Maharashtra). Duration of participant interviews lasted approximately 30 minutes each within the privacy of their homes or a private area outside their homes.

Interview data was collected confidentially with minimal risk. The questions mainly focused on the participants’ experience living and working within the village and their knowledge and perception of sustainability. The participants were read a consent script as well as reminded throughout the interview that they had the right to withhold answering any questions and to withdraw participation from the interview at any time.

Interview questions with management were welcomed, and all were gracious with their time.

5.4 Data Analysis

I transcribed and analyzed the interview data within ATLAS.ti, a qualitative data analysis software. I employed grounded theory as my research methodology to allow for themes to emerge from the data that explain the relationship between Vedic culture and sustainability rather than imposing coding hierarchies onto the data.

As I examined the data, I assigned codes to segments of data, or different phrases or sentences from the interview responses, that related to the research questions on Vedic culture.
and sustainability. In this process of open coding, patterns and trends emerged of their own accord. The resultant key points were then grouped and organized by categorizing collection of codes into significant overarching themes. This created a code hierarchy of characteristics, revealing key concepts that can explain Vedic culture’s relationship to sustainability.
Chapter 6
Ecovillages

6.1 Origin and History of Ecovillages

Before discussing the research results, it is important to locate the emergence of ecovillages within a historical context and their current form, position and influence in society at large.

Although the modern term ‘ecovillage’ was coined in the 1980s, the lineage of intentional communities built on shared values and mission stretches back to prehistory (a step beyond the premodern norm of traditional village settlements). Communitarian initiatives have sprung up at various points as far as 525 BC. At that time, Pythagoras designed Homakoeion, an intellectual and mystical commune that practiced vegetarianism, renounced private property and sought gender equality in pursuance of an ideal society. In the sixth, seventh and eighth centuries, there thrived Celtic Christian monasteries. The simple living of the Amish and Quakers began in the mid seventeenth century (Dawson 2006, Andreas and Wagner 2012).

In modern times, there is still a strong thread of spiritually-driven ecovillages: Thich Nhat Hanh’s Plum Village in France after being exiled from Vietnam; the kibbutz movement in Israel; and Auroville in India focused on Gandhian principles of self-reliance and decentralized power (Dawson 2006).

Additionally, there were many secular pursuits such as the countercultural Back to the Land movement of the 1960s and 1970s that rejected mainstream society. Also relevant is the cohousing movement of Denmark developed by Hildur Jackson, seeking households clustered together with an arrangement of shared resources and space such as common areas, gardens and tools to reduce consumption and restore a sense of community (Dawson 2006).

The cohousing concept was a significant springboard for the birth of the ecovillage movement. Jackson, along with her husband, grew weary that the cohousing movement was not
a sufficiently radical lifestyle transformation that would adequately reduce environmental footprints. They established Gaia Trust in order to leverage their finances to take the knowledge and tools already discovered to experiment further how humans could live in harmony with nature (Pais 2018).

In 1991 Gaia Trust commissioned Robert and Diane Gilman, US based owners and editors of In Context magazine, a quarterly publication on humane sustainable culture, to study existing sustainable community initiatives (Pais 2018). They undertook a survey of 26 communities that were wide ranging, from the Mondragon cooperative network in the Global North, to traditional villages in the Global South. Though there were no full-scale ecovillages at the time (at least half were less than 100 people), the Gilmans saw that the common visions, themes and attributes of each type of community offered a microcosmic model of remaking culture and lifestyle (Pais 2018).

In 1991, Robert and Diane Gilman published a seminal publication called “Ecovillages and Sustainable Communities,” which defined an ecovillage as a “human-scale full-featured settlement in which human activities are harmlessly integrated into the natural world in a way that is supportive of healthy human development and can be successfully continued into the indefinite future (Pais 2018).” The report outlined best practices and recommendations of how to best use Gaia Trust finances in supporting existing intentional human settlements that were already building new cultures, seeing it as vital knowledge to inform the transition to a sustainable society (Pais 2018).

6.2 Global Ecovillage Network

In 1995 the pioneering movement hosted a major conference in Findhorn, Scotland, called “Ecovillages and Sustainable Communities for the Twenty First Century,” which was attended by over 400 people from 40 countries (not to mention the additional 300 interested that
were unable to be accommodated). Soon after in 1996, the movement made its international debut with an ecovillage demonstration outside the United Nations Habitat Conference in Istanbul (Pais 2018). At this time, Global Ecovillage Network (GEN) was formally established as “a global confederation of people and communities that meet and share their ideas, exchange technologies, develop cultural and educational exchanges, directories and newsletters, and are dedicated to restoring the land and living sustainable-plus lives by putting more back into the environment than we take out (Edwards and Adams 2011, 173).”

Three regional centers were established in the US, Germany and Australia at respective ecovillages, and Gaia Trust in Denmark remained committed to financing the network for three to five years with the guiding mission of fostering the development of ecovillages, creating connections amongst ecovillages, and exchanging best practices on sustainable living (Pais 2018).

To this day GEN continues to be an international organization that connects a highly diverse range of sustainable communities and initiatives worldwide that are dedicated to transitioning to a sustainable future, making GEN a growing global influence on sustainability. There are innumerable ecovillages (estimated in the tens of thousands) across the world from the Global North to Global South (Global Ecovillage 2018).

6.3 Attributes of Ecovillages

Ecovillages are rich in heterogeneity, stretching across climate, location and scale. From rural to urban, new to existing communities, there are many different ways to pursue and create sustainability, and therefore there is a high degree of diversity in ecovillage structures and practices, which find their own unique and innovative solutions to living with integrity environmentally, socially and economically. This translates into dramatically different approaches and solutions to alternative livelihoods, political structures, and societal organization
and decision making, etc. Some make few concessions as they strive to achieve the lowest ecological footprint, while others afford larger compromises in order to integrate more mainstream society (Dawson 2006).

Ecovillages move beyond the politics of protest. Instead of crying out for the government or the market to make desired changes, they are an affirmative movement taking initiative into their own hands through trial and experiment, actively engaging in creating just and equitable communities and restoring health to ecosystems.

There are numerous creative and innovative ways in which ecovillages are engaged in finding alternative solutions. These solutions lay primarily in the following areas: designing low or no carbon settlements; learning from traditional and indigenous cultures; promoting local alternative economies (e.g. community banks and shared income); adopting post consumerist lifestyles and voluntary simplicity; farming organically, locally, small-scale and with nature (e.g. agroforestry, permaculture); managing waste and water resources; stewarding ecological restoration; reviving participatory governance, ensuring social inclusion, engaging in peace activism and international solidarity, developing holistic education including spirituality, and providing health and healing (Dawson 2006).

Despite this wide-ranging diversity, Dawson has identified five attributes that all ecovillages share, allowing for research to reveal deeper meanings and definitions of how sustainability is enacted (2006, 34–45).

1. **Primacy of community:** meaningful reconnection with others in community in response to alienation of modern life; sharing resources and technologies such as communal eating, common spaces and gardening
2. **Citizen initiatives:** creating avenues to work outside the financial systems and new arrangements for working and meeting needs together
3. **Wrestling back control over their own resources**: opposing economic globalization and regaining ownership of land, seeds and food, houses and energy to create self-reliant livelihoods

4. **Strong body of shared values**: spiritual or secular tenants as a framework of beliefs, principles, or philosophy that motivates members to aspire for high ideals such as cooperation, equality, peace and ecological stewardship

5. **Centers of research, dissemination and training**: through trying and testing, developing an area of niche expertise and offers this knowledge for the benefit of other communities

### 6.4 Challenges and Limitations

Ecovillages are rarely covered in mainstream media and, when referenced, are often mischaracterized as a fringe movement of the elite escaping into isolation to achieve utopia. It is natural to question ecovillages’ actual potential for social impact since they are by and large absent from media and political discourse, even when speaking about sustainability. Globalization has resulted in the ever-increasing influx of cheap, mass-produced goods which undermines efforts to promote small-scale, local economies. Additionally, it has become increasingly expensive to purchase private land. Constricting governmental regulations can often be the touch of death for most start-up projects (Dawson 2006).

There are also internal challenges that stymy the progress and influence of ecovillages. In many cases, ecovillages prioritize their alliances with organizations they are affiliated with, be it on a regional, state-wide or international level. This leaves secondary allegiance to GEN, which may undermine the power of ecovillages as a united and collective movement. A more unified movement could optimize their efficacy in making a global difference (Dawson 2006).

Another significant struggle is the lack of templates for creating ecovillages, which is undoubtedly a complex undertaking given the immense diversity of landscapes, climates, size
and types of projects that could qualify as an ecovillage. Relatedly, there is a significant amount of time, energy and money needed to start an ecovillage from scratch, such as planning, development, fundraising and implementation. All of this, coupled with regulatory and zoning frameworks, inhibit many potentially viable projects from ever being realized (Dawson 2006).

Moreover, despite being a communal initiative, there is a tendency to drift back towards individualism, diluting and weakening the shared values and beliefs of many communities. Communities that once shared homes and pooled income on the pledge of voluntary simplicity and solidarity, often find themselves several decades later arranging for private homes and keeping a larger percentage of their income. This has resulted in a higher resident turnover rate which is less attractive for potential new residents to join (Dawson 2006).

Most significantly, many ecovillages cite an evolution of culture through learning in practice, or discovery through engagement, which is often regarded as a necessary building block and growing pain of an ecovillage in progress (Mychajluk 2017). However, having an ambiguous culture that is being constantly discovered has its challenges. Without a clearly defined culture to anchor the group, community members can easily diverge and conflict on varying ideas and opinions, giving way to entropy. Interestingly, the challenges that ecovillages most face is finding a unified purpose and meaning. Many ecovillages struggle, especially in their formative years, with finding their culture of communal living and working. Ecovillages struggle with conflict resolution, social relations and living and working well together (Christian and Adams 2015). Some residents may come for one reason and end up leaving because that very thing was not actualized. Although most aim for high ideals and values, such as trust, cooperation, honesty and equality, there is much disparity in determining the best pragmatic approach for truly living such abstract and subjective principles (Christian and Adams 2015).
The final challenge is that many ecovillages are not embedded in their own bioregions and function autonomously. This is mainly due to their lack of size and influence, as a large amount of time and resources are sunk into their own survival and growth which cannot be redirected to outreach and engagement with others. It is also the case that ecovillages are stuck appealing to their client base that help them maintain financial sustainability, like the participants of their educational courses or donors, in lieu of servicing their community or larger sustainability goals (Dawson 2006).

