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Understanding the Motivation Complexity of Grassroots Ecopreneurs at the Base of the Pyramid

Norma Juma [1], Joy Olabisi [2,*] and Eliada Griffin-EL [3]

[1] School of Business, Washburn University, Topeka, KS 66610, USA
[2] Rochester Institute of Technology, Saunders College of Business, Rochester, NY 14623, USA
[3] Rockwell School of Business, Robert Morris University, Pittsburgh, PA 15108, USA
* Correspondence: jolabisi@saunders.rit.edu

Abstract: This qualitative study focuses on the factors that motivate grassroots ecopreneurship at the base of the pyramid (BoP). Our study is anchored by the research question, "How are grassroots ecopreneurs at the BoP of Kenya motivated?" The participants were mainly drawn from beneficiaries of a multinational Non-Governmental Organization. Using a grounded theory approach, we conducted 12 qualitative case studies, 10 focus groups and 2 interviews, recording 61 participants. We triangulated data sources through data collected from primary and secondary sources, such as archival documents and archival interviews. Extant research suggests that grassroots ecopreneurs (GEs) at the BoP primarily engage in necessity-driven ventures. However, this study demonstrates that GEs' motives to launch new ventures appear to be multifaceted and simultaneous (not linear or sequential). We also observed an interlinkage of environmental and economic motives in GEs who diversified their investments into related and unrelated areas. Our findings also indicate that GEs at the BoP developed socio-ethical motives-the GEs' concerns toward other members of the community-and a desire to create social value beyond private value. All these motives contributed to the GEs establishing and sustaining viable businesses.

Keywords: grassroots ecopreneurs (GEs); base of the pyramid (BoP); ecopreneurship; sustainable entrepreneurship; corporate social responsibility

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1. Introduction

More and more, the ecological environment has become a strategic consideration in the activities of the business sector [1,2]. Shifting logics in the corporate and entrepreneurial entities have led to increased adoption of environmental management strategies [3] that produce an array of sustainability-forward products, services, and processes that advance economic, social, and ecological goals [4,5]. In turn, the field of sustainable entrepreneurship [2], a conceptual umbrella for related terms such as ecopreneur, environmental entrepreneur, and green entrepreneur [4], has grown in research and practice. Empirical studies explore the sustainable practices by small business owners [6], and both opportunity and necessity motivations as drivers of sustainable entrepreneurial pursuits [2]. Sarkar and Pansera (2017) describe GEs, or 'grassroots entrepreneurs' as resource-scarce entrepreneurs who use locally available materials to offer environmentally friendly, sustainable solutions to pressing local problems [7]. The work of grassroots ecopreneurs has been theorized across the globe, including areas of Latin America such as Colombia [8], East Africa [7], Europe, and Australia [9].

Although ongoing research continues to explore entrepreneurial initiatives across a variety of resource and institutional contexts [10,11], there is a paucity of knowledge on the motivation of grassroots ecopreneurs (GEs) who operate at the "bottom of the pyramid" (BoP) in these marginalized societies, and their role in addressing local challenges [12]. Extant research has opined that BoP entrepreneurs were pushed into entrepreneurship due

to necessity or survival instincts, as individuals at the BoP are disproportionately affected by the adverse effects of climate change. [13–16]. Moreover, a number of researchers presume that the solutions to adverse climate change are more likely to be externally driven [17]. The data presents an intriguing puzzle in defiance of the literature's common assertions, in that grassroots entrepreneurs operate in some of Kenya's most resource-constrained regions, but with emerging strategies and operations for business scale and growth. In turn, our study is anchored by the research question, *"How are grassroots ecopreneurs at the BoP of Kenya motivated?"*

As per their limited resources or constrained conditions, empirical research seldom conceptualized grassroots ecopreneurs as *opportunity driven entrepreneurs*, who pursue entrepreneurship due to self-realization or the desire to exploit a business opportunity [18–20]. In turn, ecopreneurs operating at the BoP are often theorized through the lens of their poverty and presumed to be motivated by necessity alone. As a result, this single-dimensional perspective of ecopreneurs' motivation at the BoP largely minimizes our understanding of their sustainable entrepreneurial activity to the narrow measure of only certain resources. As a result, this study is important in that, despite empirical evidence suggesting that entrepreneurship activity in resource-constrained environments tends to be driven by necessity [16], questions remain as to how grassroots entrepreneurs in these environments are able to develop viable business models that are financially self-sustaining, in addition to addressing a need.

Our approach to this study has three core objectives. The first objective is to address the literature gap by investigating the motivation of grassroots ecopreneurs in the BoP context of Kenya, where the data reveals that the motives of grassroots ecopreneurs are environmentally and economically interlinked. The second objective is to examine grassroots ecopreneurship from a micro-level perspective, in resonance with the emphasis of influential scholars, such as [12], who acknowledge that "almost all of the published research to date takes a macro view of entrepreneurship" and advocate for more focus on "the micro aspect of entrepreneurship" (p. 687). Thirdly, we examine the data using a grounded theory approach and a socialist constructivist interpretive framework to explore GEs in Kenya who serve those at the BoP. We feature 12 qualitative case studies of grassroots entrepreneurs who are living in the BoP and operate in the informal sector, analyzing both primary and secondary data to inductively explore and understand this phenomenon. We investigate this assumption by exploring GEs at the BoP to understand their motivations, viability, and sustainability of their business models.

Our analysis presents the original concept of *the multiplicity of motivation*. The data reveals that as ecopreneurs advance and mature in their business development, a complex pattern of interlinked motivations drives their entrepreneurial activity. This multi-motivational framework includes the motivational orientations of *necessity, opportunity, environmental, socio-ethical, and structural*. Our findings support the argument that this motivational multiplicity positions ecopreneurs to draw from an amorphous combination of motivations at any given time as warranted by the strategic decision or action at hand. The argument advances the sustainability literature by offering nuanced layers to the over-simplified dichotomy of necessity versus opportunity motivation long accepted in the entrepreneurial discourse.

The paper first explores ecopreneurship at the base of the economic pyramid and in Kenya. We describe our methodological approach of a qualitative multi-case study and present our findings and theoretical propositions. We conclude with the discussion and suggest directions for future research.