6.5 GEN Ecovillage Design Education

Naturally over the years some larger ecovillages have become sites of teaching, calling themselves “Living and Learning Centers.” Hildur and Karen Svensson co-wrote a book called *Ecovillage Living: Restoring the Earth and Her People* in 2002, which was foundational in the development of the comprehensive education program (Pais 2018).

In 2005 Gaia Education launched as the educational branch of GEN. Gaia Education is a consortium of experienced ecovillage educators from the around the world and works in partnership with governments, universities and the United Nations (UN), leading the way in global sustainability education. Its flagship curriculum is the Ecovillage Design Education (EDE), intended as a comprehensive and holistic sustainable community design and development course for those looking to learn and/or implement sustainability in their communities. The standardized course is designed as a broad and universal framework that is adaptable for practical application at varying locations and regional levels. The course is also an official contribution to the UN Decade of Education for Sustainable Development. The EDE is also offered in over 30 countries all around the world and available as an online course in 10 languages. It is also offered as a master’s course at Open University of Catalonia in Barcelona (Pais 2018).
After years of on the ground experimenting and learning, the EDE has developed four integrated dimensions of sustainability—economic, social, ecological and cultural—as a holistic whole systems design approach. This is illustrated as the sustainability mandala or wheel that within each dimension further details 30 fundamental ecovillage principles (six per each). The sustainability mandala acts as a roadmap providing essential areas of attention to guide ecovillage implementation which also can be applied on a individual level, within an organization, or any other type of community-led project (Global Ecovillage 2018).

Today GEN defines an ecovillage as “an intentional, traditional or urban community that is consciously designed through locally owned, participatory processes in all four dimensions of sustainability (social, culture, ecology, economy into a whole systems design) to regenerate its social and natural environment (Global Ecovillage 2018).”

It is important to note that GEN is certainly not a comprehensive network of all ecovillages. There are many communities that could constitute as an ecovillage, but are not formally a part of GEN. Some are associated with other similar networks, such as the Fellowship of International Communities and the Federation of Egalitarian Communities in North America, the scope of which are not covered in this paper. Notably, Govardhan Ecovillage is not an active member of GEN, but has been listed on the GEN directory since 2010.

6.6 Global Ecovillage Network’s Four Dimensions of Sustainability

The following is an overview of the four dimensions of sustainability as outlined on GEN’s website (Global Ecovillage 2018).

1. **Social:** The social dimension focuses on relations between community members that build trust, collaboration and openness to ensure people feel a sense of empowerment and belonging. The six principles are: “embrace diversity and build community; cultivate inclusive, responsive and transparent decision-making; empower participatory leadership
and governance; ensure equal access to holistic education and healthcare; practice
conflict facilitation, communication and peacebuilding skills; develop fair, effective and
accountable institutions (Global Ecovillage 2018).”

2. **Economic:** The economic dimension aims at creating economic systems and practices
that are equitable and ecologically sound through sharing of resources and developing
strong local economies. This often means enacting alternative economies to mainstream
capitalism. The six principles are: “reconstruct the concepts of wealth, work and
progress; work for equitable ownership of land and resources; cultivate social
entrepreneurship to create sustainable solutions; empower and strengthen local
economies; invest in fair trade and ethical systems of exchange; generate wellbeing for
all through economic justice (Global Ecovillage 2018).”

3. **Ecological:** In acknowledgment of humanity’s interdependence with nature, the
ecological dimension focuses on meeting human needs of water, food, shelter and energy
while respecting nature’s cycles and limits and even stewarding the regeneration of
biodiversity. The six principles are: “clean and replenish sources and cycles of water;
move towards 100% renewable energies; grow food and soils through organic
agriculture; innovate and spread green building technologies; work with waste as a
valuable resource; increase biodiversity and regenerate ecosystems (Global Ecovillage
2018).”

4. **Cultural:** The cultural dimension aims to develop or restore the cultural integrity of a
community that serves people in feeling deeply connected to one another, to the earth
and to themselves, often through participating in dance, art, and other forms of creative
expression. The six principles are: “connect to a higher purpose in life; nurture
mindfulness and personal growth; respect cultural traditions that support human dignity;
engage actively to protect communities and nature; celebrate life and diversity through art; reconnect to nature and embrace low-impact lifestyles (Global Ecovillage 2018).”

These four dimensions differ from the logic that underscores Western modernity since they emphasize integral, holistic values. These four dimensions come together as a “whole system design” approach which is both a practice and commitment to ensure full collaboration and participation of the community as much as possible (Global Ecovillage 2018).

For the purposes of this research a further articulation of the EDE cultural dimension is warranted. The first three dimensions cover explicit practical steps humanity can take involving technology, techniques, structures and practices to restore social harmony and justice, ecological balance and conserve biodiversity. The fourth dimension of culture is described as the core that holds together “the three-legged stool (Harland 2012, xi).” The EDE attempts to represent the enigmatic and sublime aspect of human existence as the universal, integral worldview that allows for humanity to experience an “earthly unity (Harland 2012, x).” As explained in the GAIA EDE literature, the cultural dimension “is more implicit. It explores an emerging worldview which is shared between cultures all over the planet. It celebrates the ageless insight that humanity is part of the interconnected web of life in a dynamic planetary system (Harland 2012, ix).”

In more tangible terms, a cultural system is described as underlying shared values, ethics and morals, or the spiritual essence driving the communities’ meaning and purpose. The EDE celebrates the world’s rich and diverse indigenous, wisdom traditions and does not define or prescribe one specific approach. Rather it encourages to embrace whatever the natural and intrinsic spiritual perspective is of that locale and environment, which fosters universal principles of mutual respect, trust, cooperation, harmony, beauty, interconnectedness and wholeness (Harland 2012).
6.7 Holism Paradigm

Political scientist Karen Litfin, who has extensively researched ecovillages, also approaches ecovillages through four similar dimensions, but terms them: ecology, economics, community and consciousness. Litfin also identifies the unity in diversity resting on the shared holistic worldview within the ‘consciousness’ aspect (2014). Litin explains that the common core of all ecovillages is centered on a shared ontology that draws from systems thinking, recognizing the individual is embedded in a larger system and all socioeconomic and ecological components are interconnected and interdependent. This whole-systems approach, wherein humans and nature are re-integrated in harmony, is a more comprehensive understanding when compared to the reductionist, individualistic perspective of our modern Western culture that had previously divorced the two. Litin sees this as a pragmatic, rigorous and meaningful response to the global crises; it doesn’t rest on top-down political reform, nor is it entirely a grassroots social movement protesting and lobbying. Rather it is a new paradigm being lived into existence from the ground up demonstrating a world of what could be (Litin 2014).

Therefore, all ecovillages universally share a strikingly similar holistic worldview which provides the impetus to seek out a pragmatic response to modernity. Consequently, whether those shared values and vision are pre-determined or ever-evolving, they can all be traced back to an intended holistic worldview.

Ecovillages can be seen as seedbeds for cultural transformation, embodying a new holistic worldview by reflecting a paradigm of cultural sustainability (Strasser 2013). They are living models of sustainable communities, intentionally enacting new ways of relating harmoniously with nature. By seeking a dramatic transition away from the predominating paradigms of individualism, capitalism, competition and consumerism they strive towards communalism, sharing a desire to shift to a carbon neutral world that is smaller, slower and
closer (Litfin 2014). Strasser describes ecovillages as demonstration sites and dissemination sites, because they both embody and promote ecological solutions and practices while simultaneously influence and spread realized knowledge beyond their own community (2013).
Chapter 7  
Research Discussion and Results  

7.1 Vedic Culture  

Hinduism, as it is commonly referred to in present day, is considered the oldest living religion, stretching back to the second millennium BCE and originating in the Indus Valley Civilization (Narayanan et al. 2018). Interestingly, however, the term Hindu itself has no historical basis in Indian or Vedic culture. Greeks and Persians coined the nomenclature as a way to describe inhabitants across the Indus, or Sindhu, River (present day India). Only in relatively recent times (that is, the sixteenth century) did Indians begin to use such terminology to describe themselves, and usually such Indians are those who identify with the overall ethnic culture of India, rather than being devout adherents of a specific spiritual path. Moreover, though many have adopted the word Hindu, typically practitioners prefer to use Vedic culture, or the term *sanatan dharma*, which in Sanskrit means “eternal religion (Narayanan et al. 2018).” Additionally, adherents may also use terms that indicate their specific deity of worship, such as in the case of the term Gaudiya Vaishnavism, used by Govardhan Ecovillage.

Therefore, what people today refer to as Hinduism is actually an umbrella term for diverse religious traditions that have different theological conceptions and conclusions. Yet this extensive array of teachings, practices and deities all find roots in the Vedas, the ancient scriptures written in the ancient Sanskrit language. Veda means “knowledge” in Sanskrit. The Vedic texts, such as the Puranas, are comprehensive and robust teachings of all aspects of life from material livelihoods, enjoyment, and health, to metaphysical pursuits of self-realization and transcendence of the material world. Included in this vast Vedic literature are esoteric descriptions of an individual’s self as a soul, or eternal conscious being, who is separate and distinct from the body, made of temporary matter. Such Vedic texts outline varying paths of yoga, or union with the soul’s divine source, *bhagavan* (God), referred to by many names and in
different forms at different ages. In addition, the Vedic scriptures contain ancient lore of purported past kings, queens, yogis and sages that have successfully harmonized the dichotomy of living in balance as a spirit soul experiencing a material existence. This harmony is achieved by making enlightened choices based on a higher spiritual perspective and transcendent goal (Prabhupada 1977).