2. Ecopreneurship at the Base of the Economic Pyramid

Increasingly, policy makers, scholars, activists, and leaders have interrogated the implications of economic expansion on the natural environment [4,21], and mitigating or preventative measures have been embedded in policy, institutional initiatives, and, as featured in this paper, entrepreneurial strategies. Scholars use a variety of terms to describe

entrepreneurs who produce environmentally-sustainable products and engage in relevant business practices [22]. Namely, green entrepreneurs [23], environmental/sustainable entrepreneurs [24,25], GEs, grassroots innovators [26], and ecological entrepreneurs - also known as ecopreneurs [27,28]- are terms often used interchangeably. Sarkar and Pansera (2017) define GEs as "entrepreneurs moved by social and environmental concerns, coming up with simple and eco-friendly solutions in the quest to resolve everyday life problems" (p. 327). GEs "seek innovation processes that are socially inclusive towards local communities in terms of the knowledge, processes and outcomes involved" ([26], p. 114). Scholars add that these ecopreneurs often live and work in resource-constrained environments. Although such environments exist in developed countries, developing countries are more often characterized as being replete with scarce resources. In addition to resource scarcity, many of these countries experience land fragmentation, lax government environmental policies, market failures, and environmentally degrading behaviors, prompting ecopreneurs to seek eco-friendly solutions. The term "grassroots ecopreneur (GE)" is particularly appropriate when referring to ecopreneurs operating at the BoP, since they are indeed moved by social and environmental concerns. According to Sarkar and Pansera (2017), little is known about these "bottom-up actors, who are cognizant of their milieu and their community's specific needs and resources, contexts that can be hard to grasp by those on the outside" (p. 328). Moreover, they are well aware of the failures of government policies and market mechanisms in their communities. The entrepreneurship literature acknowledges that ecopreneurial opportunities may arise from these inherent failures [29–34].

The motivations and values of GEs are stimulated by social and economic self-determination. Scholars, such as Minniti and colleagues (2005), argued that whereas entrepreneurs are often classified as either opportunity-driven or necessity-driven, some entrepreneurs may be involved in business for *both* reasons [18–20,35]. Furthermore, extant research [19,35] found that entrepreneurs' motives may shift over time as the venture matures from necessity-oriented to opportunity-oriented. Williams (2007) thus argued that it is imperative to move from a dichotomous, simplistic classification schema of entrepreneurs' motives to a more textured understanding of their diverse and complex motives. In turn, some scholars have asserted the co-existence of both motivations [16] or presented the motivations as a continuum [19,35].

GEs seek profit through business opportunities with potentially scalable business models, as well as affordable products that provide solutions to identified environmental problems in their communities [36]. These GEs could also be viewed as social bricoleurs [37], since they generally operate within their local communities and use scarce, locally available resources to solve previously unaddressed community problems. These resources could come in a variety of forms, such as labor, skills, or cheap materials that some may characterize as useless or substandard [37]. These GEs also add value because they offer employment opportunities, empower community members, and benefit those communities facing environmental degradation and other long-standing environmental issues. We now discuss grassroots ecopreneurship in our particular BoP context, Kenya.

Ecopreneurship in the Kenyan Context

Kenya's economy is highly reliant on climate-sensitive sectors such as agriculture (including livestock, forestry and fishery), tourism, wildlife, and hydropower. The leading GDP sectors of the Kenyan economy are agriculture and tourism. With a GDP of USD 110.35 billion and an annual GDP growth rate of 7.5% in 2021, Kenya has the strongest economy in east and central Africa [38]. However, Kenya's economy has high vulnerabilities due to its high reliance on climate-sensitive sectors and imminent climate change risk. Over 80% of its land is classified as Arid and Semi-Arid Lands (ASALs), which are susceptible to extreme climatic fluctuations such as drought, locust invasion, and flood. These occurrences have displaced communities, disrupted learning, inhibited social services delivery, and induced social tensions and insecurities [39].

In order to understand what may motivate grassroots ecopreneurship in Kenya, we must understand the demographic distribution of the country and vulnerabilities of those at the bottom of the economic pyramid. Kenya's population is estimated to be 54.9 million, with an annual population growth rate of 2.2%. In 2021, 28% of Kenya's total population lived in urban areas and cities, leaving almost 72% of the population, who are largely dependent on subsistence farming, living in rural areas [38]. Given that roughly less than 20% of the land area is classified as arable land, the immense pressure on the arable land cannot be overstated. This condition is further exacerbated by sociocultural factors. For instance, it is estimated that over 90% of the rural population's energy requirement is met by fuelwood. The charcoal industry alone was valued at over USD 1.13 million (2016 data), which can be attributed to economic incentives and sheer lack of alternatives to affordable clean fuel. While 98 percent of Kenya's arable land is rainfed, only 13 percent of potentially irrigable land has been developed [40]. Changes in climate and weather patterns will expose the rain-fed farming systems, particularly the arid and semi-arid lands, to more climate related vulnerabilities. Furthermore, land ownership is passed down to subsequent generations which further fragments acreage with each succeeding generation.

Grassroots ecopreneurs encounter these challenges as they experience: health repercussions of using carbon intensive cooking fuel; low agricultural productivity due to land fragmentation, deforestation, and poor farming mechanisms; crop failure due to droughts, floods or locust invasion; among a host of other ills. Kenya is a leading economy in East and Central Africa so understanding the challenges, vulnerabilities and opportunities of ecopreneurs in this country can be instructive, not only to policy makers in Kenya but to other countries in the region. More specifically, the World Bank noted that increased agricultural productivity, support for sustainable development of the blue economy, and wildlife conservation are some of the key sectors that can generate economic growth for Kenya. Those are the key sectors of grassroots ecopreneurs, who are involved in identifying innovative solutions that are relevant and applicable to their milieu.

3. Research Methodology

Researchers have recognized the case study approach as being the most suitable method for investigating a novel area [41,42] because it enables researchers to expand on the field of interest. Thus, this methodological approach is ideal for our investigation of the seldom-studied entrepreneurial motives in an emerging nation and the viability and sustainability of GE enterprises. Specifically, we adopted a grounded theory approach [43,44] to analyze the data and ultimately arrive at conceptual insights and propositions.

3.1. Sampling Framework and Data Collection

We used purposive sampling, a nonprobability sampling procedure which involved selecting a target sample with prespecified characteristics and experiences [45,46]. We targeted a wide cross-section of ecopreneurs in apiculture (beekeeping); afforestation and reforestation; conservation agriculture; and low-tech clean energy. Additionally, all the eco-enterprises had to be for-profit entities of any ownership structure.