Imbedded within Vedic culture is an ecocentric lifestyle, rich with the sacredness of nature: holy rivers, mountains and even certain rocks. One’s bodily health is guided by five primary material elements of earth, water, fire, air and ether. Healing foods and herbal medicines are prescribed for remedies of illness and general wellbeing, the practice of which is outlined in the Vedic health science known as \textit{ayurveda}. Vedic astrology (\textit{jyotisha}) charts life’s trajectory through the location of planets and stars. Heavenly beings, known as \textit{devas}, or “demigods,” are described as being endowed with certain supernatural control over nature such as: Indra, the controller of rains; Vayu, the controller of wind; and Agni, the controller of fire (Rosen 2015). Vedic culture as a term thus more comprehensively refers to a holistic way of life based on spiritual principles rather than simply a religion.

GEV is grounded in one of the major spiritual traditions spawned from the Vedic scriptures, called Gaudiya Vaishnavism, a monotheistic branch of followers who worship Vishnu, or Krishna, as the Supreme Divine Being. Gaudiya Vaishnavas consider that the ultimate purpose of life is to attain self-realization or understanding of the self as an eternal spirit soul, both part and parcel of the supreme whole, Krishna. \textit{Vaishnava-vedanta}, or the conclusion of the Vedas, culminates in \textit{bhakti}, or loving devotional service to Krishna. GEV founder and visionary Radhanath Swami in his book \textit{The Journey Within} defines \textit{bhakti} as unconditional love for the Supreme Being and deep compassion for others. This love is so complete that it inspires love not only for God but for everyone and everything connected to him. In other words, \textit{bhakti} is expressed in a dynamic, practical way by loving God, showing kindness to others, and caring for the environment, knowing that it
is God’s sacred energy, essential to the wellbeing of life. (2016, 290)

Bhakti is considered both the end and the means of spiritual life. Practitioners dedicate their lives to selfless service to Krishna and believe it to be the highest fulfillment. Therefore, Gaudiya Vaishnava teachings are not only implicitly aligned with environmental stewardship demonstrated in a voluntary adoption of a less materialistic and simple lifestyle leading to a lower environmental impact, but also explicitly as a path of personalism where the ultimate goal of devotees, or practitioners, is a loving relationship with Krishna and simultaneously with all of creation.

The devotional sentiments towards Krishna as the supreme deity can be referenced throughout Vedic texts. In the most famous of Vedic texts, Bhagavad-gita (Bg), meaning “song of God,” Krishna describes himself as follows, “I am the source of all spiritual and material worlds. Everything emanates from Me. The wise who know this perfectly engage in My devotional service and worship Me with all their hearts (Bg 10.8) (Prabhupada 2014).” Also in Bg verse 10.39 we find the statement, “I am the generating seed of all existences. There is no being—moving or unmoving—that can exist without Me (Prabhupada 2014).” Further, Krishna states, “there is no Truth superior to Me. Everything rests upon Me, as pearls are strung on a thread (Bg 7.7) (Prabhupada 2014).”

Significantly, Gaudiya Vaishnavas worship not only the divine masculine, Krishna, the source and creator of all, but understand him most fully with his divine feminine counterpart, Radha. While Krishna is described as the energetic, Radha is described as the energy of Krishna. The expansion of Radha is the entirety of the cosmic manifestation, including the earth goddess Bhumidevi. The earth and the cow are especially revered, as they are seen as two of the seven mothers that are worthy of respect; the earth for giving abundant resources for flourishing and the cow for giving milk, tilling and fertilizing the soil and giving health remedies. Moreover, the
cow is sacred because of its relation to Krishna, who is often referred to as Govinda, or the “protector of cows.” As such, for a devotee of Radha and Krishna, everyone and everything in creation is seen as God’s energy and thus sacred and worshipable (Rosen 2015).

The theology of Gaudiya Vaishnavism rests on the belief that our personal characteristics and relational dealings with others in this world mirror and stem from the eternal qualities and relationships embodied by Radha and Krishna in the spiritual world. Specifically, we find that the personhood of Krishna is one who adores nature as a cowherd boy in a village surrounded by forests (Prabhupada 2003). Krishna’s features are often described in poetic fashion, with detailed reference to nature; he is decorated with flower garlands, his lips are reddish like a bimba fruit, his face is moonlike, his eyes are like lotuses, and his complexion is like a freshly formed monsoon cloud. Songs and prayers glorify his pastimes in nature, including the hills, rivers, and plants. Another name for Krishna is Vrajaraj, or the “king of the sacred Vrindavan forest,” because he spends his days there with his friends swimming in the sacred river Yamuna, playing on the sacred hill Govardhan, and dancing with peacocks. Therefore, there is no way to worship Krishna without worshiping his energy, manifested as divine nature (Prabhupada 2003, Rosen 2015).

GEV’s culture is thus fixed rather than emergent, unlike most ecovillages. The entire community’s foundation rests on very specific and defined expressions of ancient Vedic culture which are accepted as their reality of existence, not relative or subject to change. Rather than being an evolving and ever-developing culture, GEV began with a known purpose and meaning, allowing for a solid articulation of and bond over the same values and principles. Every component of the community from how it operates, organizes, makes decisions, farms, and how the community members relate to one another is all informed and guided by the tenets and principles of Vedic culture.
7.2 Symbiotic Development Model

GEV’s Symbiotic Development Model is its foundation. It is based off of an ecocentric philosophy rooted in Vedic culture that views nature and humanity as inextricably related. The model stresses the importance of living in harmony for the welfare of all with the ultimate goal of life to serve Krishna. The model couples modern science with traditional practices and wisdom. As stated on the GEV website:

The Vedas, the ancient scriptures of India, describe how our planet is perfectly created to meet the needs of all its denizens if they live in a spirit of cooperation and interdependence. Unlike the modern anthropocentric models (the belief that human beings are the central or most significant species on the planet), the Vedas present an ecocentric (nature-centred) model of creation where there is a natural symbiotic relationship between humans, animals, birds, insects, trees, rivers, mountains and all the other elements of nature. In other words, Vedic wisdom refers to the delicate balance of ecosystems...By aligning our developmental patterns with this symbiotic system, we can ensure a sustainable future. (Govardhan Ecovillage 2018)

GEV offers an alternative paradigm that reverts back to biodiverse, small-scale, carbon-neutral farming practices that reduce greenhouse gases, replenish biodiversity, and conserves water. The Symbiotic Development Model is based on principles found in natural systems that recognize all components as interdependent. Waste produced in one stage of a system can be used as a resource to fuel another aspect of the system, while effectively recycling the resource back into nature (Das and Palaniappan 2014). The following are initiatives and efforts GEV carries out.

**Sustainable farming**

Organic cow farming is the essential activity of which the entire Symbiotic Development Model is centered on. The Vedic scripture called vriksh-ayurveda (the science of plant life) outlines detailed farming practices centered around the sacred cow (Fig. 2) which is believed to be integral to cultivating the land and maintaining the ecology. These traditional practices are
coupled with modern agricultural techniques such as crop rotation, composting, multicropping, cover cropping, raised beds, etc.

One practice employed regularly that has transformed their previous slopey and stone-filled land to fertile ground is the use of a cow dung and urine-based fertilizer. Powdered legumes and jaggery (unprocessed cane sugar) are combined with cow dung, cow urine and water to create a potent mixture that, when placed within a drum for about one week, multiplies the millions of beneficial microorganisms found within the cow dung. This natural fertilizer is then spread on the agricultural fields.

A total of about 14 acres (Fig. 3) are cultivated to produce a wide variety of vegetables, legumes, grains, fruit trees and flowers, most of which are the following: squashes, gourds, cabbages, cauliflower, okra, tomatoes, spinach, eggplant, cilantro, beets, carrots, pumpkins, kale, potatoes, moringas, ginger, turmeric, coriander, fenugreek, basil, green chili, rare indigenous varieties of rice, chickpeas, and mung beans, bananas, mangoes, coconut, sapodilla, papayas, guava, pineapples, marigolds, roses, jasmine, chrysanthemums, common daisy, cosmos, periwinkle, champak and a host of wild flowers. There are also several large greenhouses that aid in growing certain vegetables that are not best suited in the climate, or are unable to grow during the monsoon season, such as bell peppers, broccoli and lettuces.
Currently, GEV is about 40 percent self-sufficient in food. However, the majority of excess foodstuff is from local farmers that are part of GEV’s Rural Development Program (more on this initiative below). Currently, GEV lands and the agriculture department is completely dedicated to research and development, constantly experimenting with new techniques for seed varieties, pest management, soil development, etc.—some of which succeed and others which fail. These tried and tested techniques are then taught to the local farmers to improve their livelihood.

**Water harvesting and conservation**

A groundwater recharge pond (Fig. 4) collects water from the monsoon season which then slowly percolates down to refill the aquifer and maintain the water table throughout the year. The pond’s capacity is about seven million liters. There is also a large-scale water collection pond (Fig. 5) which is lined with material to prevent water from percolating, allowing the water to remain so that it can be pumped for irrigation and gardening. The pond’s capacity is 13 million liters. The water is channeled through a series of solar powered pumps to irrigate the land. Depending on the type of crop, drip irrigation, micro-sprinklers and sprinklers are used to
water the agricultural fields. These practices have allowed the village to cease pumping from the local river, not only preventing over extraction of groundwater, but replenishing it as well.

**Fig. 4. Groundwater Recharge Pond.**
Source: Danielle Lella

**Fig. 5. Water Collection Pond.**
Source: Danielle Lella

**Soil biotechnology wastewater treatment**

This process collects grey and blackwater from the village via an underground network of gravity-driven pipes. Sewage water is collected and then pumped into a bioreactor (Fig. 6) with four stages based on the fundamental design principle that is derived from terrestrial ecosystems. The first of these four stages (Fig. 7) is the sewage water entering a compartment made of layers of porous rocks, sand and soil containing micro and macro organisms such as earthworms that purify the water, mimicking a natural filtration process found in nature. At the top of this compartment can be seen a lush, fragrant garden growing flowers, fruits and vegetables, such as papayas and squash which feed off the recycled nutrients.

The soil biotechnology plant processes up to 120,000 liters of sewage water every day (Fig. 9). Annually, about 28 million liters are recycled. This recycled water is then reused for farming irrigation and gardening.
Composting

All food scraps from the kitchen or post-dining of guests and residents are collected in large buckets and sent to a solid waste management area. Various composting methods are used, including typical hot composting and worm composting. In addition, a new method is being
trialed. Organic matter is first pulverized, bio-enzymes are added, and then it is laid out in the sun to dry. This quickens the composting process, allowing for a faster recycling of waste.

Alternative energy

GEV is an ideal location to harness solar energy. The 30KW solar power plant meets the entire energy needs of GEV (Fig. 10). In addition, GEV has bio-digester tanks (Fig. 12) for both cow dung and food waste wherein the organic matter undergoes an anaerobic digestion process that results in certain organic compounds converted into methane and carbon dioxide. This biogas can then be used to fuel generators, engines, boilers and, most commonly, burners for cooking. Biogas is considered a renewable energy because it is carbon neutral; the carbon released in combustion is the same amount that was absorbed to grow the biomass. The solid remaining matter (digestate) is used as agricultural fertilizer. Lastly, GEV engages oxen in ploughing the agricultural fields, as has been done traditionally in the past, in lieu of energy-intensive tractors (Fig. 11). Ox power has also been utilized to drill boreholes for irrigation, mill flour and press oil as an alternative to machines.

Fig. 10. Solar Power Plant.  
Source: GEV  

Fig. 11. Ox-powered Ploughing.  
Source: GEV
Compressed stabilized earth blocks

The building material is created through a manual process using the local earth to create bricks (Fig. 13). The earth blocks are then sun-dried within 21 days (Fig. 14). These bricks have been used to build all structures in the ecovillage. Additionally, GEV complies with the Green Rating for Integrated Habitat Assessment (GRIHA) guidelines for its infrastructure development.

Animal Sanctuary

In addition to the sacred cow deeply connected to Gaudiya Vaishnavism, Vedic texts also teach about the equality of all living entities regardless of the species. Therefore, animal care is a
significant practice within Vedic culture. Beyond just protection against abuse and slaughter, it is also understood that cows and other animals should be treated with respect and love. As such, GEV is home to a variety of rescued cows, donkeys, goats, sheep, dogs and horses and provides them with proper shelter, dietary and space needs and medical treatment (Fig. 15, 16).

![Fig. 15. Cows in Cow Shelter. Source: GEV](image1)

![Fig. 16. Rescued Retired Race Horse. Source: Danielle Lella](image2)

**Rural Development Program**

GEV is deeply enmeshed within their local bioregion, providing and promoting initiatives that are of service to the greater community. Established in 2009, the Rural Development Program “aims to reduce farmer distress and rural-urban migration by empowering them with various sustainable livelihood options in their own villages (Rural Development 2018).” GEV has gained international recognition and has received many awards and accolades, including most prominently from the United Nations World Tourism Organization (UNWTO), which promotes responsible, sustainable and universally accessible tourism (UNWTO 2018). In 2017, GEV won the UNWTO Global Award for Excellence in Innovation for promoting ecotourism as a catalyst for rural development.

The Rural Development Program has partnered with 30 villages in the Wada and Vikramagah regions, impacting over 2,100 rural families (Rural Development 2018). Its primary
objectives are aligned with nine of the 17 UN Development Programme’s Sustainable Development Goals (SDGs) for 2030 that aim to eradicate poverty, protect the planet and ensure peace and prosperity for all people. The nine are listed as: food security and poverty alleviation; water resource development; improving health of the community; women empowerment; landless development; rural education; character building and skill development (Rural Development 2018).

Each of the objectives have been implemented through corresponding initiatives, or areas of intervention, that together attribute to their holistic approach to rural development. The outreach efforts are meant to first stabilize the socio-economic circumstances of the impoverished and then re-introduce and develop the spiritual component of life, which has been lost in much of India as modern industrial and exploitative culture pervades (e.g. factory labor, alcoholism, abuse of women etc.). Some of the efforts include the following:

1. **Symbiotically Enhanced Wadi (orchard) Agriculture Program (SEWA):** This program aims at improving the livelihoods of rural farmers through supporting the cultivation of fruit and forestry tree plantations (e.g. mangoes and cashews) for long term livelihood security, as well as flowers for short term economic support (e.g. jasmine). SEWA works in tandem with families to create the best layout and plan for the long-term success of their plantation. SEWA provides the seedlings as well as education and training on crop cultivation and horticulture techniques. SEWA also connect farmers and transports their crops to Mumbai markets (Rural Development 2018).

2. **Water Resource Development:** This program helps create water conservation and storage for both potable and irrigation purposes. To ensure safe drinking, hand pumps and wells have been created. To support agriculture, especially during the dry season, water reservoirs and drip irrigation have been built (Rural Development 2018).
3. **Women Empowerment:** This program organizes rural women into Self Help Groups (SHGs) that meet regularly. SHGs empower village women with education (e.g. health/hygiene and banking/savings), skills training (e.g. craft skills and kitchen gardening), and various income generating projects to support overall improved quality of life (Rural Development 2018).

4. **Landless Development:** Extreme poverty is most seen in landless tribal families. This program provides intensive skills training and develops micro-enterprises as a means to generate a sustainable livelihood, thus reducing the tendency for rural to urban migration. Some skills training are masonry, welding, carpentry, hair cutting and tailoring (Rural Development 2018).

5. **Rural Education:** The objective is to fulfill the fundamental right of every child to receive education and support in emotional and spiritual growth. This includes tailored programs for special needs children as well. Beyond traditional school subjects, such as math and English, education includes the following: health, skills development, technical vocations, environmental education, and values and character training (Rural Development 2018).

**Ecotourism**

One of the primary purposes of GEV is to give people an experience of natural and spiritual living as an alternative to modern lifestyles. Yet GEV also aims to provide guests, who are often times Westerners on yoga or ayurveda wellness retreats, with the same level of comforts as typically enjoyed on a retreat or vacation such as private rooms, bathrooms, quality dining and massage treatments (Fig. 17). The underlying reasoning for these amenities is to facilitate a smooth transition from a modern or urban lifestyle towards more simplistic living, where they can appreciate nature and animals while learning about GEV’s ecological initiatives.
Tours are given regularly of the soil biotechnology plant, the cow shelter and agricultural farmlands. Guests are also invited to go on service tours to the Rural Development Program’s partnering farms located outside of GEV grounds. I personally went on one such tour that visited a mango plantation farmer benefiting from the SEWA program.

We met the farmer who has been connected with GEV for over five years. His 300 mango tree plantation (Fig. 18) is just beginning to bear fruit (in addition, the farmer is also growing various vegetables and legumes). We helped dig small water trenches encircling the trees for the purpose of channeling irrigated water. This fruit tree technique urges the roots to spread outward to uptake the water. In doing so, the roots grow wider and deeper, thus strengthening the tree and increasing its capacity to support and bear more fruit.

Fig. 17. Guest Accommodations. Source: GEV

Fig. 18. Rural Development Mango Farm. Source: Danielle Lella

7.3 Resident Interviews

Demographics

An overview of the community members demographic profile shows a diverse community of people from different backgrounds. This heterogeneity is significant because it is a more precise representation of the sub-set of society in general. Ages ranged from 23 to 65 (Table 1), with the majority of community members between the ages of 30–39 (40%). The
majority of the participants were male (60%) while the remaining (40%) were female. Of these 30 participants, roughly 7% were widowers, 83% currently married and 10% singles (including two monks). Households with children averaged about 2 children each. The scope of educational levels was wide (Table 2), ranging from no schooling to a doctorate degree. The majority (about 23%) finished 10th standard—equivalent of a US high school graduate.

About 37% of the participants were previous residents of a nearby village (Table 3). The remainder either migrated from Mumbai (37%) or from other Indian states (27%). Members joined at different times over the past 15 years (Table 4); the earliest during the starting years of 2003–2007 (17%), and the majority arriving between the period of 2013–2017 (47%).

<table>
<thead>
<tr>
<th>Ages</th>
<th>No. of Participants</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20–29</td>
<td>8</td>
<td>26.67%</td>
</tr>
<tr>
<td>30–39</td>
<td>12</td>
<td>40.00%</td>
</tr>
<tr>
<td>40–49</td>
<td>4</td>
<td>13.33%</td>
</tr>
<tr>
<td>50–59</td>
<td>2</td>
<td>6.67%</td>
</tr>
<tr>
<td>60–65</td>
<td>4</td>
<td>13.33%</td>
</tr>
</tbody>
</table>

**Table 1. Age Ranges**

<table>
<thead>
<tr>
<th>Education Level</th>
<th>No. of Participants</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No education</td>
<td>4</td>
<td>13.33%</td>
</tr>
<tr>
<td>7th standard</td>
<td>3</td>
<td>10.00%</td>
</tr>
<tr>
<td>10th standard</td>
<td>7</td>
<td>23.33%</td>
</tr>
<tr>
<td>12th standard</td>
<td>2</td>
<td>6.67%</td>
</tr>
<tr>
<td>Some college</td>
<td>1</td>
<td>3.33%</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>9</td>
<td>30.00%</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>3</td>
<td>10.00%</td>
</tr>
<tr>
<td>Doctorate</td>
<td>1</td>
<td>3.33%</td>
</tr>
</tbody>
</table>

**Table 2. Educational Levels**

<table>
<thead>
<tr>
<th>Place of Origin</th>
<th>No. of Participants</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Migrated</td>
<td>8</td>
<td>26.67%</td>
</tr>
<tr>
<td>Mumbai</td>
<td>11</td>
<td>36.67%</td>
</tr>
<tr>
<td>Nearby village</td>
<td>11</td>
<td>36.67%</td>
</tr>
</tbody>
</table>

**Table 3. Place of Origin**

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Participants</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003–2007</td>
<td>5</td>
<td>16.67%</td>
</tr>
<tr>
<td>2008–2012</td>
<td>11</td>
<td>36.67%</td>
</tr>
<tr>
<td>2013–2017</td>
<td>14</td>
<td>46.67%</td>
</tr>
</tbody>
</table>

**Table 4. Year Joined**
**Motivations**

During each interview, participants were given three options when asked about their motivations for moving to GEV: a.) to live within a spiritual community; b.) to live in harmony with nature; and c.) to earn a livelihood. As depicted in Figure 19, the most common response from participants (40%) was ‘to live with a spiritual community’ and to ‘live in harmony with nature.’ The five participants that further elaborated on their answer either explicitly ranked living in a spiritual community as a number one priority or emphasized the significance of the spiritual community. Participant 1 said, "I am here for the service to the Lord and devotees of Krishna. In such an atmosphere I can raise my kids in a positive environment.” Participant 2 said, "The main reason I am here is for my bhakti.” Participant 6 indicated that her husband's health was not doing good in the city and that the environment here is more conducive for good health. Additionally, her sons live here as monks. Participant 12 wanted to "transition from city life to a simpler life.”