We collected data from primary sources-semi-structured interviews and micro-ethnography-and secondary sources such as archival documents and archival interviews on YouTube and other channels [47]. We triangulated data sources to ensure research rigor [48–50]. Semi-structured interviews allowed us to retrieve the data that is most vital to each participant [51]. Micro-ethnography involves brief and comprehensive accounts that include all material relevant for interpreting data [52]. Micro-ethnography is particularly important because this approach is sensitive to the context and embeddedness of the phenomena under investigation. This approach allowed us to observe the actions and interactions of the ecopreneurs in their milieu and deduce the meaning of their motivations [53,54]. Consistent with extant qualitative research, we did not disguise the identity of public entities that we interacted with or that were mentioned by the ecopreneurs; however, all ecopreneurs were given pseudonyms due to an obligation to participants' confidentiality. Furthermore,

the raw data will not be made public [10,55]. We conducted 12 face to face interviews with 61 participants. See Table 1 below for a list of our data sources, which includes the 12 interviews as well as secondary data (case study interviews) of the Amondi Community Group (#12). We acknowledge that not all 61 participants voiced their motivation for engaging in ecopreneurship. However, all 61 participants were actively involved in the team activities during our visit. We recorded 38 active voices. Two of the 12 interview sessions were individual interviews and ten were focus groups. The interviews were conducted during group meetings or at the business premises of the interviewees. Five of the ten focus groups were held during a regular group meeting, while another five were impromptu group sessions which involved touring projects and talking to team members who were present. The interviews were conducted during group meetings. The interviews, which adhered to IRB requirements, produced 13 h, 28 min of recording, ranging from 36–120 min per session.

Table 1. Interview, Participant Observation and Archival Data.

Data Source	Data Format	Duration
Otieno [1] #1: Male; Green Coal Solution Ltd.; low-tech clean energy	Primary data: *Field Interviews & Observations* Director of Sales & Operations; Finance & Production Manager Secondary data: Otieno, Founder CEO	2 h
Abuya #2: Female; Briquette Business; low-tech clean energy	Primary data: *Field Interview & Observation* Secondary data: TV interviews	1 h 1.57 min; 3.16 min
Adongo #3: Female; a small-scale commercial farmer; agribusiness	Primary data: *Field Interview & Observation*	42 min
Akello #4: Female; a small-scale commercial farmer; agribusiness	Primary data: *Field Interview & Observation*	61 min
Apiyo #5: Female; Briquette Business; low-tech clean energy	Primary data: *Field Interview & Observation*	36 min
Obuya #6: Male; Environmentalist; afforestation & reforestation	Primary data: *Field Interview & Observation*	46 min
Odongo #7: Male; Conservation Agriculturalist; agribusiness	Primary data: *Field Interview & Observation*	43 min
Opiyo #8: Male; Conservation Agriculturalist; agribusiness	Primary data: *Field Interview & Observation*	40 min
Owino #9: Male; Environmentalist & Commercial Farmer; forestry & agribusiness	Primary data: *Field Interview & Observation*	46 min
Wekese #10: Women Pottery group; low-tech clean energy	Secondary data:	1.32 min
Awino Sisters #11: Member of Church Sisters: clean water	Primary data: *Field Interview & Observation*	1 hr 45 min
Amondi Community Group #12: Pottery group; low-tech clean energy	Secondary data: HiH EA case study interviews	
Mutanu #13: Female; Basket Weaver; recycled waste	Primary data: *Field Interview & Observation*	49 min

[1] We have altered individual names and a few inconsequential details to maintain confidentiality.

3.2. Analysis

We used Guba and Lincoln's [56,57] recommendations for qualitative studies during our data collection and analysis. Their approach requires that the study be driven by a discipline-specific question, which in turn dictates the data collection procedures and analysis process. Our research question, as stated in the introduction, drove the selection of our target sample and sampling framework as articulated above. We generated an

interview protocol which was informed by identified gaps in the literature [7,36,58]. We conducted interviews, gathered micro-ethnography data (verbalized and observed actions and interactions of ecopreneurs), and retrieved archival data (where available). We utilized NVivo Plus, a qualitative analysis software to analyze the data.

Using a three-step data analysis approach, we started with open coding, where we used a hybrid of "a priori codes" derived from our research questions and "emergent codes" based on the relationships that appeared in the data [42,59–61]. We used NVivo to generate a preliminary textual analysis. First, we did a search in textual sources such as interview transcripts, open-ended survey responses, annual reports, marketing materials and field notes. Secondly, we depicted the results in Word Cloud, a Tree Map and a Cluster Analysis. We used NVivo visualizations to identify "emergent codes." For instance, we were interested in the most frequently used words or phrases as depicted in the Word Cloud. Using a Tree Map helped us discern the words or phrases commonly used in close proximity, identifying sequencing of words or phrases (see Figure 1).