![Figure 19. Motivations](image_url)
The second most common response from participants (37%) reported that all three choices played an influential role. Two participants qualified their answers with further comments, illuminating the primacy of spirituality, which is similar to the first response group. Participant 3 said, "My bhakti is more easily practiced here.” Similarly, Participant 8 said, "They are all important, but number one reason is for the spiritual community and number two is to be in nature." Two participants said that their number one reason is for a job, but Participant 28 indicated a change in heart. "Initially I only came for a job, but when I saw everything and the potential with the environment and spirituality it affected my heart, and I am happy about all three.”

About 17% of the participants indicated their sole reason for coming to GEV was ‘to serve a spiritual community.’ Participant 4 explained further, "Our number one priority is for our bhakti and to serve. We did not come for money. We are earning less than previously. We are getting half than what we previously earned, but we are given a home as well.” Lastly, the least common response (7%) chose ‘to serve a community’ and ‘to earn a livelihood.’ Participant 22 explained, "My main priority is to earn a livelihood. Second, I am here for spirituality.”

The majority of the responses indicate that the primary reasons for coming to GEV were to serve the spiritual community, with 100% of the participants indicating such as at least one of their motivations. This was further strengthened by their qualifying explanations which leaned heavily towards the draw of living in a spiritual community. The second most common motivation was ‘to live in harmony with nature’ which is cited in 77% of the responses. The least common motivation, ‘to earn a livelihood,’ was cited in 44% of the responses. Interestingly, no one moved to GEV for either just a livelihood or to live within nature, and there was no reported response of these combined motivations.
The overall responses demonstrate a strong unified purpose of spirituality for being in the community. Although this may be expected in a such an ecovillage, it is significant when evaluating the sustainability of Vedic culture, as it demonstrates a unified goal. Additionally, many participant responses indicate a lack of any economic motivations, which stands in stark contrast to motivations of a modern Western culture.

**Occupations**

Participants had the following paid occupations: ayurvedic doctor, classical Indian singer, traditional Indian dancer, kitchen cook, cow herder and caretaker, farmer, housekeeper, guest accommodation team member, teacher (history, math, Hindi and English), Rural Development Program team member (spiritual preacher and teacher), yoga teacher, gift shop manager, wellness products director, medicinal researcher, maker of medicinal products, plant nursery laborer and gardens landscaper.

I also interviewed several individuals who had no income: several housewives who serve their family full time, two unpaid monks who serve full time (cow protection manager and construction department team member) and three retired seniors, two of whom spend significant time serving (garland making and temple cooking).

It is significant to note that these occupations and services are all in the service field, meaning they have lower environmental impact and are more meaningful means of work that bring higher life satisfaction.

**Income**

The monthly income varied from INR$4,000–$25,000 (USD$55–$450). The two lowest salaries were for a farm weeder and cowherder/caretaker. The higher salaries were for a married couple, both of whom worked full time—one as a classically trained singer and the other as a dancer—and another full-time department manager. About 32% of the participants who have
income are paid monthly INR$10,000–$14,000. Some participants (8%) did not wish to disclose their income, one of whom indicated it was high.

The monks live completely off the ISKCON Trust. The three retired seniors stated they are living off of savings, but they do not have rent or pay for food which taken care of by GEV. Participant 5 said, “It is peaceful to live off of savings.”

When asked if the standard of living is sufficient (Fig. 20), nearly 97% of the community members with jobs indicated ‘yes.’ About 13% of participants, although indicating that their income was sufficient, shared similar sentiments expressed by Participant 4 who mentioned, "We don’t have much expenditures. We are a little tight, but okay. We are not able to save.”

**Fig. 20. Standard of Living**

Despite making more than the average (INR$16,000), Participant 2 reported, "No, we have no savings at all because it is difficult to manage four children. We must supplement it by requesting from benefactors in the temple community to support our children's education.” Additionally, a couple participants were not able to save because of temporary familial obligations (i.e. building a retirement home for parents; paying for grandchildren's expensive weddings).
The perspective of nearly all was that income was sufficient despite having modest salaries and some not being able to save. This indicates a satisfaction in the level of material needs and wants. Additionally, any financial concerns were related to needs such as healthcare and education, which was further strengthened by answers to the next couple questions.

**Standard of living**

When asked if they felt they still needed to increase their standard of living (Fig. 21), about 73% of the community members indicated ‘no’ and seven ‘yes.’ About 13% cited reasons concerning future expenses such as higher education and healthcare. Affirmative answers included the following elaboration from Participant 12. "Yes, as our family grows, finances will get tight. Especially as children grow older, they will need higher education. We will need to increase our finances, though we expect management will facilitate at that stage as they do with all things.” GEV child residents get free education in the GEV school from grades five to 10.

Participant 18 provided another anticipatory answer, “No, but if medical issues arise.” Theirs is a unique case given his daughter was born with a birth defect that may have complications down the road. The ISKCON Mumbai temple is associated with the Bhaktivedanta Hospital, sharing in the same spiritual principles, which provides health care coverage to all GEV residents at a local hospital. In case of serious emergencies like surgery, GEV covers partial to full expenses on a case by case basis.
When asked what their main problems were in the community (Fig. 22), about 67% participants said they had no problems. Of the 30% who face problems, the majority (56%) cited financial concerns specifically. Participant 16, "Yes, we have concerns of the children's future about paying for higher education. We have a counseling system to express concerns and from there they can get taken care of."

Participants 4 and 8 also mentioned the counselor system being available to seek out support from. Participant 8 said, "Problems are always there, but the management looks after all and are very sensitive to address any family or financial issues timely." Participant 12 acknowledged that "Yes, there are struggles in life, but through a spiritual perspective they are nothing compared to gaining the great spiritual benefit in serving Krishna’s devotees."
Fig. 22. Problems

It is also of particular significance that not one participant noted interpersonal conflict which, as mentioned in the literature review, is one of the major challenges for ecovillages.

Quality of life

Nearly 97% of the participants cited that their quality of life has improved since living in GEV (Fig. 23). The one exception, Participant 27, did not directly answer the question and said, “No comment. I have no choice for being here. I need to earn a livelihood.”

Fig. 23. Perceptions of Quality of Life
The consistent themes of spiritual benefits, community of devotees, better environment and a holistic lifestyle for both self and family, which often contrasted from their previous modern lifestyle, were provided as reasons for an increased quality of life.

Participant 8: Yes, the world outside is filled with materialistic infatuation to earn money and power. We are self-motivated to live a simple life in harmony with nature and to have a spiritual component in life, which brings the ultimate balance to life. Our lives have been transformed.

Participant 28: Yes, it’s better here because Krishna is looking after me. The environment is so pure and tranquil, so naturally I am happy here.

Participant 1: Previously I was staying in my other village, but comparatively here I am now getting the association of devotees and service to the devotees. I am getting everything here: career, income and devotional service.

Participant 25: You can get everything here: livelihood, spiritual life...it’s beautiful here. The kids and wife are happy. There’s nothing more you could need or want.

Participant 16: I am feeling bliss. We came for our children, so they could have better lives than we had. The foundation of a healthy future relies on developing spiritual character and integrity.

Participant 2: It would have been very difficult in Mumbai to inculcate good moral values in children. But here naturally the environment allows for children to develop good qualities because of bhakti and the children are happy. Spiritual practices can be easily practiced here. Everything else automatically seems to be taken care of.

Participant 21: Of course, now it is better. You cannot even compare to previous condition. In previous city life all modern conveniences were there like transportation and market, but here in village life you learn to adapt to the slower pace of life and you feel more connected to community.

There was no mention of financial austerities playing as a negative factor in the quality of life and some even explained voluntary simplicity as a fulfilling spiritual practice. In fact, 13% of the participants cited that the reduced material lifestyle was what made life better for specifically spiritual reasons.

Participant 3: Although we previously lived in a big apartment in Mumbai, life has actually improved because of our bhakti practice being conducive here.

Participant 15: Yes, because when you transform your material desires to spiritual desires you become content and grateful for basic needs being met.
Participant 20: It is better now because of the spiritual love and care we feel like we have a big family here. Even though previously we had more material comforts, we feel it’s better now.

Participant 29: Even though previously I was getting INR$10,000 more a month, I feel that sacrifice financially is giving me a multifold of spiritual benefit.

In direct response to quality of life, two participants highlighted specifically what they believe to be the actual purpose of life.

Participant 10: I was frustrated with exploitative corporate life. It is a stress-free life here. Everyone is a devotee, so they understand better than other people what the real aim of life is.