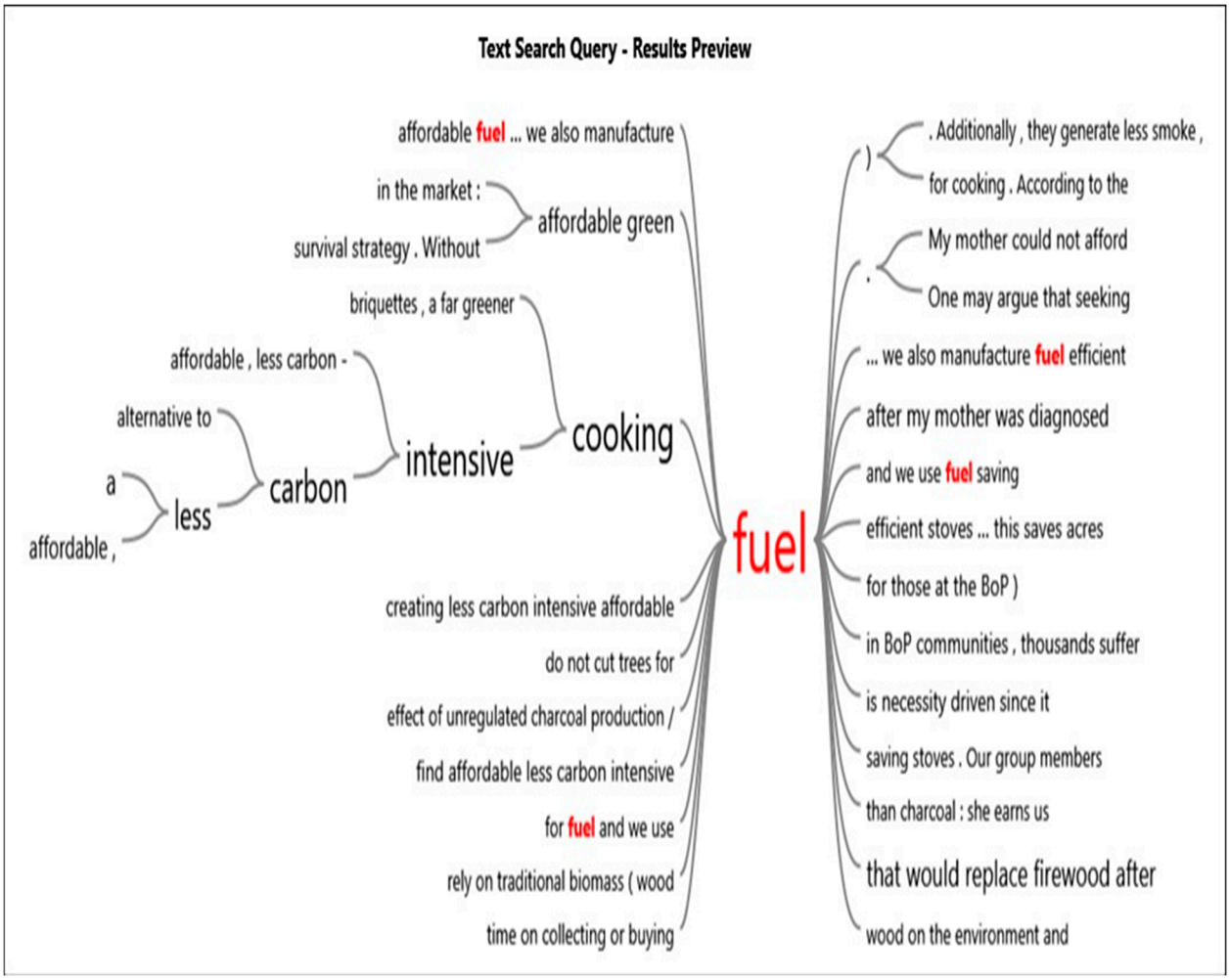

Figure 1. Illustration of Emergent Codes-Tree Map of Most Frequently Used Words.

The second step of our data analysis involved axial coding [62]. We ran several matrix coding queries to cross-tabulate themes. The first matrix coding query included coded content from the GEs. We then ran a Comparison Diagram to generate a visual comparison. For instance, we compared the GEs responses to questions, such as what motivated them to start their venture and what helped them to sustain their businesses. These analyses helped us to examine relationships between and within the initial themes.

In the final step, we reviewed each case to check for the degree of emphasis on each of the second-order themes. We closely mapped our observations to the initial research question [63]. This process generated information that either confirmed or countered the identified categories. We conducted an inter-rater coding and reconciled the differences. We also went back and forth between the extant literature and data and eventually determined the three aggregate dimensions: Economic Sustainability/Profitability (economic motive and necessity driven; economic motive and opportunity driven); Environmental Sustainability (environmental motive); Social sustainability (social-ethical motive). Figure 2 displays a project mapping of our analysis.