Participant 12: The whole goal of life is to live a spiritually healthy life and to pass that on to our children.

Retired members also indicated feeling fulfilment in their last stages of life. Participant 6 explained, "Before I was full time working and then I was retired, and I did not like it. Now I have full time service which keeps me engaged and happy.”

Overall, responses were overwhelmingly holistic in content, crossing over socio-economic, environmental and spiritual reasons, demonstrating an implicit shared understanding that quality of life is one of wellbeing for the self, family, community and environment. Additionally, despite reasonable financial concerns, participants’ perception of quality of life were not negatively affected. To the contrary, quality of life overall had greatly improved.

Plans for residency

Only 10% of participants indicated that this was a temporary residency, while over 84% expressed the desire to stay long term (fig. 24). The following terms were used frequently: forever, always, till last breath and lifelong. Many of these responses reveal a strong sense of humility, surrendering to what they believe to be God’s will for their life’s direction. Participant 7 said, “I want to live here forever, but whatever the Lord wants.” Similarly, Participant 12 said, "Everything depends on the Lord’s plan. If it was up to us, yes.” Others expressed a strong
service attitude. Participant 19 said, "For as long as the community will keep us, we will stay and serve." Participant 28 said, “Yes, as long as I can serve.” Participant 29 explained, “I would be blessed if I could serve till my last breath.”

![Fig. 24. Plans for Residency](image)

**Living and environmental conditions**

One hundred percent of participants responded ‘yes’ to both questions concerning whether their living conditions were comfortable or not and if their basic needs were being met, including housing, electricity, running water and food. Participant 20 explained, "It is an austerity, but we are comfortable. We had a much bigger place in Mumbai.” Only about 13% of the community members interviewed had malaria, all of whom indicated that GEV provided free healthcare at the local hospital.

One hundred percent of respondents affirmed that the grounds were being managed well. Responses ranged from satisfactory, sufficient, good and nice to beautiful, clean, wonderful and perfect. There were some responses which acknowledged that the responsibility was also on the community to maintain the grounds, as expressed by Participant 25, “It is our responsibility also to take care of the environment.” Participant 12 explained, "Yes, the management and residents
are cooperating to keep everything nice.” Participant 17 shared, “The management and congregation work well together to take care of the grounds.”

**Spiritual practices**

On average, community members go to the temple at least two times a day, in the morning and evening. Morning temple worship begins at 4:30 a.m. with song and prayer. Other daily spiritual practices described were as follows: priest services on the altar, daily *japa*, or meditative chanting on the *maha-mantra*, “the great mantra,” (*hare krishna hare krishna krishna krishna hare hare, hare rama hare rama rama rama hare hare*), garland making and community gatherings. Other activities included cooking for the deities, attending evening *kirtan* (musical mantra medication), worship of Yamuna River (Fig. 25), visiting seven sacred temples in Vrindavan forest (Fig. 26, 27), circumambulating Govardhan hill (Fig. 28), stitching clothes for the deities and attending festivals which celebrate Krishna’s pastimes with devotees.

![Fig. 25. Yamuna River Worship. Source: Danielle Lella](image1)

![Fig. 26. Temple. Source: Danielle Lella](image2)
Ecotourism guests are welcome to participate in any of the above devotional activities. I was able to attend a flower festival, alongside the GEV residents and neighboring villagers. In preparation for the festivities, devotees plucked petals all day long from the marigolds grown with the GEV gardens (Fig. 31). In the evening everyone gathered in the main temple to glorify Krishna with *kirtan*, dancing and, most significantly for this festival, watching the deities be showered in petals (Fig. 29, 30). The petals were then collected again and showered on everyone. The principle is that after being offered to the deities with love and devotion, Krishna accepts these flower petals with pleasure, making them sanctified and transformed from something mundane and material to something spiritual. After this process, the flowers become known as, *prasadam*, or “mercy.”

The same practice is enacted daily to a less degree. Multiple times a day there is a *puja*, or worship of the deities (Fig. 32), through offering different types of articles representing the elements of creation, such as incense (earth), a small lamp (fire) and fan (air), etc. All these are meant to attract and engage the senses in connection to God. Devotees are often seen deeply
gazing at the deities, which is an experience referred to as *darshan*, or “to see and be seen by God.”

**Fig. 29.** Main Radha–Krishna Temple.  
Source: Danielle Lella

**Fig. 30.** Flower Festival.  
Source: Danielle Lella

**Fig. 31.** GEV Women Picking Flowers.  
Source: Danielle Lella

**Fig. 32.** Puja Ceremony.  
Source: Danielle Lella

**Spiritual ecology**

Answers to the question on spirituality regarding humans and nature were also very similar to answers regarding motivations for coming to GEV and perception of quality of life.
Present in the majority of interviews were themes of respecting nature as Krishna’s energy, as a sacred mother and reciprocating with nature through service.

Participant 7: We get so much from nature, so it is our duty to reciprocate and help nature. City life there is a lot of air pollution, whereas here we don’t use cars, we use bicycles. The whole society can learn from the ecovillage and support nature not degrade it.

Participant 13: As a farmer I can understand that after coming to bhakti we should take care of mother earth. Whatever wonderful offerings are coming from mother earth are sacred and that should be respected properly, and we should reciprocate back.

Participant 14: We are deeply indebted to mother nature for all the fruits, vegetables, freshwater. What can we do for her? We must try to give back.

Participant 15: In the Vedic text Srimad Bhagavatam it is said that every seed, fruit, and flower is a mercy of Krishna. Because its Krishna’s mercy creating, we should take care and respect it.

Participant 18: Whatever is coming to us is emanations of Krishna only. We should respect every aspect of creation as the sanctity of the Lord. We should reciprocate with mother nature by respecting, honoring and serving her. We should understand that everything belongs to God.

The significance of respect extended beyond mother nature to all of life, specifically animals and fellow community members.

Participant 19: I always pray, when will the day come when I will consciously respect all of creation connected to God, including all of life and nature.

Participant 20: The Lord has created everything, so everything we see, whatever we get, it is from him, and so we should respect everything. Since he is giving us so much, we should give thanks all the time. Krishna gives everything, so we just need to surrender unto to him and be happy. To be human, everyone wants love. We are getting so much love and affection from everybody and also nature, the community, the beautiful gardens, the cows, the peaceful views, organic food. We can feel connected to God’s mercy if we just see like this.

Participant 22: The one aspect from bhakti that I have learned from working on the farm is that everyone loves taking care of each other. They respect each other, even the animals, the cows. I had never witnessed this type of service before, especially such treatment to cows. Out there in the world, it is all commercial and economic gain. This touches my heart, so I feel appreciative to be involved.

Participant 26: Previously there was some cruelty in the heart, thinking that to kill animals for food. But with the understanding of bhakti there is actually now a sensitivity
to honor the life in other living entities as part and parcel of God. Spiritual consciousness from bhakti gives the understanding to respect the environment.

Further themes of interconnectedness and interdependence were consistently expressed. Many explained that humans and nature are interconnected. As such, they understand that being stewards of nature is integral to the bhakti practice.

Participant 2: Nature and our quality of life are in interdependent. If we take care of nature, then nature takes care of us.

Participant 4: Whatever we give to nature, nature gives it back to us. It is a simple relationship. If we give good, then it will be returned. If we have our own land, cow and farming, and are connected with nature, then we can have our own sustainability and independence. We need not be dependent on outside factors for our livelihood. Outside there is so much pollution and pesticides and it is unhealthy. If we are farming in an organic way we can eat healthy and live longer and give good health to our children.

Participant 9: Simple living, high thinking is the main motto of GEV. If we can improve our spiritual qualities than we can better serve God and humanity.

Participant 12: External cleanliness is a reflection of internal cleanliness. If you are not internally clean, then externally you won’t be clean. Bhakti teaches us to respect the environment and harmonize life with nature.

Participant 17: The beautiful nature attracts and enchant our hearts in bhakti. It is a stress-free life and there is devotional association that you will not find in the city.

Participant 22: Everything is interdependent—humans and nature. Whatever you do in life, if you are connected to God it is meaningful.

Participant 29: Bhakti has taught us a wonderful lesson about our relationship between the individual and the environment. That relationship is sacred. If you are conscious of how to live spiritually internally than that consciousness is expressed externally. If you are cleaning your heart regularly through the spiritual process, then you will also clean the environment. It is a symbiosis.

Some participants shared their critiques of modern lifestyles being polluting and degrading, as well as the significance of pursuing a simple, spiritual life instead.

Participant 10: The previous lifestyle in the corporate sector is so polluted. You inhale toxic air. There is no chance for good health. But here we can live a life of bhakti, peacefully and healthfully, especially my kids.
Participant 17: People keep on exploiting resources without understanding the origin of those resources. Krishna is the supreme possessor of everything. If we are connected to him, we will naturally respect his resources.

Participant 28: If each and every step is not taken consciously it will affect the environment and then cause more human problems. We have a wonderful relationship between humans and environment in the bhakti perspective. If humans act without spiritual integrity, then the environment will be spoiled and that in turn affects so many humans negatively.

Participant 8: The world outside is filled with materialistic infatuation to earn money and power. We are self-motivated to live a simple life in harmony with nature and having a spiritual component which brings the ultimate balance to life. Our lives have been transformed...What bhakti has taught us is that you have to pass down the legacy. If modern industry exists to improve material comforts, yet it pollutes the environment then it causes even more problems. Their endeavors pollute because they are polluted within. Whatever is inside is projected outside. Bhakti teaches us to purify from within and also to preserve the wonderful environment that we have been given so that the next generation appreciates and learns to take care of the environment as well. We keep on exploiting without understanding because we think nature only exists for our own material pleasure. But with consciousness we understand that we have a responsibility to God to protect the environment, so we have to bring it in harmony with our actions. Bhakti teaches us how to balance our relationship between us, God and the environment. Initially when we were not in bhakti, it did not matter what food we ate. But now we understand the importance of where our food comes from and where our waste goes. Our own small negligence would become a contributing factor to the overall environmental problems. Now we understand that a small piece of plastic discarded improperly is spoiling nature in some way. When we change our perspective like this, we see that we have to respect mother earth, who is overburdened. She is a mother just like our mother, so we should respect her in whatever way we can.

This last response best summarizes the holistic view shared by most community members. Many of these answers expressed the same themes, including a desire to deepen personal, communal and ecological aspects of life. As a participant spoke about the environment, they spoke about it in reference to their bhakti practice and connection to God. This demonstrates that devotees do not see their life in compartmentalized ways, but rather see their physical wellbeing, treatment of the environment and spirituality all intrinsically connected.
7.4 Management Interviews

Interviews with the founder and chief sustainability officer of GEV were aligned with the community members’ responses. This similarity demonstrates a strongly unified purpose and shared understanding of beliefs stemming from leadership.

**Radhanath Swami, founder and visionary**

Radhanath Swami described the impetus for starting Govardhan Ecovillage as an effort to fulfill the desire of his guru (spiritual teacher) to create a model farm community. In Vedic culture, following the instruction of and serving the guru is considered vital to spiritual advancement. Radhanath Swami defined bhakti as being the path of awakening the intrinsic, innate love for Krishna, for God, within our hearts in such a way that it is inseparable from how we view the natural resources of mother earth—that everything is God's creation, and everything is potentially sacred. And in this sense, when we see anything—a tree, a cloud, river, mountain or a piece of steel—when we see it in relationship to Krishna, to God, in the sense that it is his creation it is his energy and therefore it is ultimately meant to be used in harmony with his will, then we see the whole of creation as spiritual. That is really what bhakti means: to see everything in the spirit of being a servant.
Radhanath Swami described Krishna as the one supreme God of all religions, who in his intimate, original form of Krishna is all sweet, loving, and loveable. Part of the ecovillage is a replica of Vrindavan forest which, according to Vedic literature, is the spiritual world where Krishna lives eternally with his devotees (including animals and plants), who lovingly reciprocate with each other. Vrindavan can be looked at as “the perfect ideal of an eco-friendly, environmental lifestyle, because everyone is in respectful harmony with one another, living a natural, simple life.” Radhanath Swami explained that the principle of harmony is based on the deep respect between human society, animal society and mother earth, because of their united connection to their source, Krishna.

The Symbiotic Development Model, as described by Radhanath Swami, is a “holistic view of the world and life.” He further explained:

The idea of symbiotic development is that everything is naturally connected. It’s due to our own ignorance, or lack of knowledge, that we don’t see the connection between everything within creation. When we understand how everything in creation is connected then there is no waste. The concept of waste is due to a disconnect of our own awareness from reality. So, whatever we take from mother earth, we can offer something back to mother earth to enhance and nourish her. Not that we strip her and then pollute her with the byproducts of what we take from her. Whatever byproducts are there should actually be healthy and healing.

Radhanath Swami acknowledged the importance of utilizing science and technology for necessary progress but stressed that it must be based on the sacred principle of symbiotic relationships between humankind, nature and God. He described God as being both the supreme divine masculine, Krishna, and supreme divine feminine, Radha. In this understanding, Bhumidev, or “mother earth goddess,” is a manifestation of the supreme divine feminine. Therefore, the philosophy propounds that, “we cannot disrespect the feminine aspect of God and have a whole relationship with the masculine aspect of God. They are inseparable.”

When asked how non-secular societies can enact sustainability, Radhanath Swami gave the principle of compassion, which he explains “goes to its deepest state when there’s spiritual
awareness…compassion for the body, mind and ultimately the soul.” However, on the relative platform of viewing the world, he said that, regardless if one has a spiritual or secular worldview, everyone needs clean water, medicine, fresh food and a healthy environment. Therefore, he explained that “for those who are limited to compassion of the body and mind, the same principles of sustainability and respect for mother earth are there. From a spiritual perspective, however, there is the deeper principle that a sustainable lifestyle is inseparable from the way we reciprocate with God’s love and respect that love.”

When asked what the root of the global socio-economic and ecological problems is, Radhanath Swami replied, “The real problem is a spiritual problem—crisis of the human spirit.” He explained that wisdom, as described in the Bhagavad-gita, is to understand the equality and sacredness of all life, regardless of one’s color, sex, religion, nationality and species, and then to act with that spiritual vision. Radhanath Swami further elaborated:

It is not possible to make sustainable changes in society unless there is a corresponding change in people’s behavior, values and philosophy. Life needs to be seen as a whole, wherein inner change and outward change go together…The pollution in the world today is the natural consequence of pollution in the human heart, when our inner self becomes polluted by arrogance, greed, envy, insatiable selfish desires and anger. When we have an exploitative tendency that is prevailing within us, then it is going to exploit and pollute the world around us. Even if we clean every river and every ocean, and all the land and all the sky, if we do not cleanse the heart we are just going to pollute it all once again. So, the purpose of yoga, meditation or prayer is to develop a true sense of what in Sanskrit is called karuna. Karuna is sometimes translated as “compassion.” But it’s not just a sympathetic feeling within the heart towards the sufferings of others. Karuna is that feeling that is intelligent, active, dynamic and courageous. To actually make changes. To be a yogi means to be an activist of compassion.

This act of compassion can be most explicitly seen through the efforts of the Rural Development Program, which is “at the heart of the ecovillage,” according to Radhanath Swami. The Rural Development Program was conceived by witnessing the extreme material suffering of poverty, alcoholism and abuse of women in the surrounding villages. They realized that before they can share a spiritual message of life they have to care for their neighbors’ socio-economic
wellbeing. Thus, a set of holistic impact initiatives were naturally born. He expressed that what has successfully developed GEV is the synergy amongst PhD engineers from some of the most esteemed universities serving alongside simple villagers who cannot even write their names, but have rich, indigenous knowledge.

**Nimai Lila, chief sustainability officer**

Nimai Lila discussed the development of the symbiotic development model as an alternative to the modern linear model of take–make–waste. The intention was to meld together the best of traditional and modern technology to create a way of living in harmony with nature. In summary, the waste of one component of a system is used as the resource to generate prosperity in another. An example of this is the use of cow manure and urine for natural fertilizer or medicinal products. This zero-waste concept is drawn from the cycles of nature.

Nimai Lila explains:

In contrast with the modern development linear ideology, if you look at nature it also has a precise timeline of operation, but it doesn’t work in a linear way, it works in cycles: seasons, water cycle, carbon cycle, nitrogen cycle, and then also the concepts of karma and reincarnation are cyclic. So, what sustains are cycles; linear things don’t sustain. So, in our designs we need to incorporate the concept of cyclic nature. And that is the secret of sustainability in traditional systems.

Nimai Lila expressed that what makes the community special is the invisible current of spirituality that permeates the entire community. The presence of theology and values re what is essential to their sustainability model. He points out that the mood of service epitomizes Vedic culture and is what is missing from modern Western culture.

Every person you speak to within the community know why they are here—from the monks to the simple villagers—they all have the same answer when you ask them. It’s all for Krishna. Everyone here has the same goal of life. This is missing from other ecovillages which, rather than living with an already known goal, they use the ecovillages as a means to find some goal which they are still not sure of. This is the natural pursuit of a person in search of the truth. They are looking for transcendence, but they do not know what it is. We are all already fixed on our goal… All these intentional communities ultimately have some kind of cultural, spiritual, religious aspiration. That’s what makes us humans—*athato brahma jijnasa*—the soul has that natural inclination to
know about what lies beyond. When someone is living a very sattvic (wholesome) life, ultimately these types of questions come about. Even if you put a person in the best of ecovillage environments, still they won’t be satisfied because of their hankering to know the ontological truth (tattva). Without understanding tattva, that person will not be happy. So that also needs to be catered, and that is the missing link which we are trying to showcase.

Nimai Lila also suggests that many ecovillages face deep conflicts and struggles with their social structure and pursuit of egalitarianism as was discussed in the literature review. He even cited that members of other ecovillages have visited GEV to seek out how their ecovillage thrives as a composite of people with different levels of skills, authority and influence who must work together.

Nimai Lila explained how “in Vedic culture there is a system of varnashrama, which has been misconstrued as a caste system of hierarchy through a modern material conception of life.” As a spiritual concept, it is “a system of love and unity in diversity.” Varnashrama recognizes spiritual egalitarianism, wherein there is an equality of all souls in expressing love to Krishna. It also recognizes the natural differences in temporary bodily natures inclined to different types of work. In other words, all work can be spiritually equal and valued as divine service to Krishna, though the work itself may appear to be of various levels of importance materially.

You can only be happy if you are in your place of belonging in the community, having different areas of responsibilities based on your nature and talents. Those who are better for leadership roles will make the decisions. Not everyone can be a supervisor and not everyone would enjoy that. The social structure can be appreciated by taking into account the variety of human natures and inclination towards responsibility and power and ability to steward that power.

Nimai Lila explained that even if you have the best of ecological practices and systems, if there is no “spiritual culture governing the infrastructure, you cannot really have sustainability.” He posits that looking at social systems as egalitarian on the bodily platform and not on the spiritual platform is what makes it just another version of a mechanical system of modernity, separating humans from nature. By removing individual variations in human nature
to contribute to the whole, we paradoxically constrain the ability to make key decisions that benefit the whole of the community. According to Nimai Lila, the best form of governance, as demonstrated at GEV, is compassionate leadership that represents the community, unified under a shared purpose and goal. In this model, everyone is engaged in a meaningful, fulfilling way that suits their nature.
Chapter 8
Summary and Conclusions

8.1 Key Findings

Numerous codes were ascribed across the community member and management interviews, in addition to field observations and participation notes. From this long list of codes, it was evident that many terms and phrases could be grouped on axes, or points of intersection. All codes fit into one or more of the following nine conceptual categories:

1. Devotional service to Radha–Krishna (bhakti)
2. Simple living, high thinking (Krishna consciousness)
3. Respect for mother earth as supreme divine feminine (Radha)
4. Reciprocal relationships
5. Spiritual community
6. Healthy lifestyle connected to environment
7. Daily life centered around Radha–Krishna
8. Sacredness of all life
9. Interconnection/interdependence of all life

These categories represent Vedic philosophical and spiritual beliefs, values, practices or behaviors which, as defined earlier in the thesis, are all representations of culture. A comparative analysis of these nine categories, with the extensive literature review on cultures as sustainability and unsustainability, helped reveal the significant themes of holistic culture.