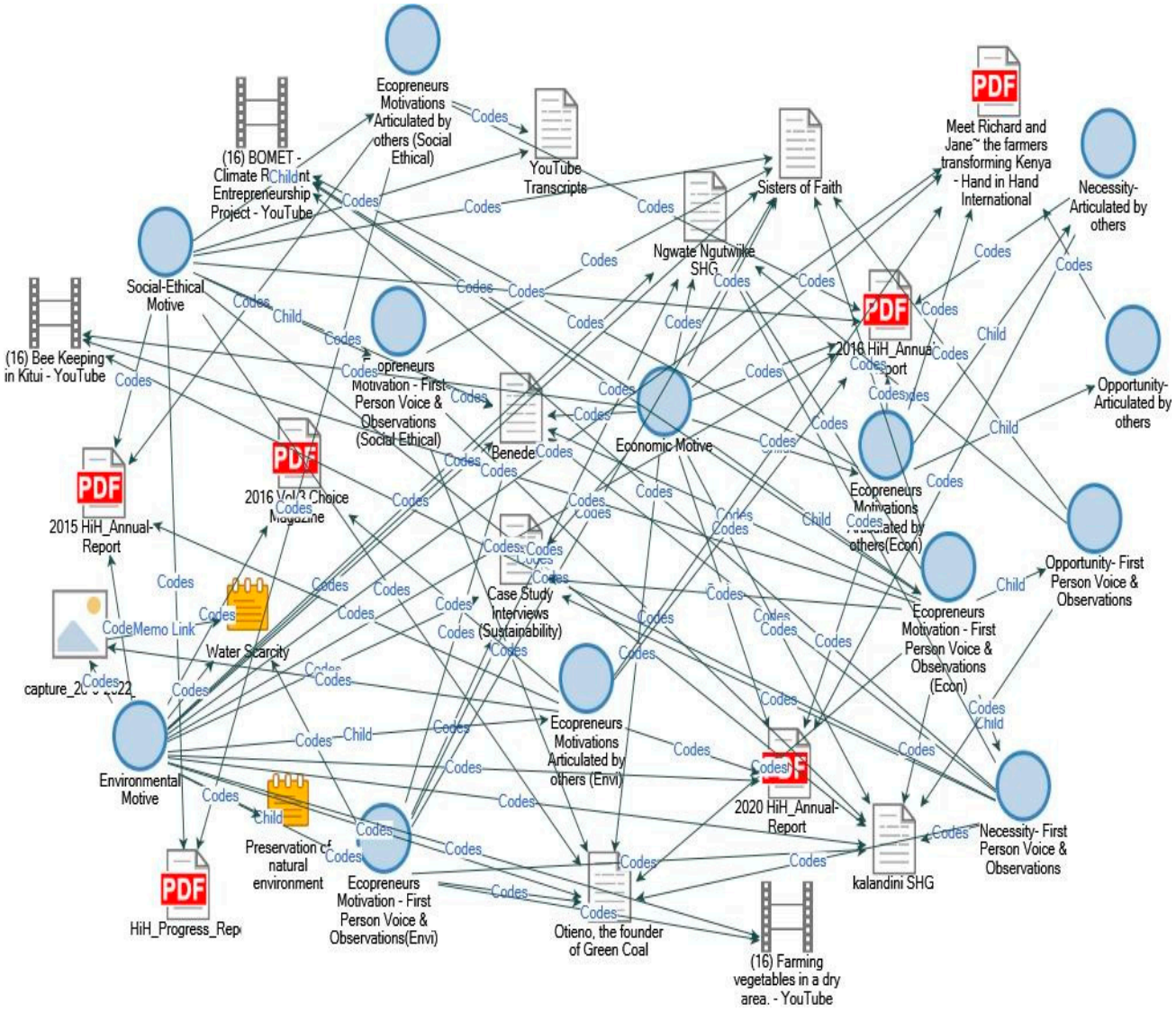

Figure 2. Project Map Depicting Primary and Secondary Data.

We solicited feedback from our peers and practitioners who are experts and thought leaders in the field to validate the findings. An earlier version of this paper was presented at a conference where we obtained feedback from peers in the field. Ref. [64] argued that this iterative approach is imperative in identifying new phenomena as well as possible disparities. Table 2 below shows the coding structure used in our analysis and Table 3 is the Code book that depicts the comprehensive coding structure.

Table 2. Coding Structure for Data Analysis.

First Order Themes (Open Coding)	Second Order Themes (Axial Codes)	Aggregate Themes (Selective Coding)
"When my mother was diagnosed with a respiratory tract infection I knew I had to do something . . . I knew a better way was possible. I dropped out from a sports club and I joined the science lab club. I was determined to find affordable less carbon intensive fuel. My mother could not afford gas stoves and we had no electricity in my village." [Otieno # 1] *"Initially my desire was to provide for my family, I wanted a safer home and to meet our basic needs . . . "* [Abuya #2] *With every successive generation the land is further fragmented. People in our community find it difficult to support their family using the ancient farming techniques on small parcels of land. The story is the same for most people in my village. I wanted my story to be different.* [Adongo #3)] *The business training I obtained from HiH EA was instrumental in setting the price. I factored in cost of material, my wages and a profit before setting my selling price* [Apiyo #5 of Briquette Business]. *Business training from HiH EA made a big difference on how I practice farming today. We got technical support from the National Agriculture and Livestock Extension Programme (NALEP), which greatly increased both the quality and quantity of my yield. HiH EA taught us the significance of adding value to basic commodities. I am currently seeking certification by the Kenya Bureau of standard, which can readily broaden my market reach.* Opiyo #8, a small-scale commercial farmer.	[**economic motive** and necessity driven]	Economic Sustainability/Profitability

First Order Themes (Open Coding)	Second Order Themes (Axial Codes)	Aggregate Themes (Selective Coding)
"When my mother was diagnosed with a respiratory tract infection I knew I had to do something . . . I knew a better way was possible. I dropped out from a sports club and I joined the science lab club. I was determined to find affordable less carbon intensive fuel. My mother could not afford gas stoves and we had no electricity in my village." [Otieno # 1] *"Initially my desire was to provide for my family, I wanted a safer home and to meet our basic needs . . . "* [Abuya #2] *With every successive generation the land is further fragmented. People in our community find it difficult to support their family using the ancient farming techniques on small parcels of land. The story is the same for most people in my village. I wanted my story to be different.* [Adongo #3)] *The business training I obtained from HiH EA was instrumental in setting the price. I factored in cost of material, my wages and a profit before setting my selling price* [Apiyo #5 of Briquette Business]. *Business training from HiH EA made a big difference on how I practice farming today. We got technical support from the National Agriculture and Livestock Extension Programme (NALEP), which greatly increased both the quality and quantity of my yield. HiH EA taught us the significance of adding value to basic commodities. I am currently seeking certification by the Kenya Bureau of standard, which can readily broaden my market reach.* Opiyo #8, a small-scale commercial farmer.	[**economic motive** and necessity driven]	Economic Sustainability/Profitability

Table 2. *Cont.*

First Order Themes	Second Order Themes	Aggregate Themes
"We manufacture briquettes from agricultural wastes saving trees and creating less carbon intensive affordable fuel . . . we also manufacture fuel efficient stoves . . . this saves acres of tree cutting which is good for our environment and is good for our people" [Otieno, founder of Green Coal (#1)] *"Then I realized that I can train street families how to use discarded waste that nobody wanted such as charcoal dust, papers and cartons from garbage dumps and sawdust from mills to make briquettes."* [Abuya #2] *In our community, land is passed down through male lineage. With every successive generation the land is further fragmented. People in our community find it difficult to support their family using the ancient farming techniques on small parcels of land. The story is the same for most people in my village. I wanted my story to be different.* [Adongo #3] *This saving is largely from selling tree seedlings* [Obuya #6)] *Our group sincerely appreciates the business training given by HiH EA which is invaluable. Officials from the Ministry of Environment and Natural Resources provided us with high quality seedlings and trained us in afforestation. We have collectively planted thousands of trees and sold thousands of seedlings [environment and economic motive interlinked]. Individually our members have planted dozens of trees. Our members understand the benefits of afforestation and ills of deforestation. We use fuel efficient stoves. Additionally, our members are in multiple ventures such as poultry and kitchen gardening.* [Amondi Community Group #12...Environment and economic motive interlinked]	[environmental motive]	Environmental Sustainability
"Upon launching our business, we realized that we could do more for our people, especially the women and youth . . . our distributors and retailers *are predominantly women and youth."* Otieno, founder of Green Coal (#1) *I realized that I can train street families how to use discarded waste that nobody wanted such as charcoal dust, papers and cartons from garbage dumps and sawdust from mills to make briquettes [environmental motive]. This was an easy decision for me because I was once homeless. I know the insecurities of living in the street. I wanted better for them...* [Abuya #2)] *I am now training other women in my village. There is enough demand for briquettes in the village and at places like Kibera and Kawangware in Nairobi.* [Apiyo #5 of Briquette Business]. *We are eager to encourage as many women groups as possible to seek business training and technical training. We want them to thrive just as we have thrived* [Awino # 11, Church Sisters Group]	[social-ethical motive]	Social Sustainability

Table 3. Code Book Depicting Comprehensive Coding Structure.

Name	Description
Economic Motive	This node depicts the economic-private rent rationale for starting the business. Included in this node is both Opportunity-Driven and/or Necessity-Driven
Ecopreneurs Motivation-First Person Voice & Observations (Econ)	Document why ecopreneurs are motivated to seek opportunities in eco friendly entrepreneurial ventures. The focus here is economic motive, First Person Voice
Necessity- First Person Voice & Observations	Those were pushed into entrepreneurship by necessity or survival instincts or a last resort. Principal reason to start a business is for sustenance. Focus is on entrepreneurs' voice. First Person Voice.
Opportunity- First Person Voice & Observations	The opportunity-driven refers to those endeavors born out of choice to exploit a business opportunity. Focus is on entrepreneurs' voice. First Person Voice.
Ecopreneurs Motivations Articulated by others(Econ)	These are secondary sources that document why or how ecopreneurs are motivated to seek opportunities in eco friendly entrepreneurial ventures. The focus here is economic motive.
Necessity- Articulated by others	Those were pushed into entrepreneurship by necessity or survival instincts or a last resort. Principal reason to start a business is for sustenance. Focus is on the third person's voice. As articulated by others
Opportunity- Articulated by others	The opportunity-driven refers to those endeavors born out of choice to exploit a business opportunity. Focus is on third person's voice. As articulated by others
Environmental Motive	This node depicts the desire to take corrective measures to conserve the natural environment. Included are expressions to conserve, sustain or reaffirm the natural environment in any way.
Ecopreneurs Motivation-First Person Voice & Observations(Envi)	These are primary sources that document why ecopreneurs are motivated to seek opportunities in eco friendly entrepreneurial ventures. The focus here is environmental motives.
Ecopreneurs Motivations Articulated by others (Envi)	These are secondary sources that document why or how ecopreneurs are motivated to seek opportunities in eco friendly entrepreneurial ventures. The focus here is environmental motive.
Social-Ethical Motive	This node depicts all expression of concerns toward other members of the community-and a desire to create social value beyond private value.
Ecopreneurs Motivation-First Person Voice & Observations (Social Ethical)	These are primary sources that document why ecopreneurs are motivated to seek opportunities in eco friendly entrepreneurial ventures. The focus here is social-ethical motive.
Ecopreneurs Motivations Articulated by others (Social Ethical)	These are secondary sources that document why or how ecopreneurs are motivated to seek opportunities in eco friendly entrepreneurial ventures. The focus here is social-ethical motive.

4. Findings

We identified a couple of distinct emerging themes that supported our research question: *"How are grassroots ecopreneurs at the BoP of Kenya motivated?"* First, the GEs' motivations to launch new ventures were multifaceted and not simply binary (either necessity

or opportunity driven). Moreover, the GEs' motivation does not appear to be linear or sequential. Secondly, GEs had viable business models that were financially self-sustaining. All microenterprises had multiple revenue streams and market driven business models, with the exception of the small enterprise (GreenCoal) in our sample that was not part of an emerging entrepreneurial ecosystem. We attributed this development of multiple revenue streams to economic motives, and we further opined that GEs environmental motives are interlinked with economic motives. These themes are further discussed below.

4.1. Multiplicity of Motivation

We observed that GEs are driven by a multiplicity of factors that cannot be classified simply as necessity-driven or opportunity-driven. We noticed that most interviewees were initially driven by necessity, consistent with the findings of prior studies [18–20]. However, although the GEs' motives did shift over time as the venture matured from necessity-oriented to opportunity-oriented, we observed a far more complex pattern. These GEs experienced the repercussions of environmental degradation; therefore, their decisions were informed and shaped by those experiences. These GEs were driven by a mission to create and sustain social value, not just private value. The essence of necessity motivation is to meet one's basic needs, which is a private value. These GEs sought a more inclusive value, exploring opportunities that would enhance the social and economic wellbeing of their communities, which suggests that they are concerned with creating social value and improving their community. Thus, we observed that the GEs were driven by multiple motives, such as necessity (a survival strategy when confronted with limited options or no alternative), opportunity orientations (satisfy a gap in the market), environmental (a desire to engage in environmental conservation), socio-ethical (community and cultural preservation), and structural (yielding to community and personal values and norms, government policies, and programs).

A GE in our sample, Abuya [#2], a garbage collector prior to launching a briquette business, initially focused on providing a better life for herself and her family. However, upon launching her business, she realized that she could do more. She essentially recycles garbage, collecting charcoal dust and sawdust from garbage dumps to produce briquettes. This activity awakened her environmental consciousness and commitment to her community. She states:

> *Initially my desire was to provide for my family, I wanted a safer home and to meet our basic needs . . .* [economic motive and necessity driven]. *Then I realized that everybody wanted the same things for themselves and their families. I realized that I can train street families how to use discarded waste that nobody wanted such as charcoal dust, papers and cartons from garbage dumps and sawdust from mills to make briquettes* [environmental motive]. *This was an easy decision for me because I was once homeless. I know the insecurities of living in the streets. I wanted better for them...* [social-ethical motive]

Awino Sisters #11, a group of twenty Kenyan church-going women decided to tackle one of their community's most protracted environmental and health problems-the shortage of clean drinking water. As a group, their initial motivation was to help each other establish a viable business venture as a source of sustenance (necessity driven). After one year, they collectively formed an eco-enterprise with the primary purpose of bridging a gap in their community: providing affordable clean drinking water (opportunity driven). This motivation did not preclude their desire to earn a livelihood from their efforts or to seek venture growth and sustainability. When asked about their immediate plan for their venture, growth, profitability and community prosperity were high on their agenda.