The following three general themes emerged as the fundamental and interrelated dimensions of culture as sustainability. The content following the colons are relational statements meant to describe how the three are interrelated specifically in the context of Vedic culture exercised at Govardhan Ecovillage:
1. **Human–nature–other species interrelationship:** This dynamic arises from understanding earth as the grace of the supreme divine feminine Radha, and therefore devotees show gratitude for her gifts (resources) and reciprocate with her (stewardship). Non-human species are also seen as sacred souls, part and parcel of Krishna. This conception of mother earth and other species fosters a sense of interdependence, compassion, responsibility and respect for all of creation.

2. **Human–human interrelationship:** This dynamic arises from the understanding that devotee association is vital for spiritual practice and growth, because devotees provide inspiration, support and means of connection to Radha–Krishna. Devotees dedicate their lives to service to Radha–Krishna through serving one another and all of humanity. This fosters a sense of interconnection, belonging, care and accountability in local community and as global citizens.

3. **Non-materialistic pursuit of self-fulfillment:** This dynamic arises from the understanding that the ultimate goal of life is for the self to realize their eternal relationship with Radha–Krishna and to act in loving selfless service. This spiritual connection transcends materialistic endeavors and acquisition, with resources solely used in service to Radha–Krishna and others. This fosters a sense of meaning, identity, purpose and contentment with simple living.

Each of the three inner dimensions of culture reflect one part of life in intimate relationship with the whole of life, which in the case of Vedic culture is Radha–Krishna. The different parts (i.e. humans, activity, other species, and nature) and their relationship with the whole is integral, intrinsic and inseparable, meaning that no single part can exist independently or be understood without reference to Radha–Krishna. These relationships are expressed actively through service.
Furthermore, the integrity of one dynamic is upheld and nourished by the presence and harmony of the other two. For example, that one could exploit or degrade nature while claiming to love Krishna would be antithetical in this culture’s paradigm. Additionally, rather than viewing social, economic and ecological dimensions as separate and distinct aspects of sustainability, Vedic culture collapses these three into an integrated holistic way of life that naturally breeds sustainability.

Therefore, Vedic culture can be understood as a holistic paradigm that fosters a reconnection of humans with nature and other species, cultivates meaningful human to human relationships and community, and provides an alternative model of happiness and fulfillment. This paradigm is centered around Radha–Krishna as the Absolute Truth, the summum bonum of all existence who give meaning to life and explanation of reality. This can be illustrated best in Fig. 34, which depicts the reciprocal interaction of the dynamics wherein at any point of entry one dimension is simultaneously interacting with the other two:

Fig. 34. Vedic Culture as Sustainability
Conversely, it is significant to recall that modern Western culture is grouped around economic growth, as depicted in Fig. 35. This growth model generates an insatiable feedback of perpetually increasing material resources through ecological exploitation and destruction and the unjust treatment of other humans and species. Listed inversely as:

1. **Human–nature–other species separation**: humans are superior to and can control and exploit nature.
2. **Human–human separation**: humans are individuals acting for self-interest.
3. **Materialistic pursuit of self-fulfillment**: humans attain prosperity through continued material acquisition.

![Diagram of Modern Western Culture as Unsustainability](image)

**Fig. 35.** Modern Western Culture as Unsustainability

**8.2 Intellectual Contribution**

These three interrelated dynamics may identify the essential dimensions of culture as sustainability. However, the framework warrants further investigation into how it may be applied generally and to non-Vedic cultures that do not have an absolute understanding of the
whole, like Govardhan Ecovillage’s Radha–Krishna. GEV’s framework rests entirely on this shared center just like modern Western cultures rests entirely on the pursuit of economic growth. Therefore, multiple questions become pertinent in order to investigate other ecovillages: what other non-Vedic or secular cultures are determinants of sustainability in modern Western societies? What is the unifying core of such a culture’s paradigm? How does the culture land on the same conception of the core? Is sustainability possible without a fixed culture? Are there secular universals that can be used as a surrogate for Radha–Krishna (i.e. compassion, service)? Does culture as sustainability require a definitively defined core such as Radha-Krishna?

This work is crucial, because it contributes to the understanding of which cultural beliefs, values and principles are inherently sustainable. Many other ecovillages struggle with social conflict, organization and management and maintaining a unified purpose and vision over the years. Additionally, many ecovillages accept culture as an ever-evolving discovery. It would serve well for ecovillages to have a fixed framework of cultural principles that guide the process, otherwise it appears that ecovillages will always be embattled in finding themselves on shifting ground. If ecovillages are indeed microcosms of society, this holds immense implications for what it means for society at large to truly transition to one of sustainability.

8.3 Opportunities for Future Impact

Ecovillages, which have been defined for so long as extreme alternatives, must find a way to influence the mainstream. The following two areas of focus are recommended to GEV, and ecovillages in general, to expand their influence:

1. **Develop templates for replication:** Model templates to create ecovillages elsewhere are needed to ease the overwhelming difficulty of starting an ecovillage from scratch, especially in light of increased regulation regarding zoning. A model that has already been recognized and approved by official planners may be more easily greenlighted.
Additionally, what sets GEV apart from most ecovillages is that it has struck a gold mine in terms of social dynamics and structures. An ecovillage model built off of Vedic culture could be well received and applied to other villages in India, sparking spatial diffusion of Vedic culture as sustainability.

2. **Create self-financing strategies:** As is the case for most ecovillages, finding financial sustainability is GEV’s main challenge. GEV must find ways to regenerate and promote a thriving, local economy that keeps money circulating within the local sphere and is also independent from conventional markets and donations.

### 8.4 Conclusions

The age of modern Western culture as we know it is nearing its end as the world teeters on the precipice of dramatic global climate change and the demise of socio-economic structures. A person’s motives and actions are relative to their beliefs and values, and the predominating collective beliefs and values constitute a society’s culture at its most profound level. Modern Western culture has a fragmented conception of reality that separates humans from one another, from nature and other species and narrowly focuses self-interest on individual material gains for prosperity. It is a culture that simply does not acknowledge the interconnection of life and is therefore inherently unsustainable. If our existence is interconnected, then we must seek out the values that sustain integrity and promote the flourishing of these relationships. Our wellbeing depends on it. If the world desires sustainability, it becomes critical to build society on a foundation of beliefs and values that are based off of this interconnected reality.

We can seize this moment as a revolutionary opportunity to rebuild society as just and equal for people and the planet. Though these are lofty aspirations, we will inevitably be forced into radical change one way or another. No doubt the transition will happen, whether we transition proactively, or the whole system caves in on itself. Lifestyles must become simpler,
slower, more local and decentralized. The materials economy must shift to a service economy that is more meaningful and less resource intensive and non-polluting. Communities and social connections must be revitalized and prioritized. A shift from external to intrinsic goals must steer humanity’s search for meaning and purpose, a search that must not degrade or devalue any species or the earth. This can only be informed by a holistic, ecocentric paradigm that acknowledges the interrelationship of humans, nature and other species as a foundational reality of the world, such as the culture of spiritual ecology found within the Vedic culture of Govardhan Ecovillage. In Vedic culture the binding force is Radha–Krishna that gives meaning and motive to these interconnections through service. Other possible cultures as sustainability would need to be investigated to see if such a framework stands without a defined and fixed core, or if there are alternatives.

We get a glimpse into how the transition might look on a micro-scale in ecovillages where cultures as sustainability are unfolding. Ecovillages like GEV are developing the skills, technologies and community structures needed to respond to the necessary transition the world must undergo. Most significantly, their sustainability designs and practices are built off an entirely alternative set of beliefs, values and principles to modern Western culture. Researching cultures that are inherently sustainable is critical to discover cultural attributes and dynamics that promote a truly transformed society. Vedic culture is one of the multitudes of spiritual and secular cultural movements that may lead to sustainability. This foundational knowledge can be harnessed for the greater good to transform the cultural landscape of the planet in the coming decades and beyond.
Appendix

Interview questions
1. Gender
2. Age
3. Marital Status
4. Number of children
5. Number of Dependents
6. Education Level
7. Place of origin
8. What year did you move to GEV?
9. Why are you living at Govardhan Ecovillage (option to choose more than one)?
   a. To live within a spiritual community
   b. To live in harmony with environment
   c. To earn a livelihood
11. What was your previous occupation before moving here?
12. What is your occupation/role within the community?
   a. If you are married, what is your spouse's occupation/role?
13. How many hours a day and hours per week do you work?
14. What is your monthly income (combined if married)?
15. What expenses do you have?
   a. Is your income sufficient?
   b. If it is not sufficient, explain why.
16. Are your living conditions comfortable?
17. Are your basic needs met by Govardhan Ecovillage (water, electricity, healthcare, education for children)?
18. What do you have to purchase outside of GEV?
19. Has your quality of life improved since living in GEV?
   a. Explain why or why not.
20. Do you feel a sense of needing to still increase your standard of living?
21. What are your main problems you face living in the community?
22. Do you plan to stay here permanently, or is this a temporary residency?
23. Is the drinking water safe?
   a. Have you ever gotten sick from the water?
24. Have you ever gotten malaria?
   a. If so, how were you taken care of by GEV management?
25. Does GEV management maintain the grounds and surrounding environment well or not?
26. Are there community lectures other than religion that you attend?
27. How many times do you go to the temple a day?
28. What are your daily spiritual practices?
29. What does your spirituality teach you about the relationship between humans and nature?
30. Are you happy living in the community?
   a. Do you feel a sense of community?
Bibliography