> *We are planning on setting up a second tank once we have paid off our first loan. Water is one of the scarcest commodities in our community. Safe water was only available from a few isolated water distribution points and a handful of traders were selling water at extremely high prices from donkey-carts. We want to bring an end to that [economic*

> *motive and opportunity driven]. We are eager to encourage as many women groups as possible to seek business and technical training. We want them to thrive just as we have thrived [socio-ethical motive]. Awino Sisters [#11].*

Most of the GEs were acutely aware of environmentally degrading economic behaviors. This awareness drove them out of necessity to seek alternative models. However, they were also pulled towards these models because they recognized them as viable, sustainable and profitable options. For instance, Adongo [#3], who transitioned from being a subsistence farmer to a small-scale commercial farmer, spoke of her motivation to start commercial farming:

> *In our community, land is passed down through male lineage. With every successive generation, the land is further fragmented. People in our community find it difficult to support their family using the ancient farming techniques on small parcels of land. The story is the same for most people in my village. I wanted my story to be different. I joined a self-help group and we obtained business training from HiH EA (an NGO that supported most of the GEs). Additionally, government agricultural officers gave us technical training. We also tuned into the Shamba Shape Up radio program and got notices alerting us of changes in weather, commodity prices, etc . . . [economic motive and necessity driven].*

Otieno, the founder of Green Coal [#1], was driven by the need to find a less carbon intensive cooking fuel that would replace firewood after his mother was diagnosed with a respiratory tract infection (opportunity driven: identified a gap in the market). We observe the multiple motives of need and opportunity. He elaborates:

> *When my mother was diagnosed with a respiratory tract infection I knew I had to do something . . . I knew a better way was possible. I dropped out from a sports club and I joined the science lab club. I was determined to find affordable less carbon intensive fuel. My mother could not afford gas stoves and we had no electricity in my village [necessity driven].*

However, upon launching his business he realized that it was possible to do a lot more for women and youth (opportunity driven and socio-ethical motive). Given the economic, social and ecological challenges that he experienced firsthand, Otieno and his colleagues launched a business that generates 'green fuel' (driven by environmental consciousness), sourced their distributors and retailers from their community [socio-ethical motive], and strived to have a financially profitable venture [economic motive]. He describes their strategy:

> *We manufacture briquettes from agricultural wastes saving trees and creating less carbon intensive affordable fuel . . . we also manufacture fuel efficient stoves . . . this saves acres of tree cutting which is good for our environment and is good for our people." [environmental motive] Otieno, founder of Green Coal [#1]*

This case was rather peculiar in comparison to the rest of the GEs in the sample. The business idea was conceived in a high school lab and launched by high school friends. This case was particularly interesting because even though these students came from a disadvantaged background, they were not pushed into entrepreneurship as a survival strategy, but rather they were pulled into it in order to fill a gap in the market: affordable green fuel. One may argue that seeking a safer alternative to carbon intensive cooking fuel is necessity-driven since it is a survival strategy. Without affordable green fuel in BoP communities, thousands suffer respiratory diseases and, too often, premature death. The GEs transitioned to an opportunity orientation (improving the livelihood of a community and conserving the environment, socio-ethical motive) before implementation of the idea. A noteworthy observation is that the transition to the opportunity orientation occurred in quick succession or it appeared simultaneously.

When asked about the primary motivation for the venture as well as any relevant secondary motivating factors, the GEs had similar responses. Their survival instincts

pushed them to identify the entrepreneurial opportunity; however, they soon realized that there was more they could do beyond providing for themselves. For instance, Otieno, the founder of Green Coal commented on their realization that their business could do more for their people, specifically the women and youth:

> *There is high youth unemployment in my country. Women are equally disadvantaged in terms of employment and owning property or business. We wanted to create opportunities for women and youth . . . our distributors and retailers are mainly women and youth. [socio-ethical motive]*

Similar to Otieno, Wekese [#10] is another group of ecopreneurs who had also experienced exposure to respiratory illness as a result of using charcoal and firewood openly. This cooking approach caused intensive carbon emission and exacerbated deforestation and Wekese sought to address this shortcoming:

> *We make modern, affordable and improved rocket propeller cook stoves. Compared to using traditional biomass, these cook stoves use less firewood and release less smoke. You need only two pieces of firewood to cook an entire meal. The stoves directly decrease time of firewood gathering and reduce indoor cooking smoke. [environmental motive] . . . . As a group, we make different sizes of the cook stoves and sell to other women as well as learning institutions thus creating income for ourselves. [economic motive] . . . . We have taken up this noble initiative to encourage the community to safeguard our environment for present and future generations. [Environmental motive interlinked with Social Ethical motive]*

Yet, another example of multiple motives working in tandem is Mutanu [#13], who was initially surviving on casual jobs like many other women in her village. She was driven by a need to do better [economic motive interlinked with necessity] and was challenged by supportive networks to think beyond what everyone else was doing. She explains:

> *After HiH EA enterprise training I realized that what I thought of as a hobby could be a business opportunity. Just about anybody can weave a basket in my village. There are different types of styles and sizes made from sisal. My trainer challenged me to think of how to offer something new to the market. [economic motive and opportunity driven] Then I thought of reworking discarded silver foil paper into bright, shiny silver baskets. This not only offers something new to the market but it also saves the environment because I am recycling waste that would have otherwise ended up in the landfills. [environmental motive] I have trained two women in my self-help group [socio-ethical motive]. The demand for my product is high, especially now that the government has banned plastic bags. [environmental motive].*

We opine that it is possible for GEs to be simultaneously driven by necessity, opportunity, and a host of other motives such as environmental, socio-ethical and structural motives. Thus, we assert that:

Proposition 1. *GEs are driven by a multiplicity of factors that motivate venture startup, and such factors are neither linear nor sequential.*

4.2. Environmental Motives Interlinked with Economic Motive-Multiple Revenue Streams

All the GEs in our sample operated their businesses using financially self-sustaining business models. Most of the GEs attained some business skill proficiency from either governmental institutions or NGOs. The majority of the GEs also operated eco-enterprises and additional conventional businesses to diversify and supplement their incomes.

The GEs were not only alert to failures of market mechanisms (i.e., the market's failure to provide affordable, less carbon-intensive cooking fuel for those at the BoP), but they were also informed on how to create an economically viable business model while conserving the environment and improving their communities. Akello, a small-scale commercial farmer [#4] notes: "I loan out my irrigation pump for a dollar a day once I am done irrigating my

farm." Before becoming a commercial micro-farmer, Akello used to earn only KES 1400 (around USD 14) a week. Now her income has gone up to KES 7000 (USD 70) a week and she has gained more independence.

Apiyo [#5], who owns a briquette business explains:

> *I first encountered charcoal dust briquettes when I visited my daughter at Kibera, Nairobi. That prompted me to act having obtained business training from HiH EA. I knew I could get discarded charcoal dust from dumpsites and I could also ask my neighbors and friends to sell their charcoal dust to me instead of discarding it [environmental motive]. Nobody in my village was producing charcoal dust briquettes, I was a pioneer. The business training I obtained from HiH EA was instrumental in setting the price. I factored in the cost of material, my wages and a profit before setting my selling price [economic motive]. I am now training other women in my village. There is enough demand for briquettes in the village and at places like Kibera and Kawangware in Nairobi. I want my fellow women to prosper too [social ethical motive]. I have also diversified my income by operating a Coca-Cola kiosk [economic motive]. In the event that one business is slow I can depend on the other.*

The GEs did not only seek additional revenue streams by diversifying into unrelated businesses, they also realized that additional revenue streams were embedded in their skill sets and existing resources. Obuya [#6], an environmentalist, clearly viewed agroforestry as his mainstay, but based on training he received from a local NGO, he also diversified his income streams to unrelated businesses, such as welding and retail.

> *I have undergone training, and I found the saving module was the most interesting to me. Through the HiH saving module, I embraced the saving culture and I have saved over USD 900. This saving is largely from selling tree seedlings [environment and economic motive interlinked]. Through HiH enterprise development, I have learnt to develop multiple revenue streams. My wife and I now have a welding shop, a second-hand clothing store, and a butchery. These additional businesses are particularly helpful when tree seedlings are maturing. HiH trained me on simple bookkeeping skills. I now know exactly what each business is bringing in. [economic motive and opportunity driven]*

Opiyo [#8], a small-scale commercial farmer commented on the evolution of his business:

> *Business training from HiH EA made a big difference in how I practice farming today. We got technical support from the National Agriculture and Livestock Extension Programme (NALEP), which greatly increased both the quality and quantity of my yield. HiH EA taught us the significance of adding value to basic commodities. I am currently seeking certification by the Kenya Bureau of standard, which can readily broaden my market reach. [Economic motive and necessity driven]*

Experiences from several other GEs illustrate this trend. Owino [#9], an environmentalist and commercial farmer, used his avocado pruning skills to generate additional income by rendering his service to other avocado growers. As noted earlier, Akello [#4], a small-scale commercial farmer, loans out her irrigation pump for a dollar a day once she is done irrigating her farm. Odongo [#7], a conservation agriculturalist has four major enterprises: dairy, poultry, cereal grower, and posh mill. Odongo generates an income from each of those enterprises, in addition to recycling and selling waste from the same channels. For instance, he uses maize jam waste from the posh mill to make animal feed, sells manure from the dairy and poultry, and uses his donkey to deliver the manure for clients at a fee. Thus, a few common themes emerged from the nature of ventures these GEs pursued. The ventures were market driven, the GEs established multiple revenue streams in both related and unrelated areas, and their approach was informed by the training they received from governmental and non-governmental agencies. The knowledge and resourcefulness seem to be transmitted through a collective effort of various entities as well as the experiential knowledge of the GEs, as evidenced by the following recounting of environmentalists and conservation agriculturalists at Amondi Community Group [#12].

> *Our group sincerely appreciates the business training given by HiH EA which is invaluable. Officials from the Ministry of Environment and Natural Resources provided us with high quality seedlings and trained us in afforestation. We have collectively planted thousands of trees and sold thousands of seedlings [environment and economic motive interlinked]. Individually, our members have planted dozens of trees. Our members understand the benefits of afforestation and ills of deforestation. We use fuel efficient stoves. Additionally, our members are in multiple ventures such as poultry and kitchen gardening.*

The grassroots ecopreneurs in the study also spoke of expanding their businesses beyond their initial focus.

> *I got training on the type of vegetable seeds that can do well in Tala. That garden is a source of sustenance for my family and it supplements my income. [economic motive and necessity driven] Mutanu [#13]*

> *We are no longer spending time collecting firewood and I no longer cough when I'm cooking. Instead we engage in other economically viable activities to improve our livelihoods...Our members also run individual businesses such as making pots, retail, selling vegetables and fruit selling [economic motive]. Wekese [#10]*

Therefore, we propose the following:

Proposition 2. *GEs environmental motives are interlinked with economic motives. GEs operate multiple revenue streams to sustain their economic feasibility given the seasonal cycle of agriculture and forestation.*

5. Discussion and Conclusions

This study presents the concept of *motivational multiplicity* toward understanding grassroots ecopreneurs' motives for starting their businesses. Grassroots ecopreneurs (shortened from ecological entrepreneurs) are a type of environmentally conscious social entrepreneurs that initiate innovative, sustainable solutions to improve societal conditions, especially in economically deprived environments akin to the BoP [65]. Our analysis reveals that GEs motivations are multifaceted and interconnected, supporting their business models built to address their resource needs but also diversified with multiple revenue streams to ensure business growth and sustainable impact. Our findings illuminate how an entrepreneur's ability to innovate for sustainable solutions to ecological issues warrants a multiplicitous orientation of motivations in order to create value for both personal welfare as well as the perpetuated productivity of the surrounding community and natural environment for the long term.

In turn, our findings, and the idea of motivational multiplicity, resonate with distinguishing attributes of sustainability-driven entrepreneurship found in the literature. Parrish (2010) posits, for example, that the organizational design of sustainable enterprises is shaped by five regenerative rules with which our findings agree. Parrish (2010) argues that sustainability entrepreneurs seek to create models where resources can be used regeneratively over the long term (*resource perpetuation*), while also *benefit stacking* so as to multiply the variety of benefits that can be generated for as many stakeholders as possible. We see this in our data where ecopreneurs seek to use waste resources, as seen in the circular economy [10], or natural elements, in a renewable fashion so as to perpetuate resource amounts over a long stretch of time and to serve as many community members as possible. Motivated to address a pressing ecological need, while also seeing the opportunity to differentiate their market positioning via their sustainable innovation [11], and make the solution available to more people, the data shows they are likely to adopt such venture-building principles.

Our finding on the multifaceted nature of GEs motivations is consistent with extant research findings. Whereas 84 opined that entrepreneurs' motives shift over time as the venture matures from necessity-oriented to opportunity-oriented [66], identified up to

five factors that underpin GEs motivations. Three of Kirkwood and Walton's factors can be classified as opportunity-driven (passion, seeing a gap in the market, being their own boss), while earning a living and green value can be identified as necessity-driven and personal convictions, respectively. Our study did not observe GEs motivations to be linear or sequential, and certainly, the duality of GEs motivations has been questioned in the extant literature [19]. The line between opportunity-driven and necessity-driven motivations was blurred for the GEs in our sample. From their narrations, we deduced that these motivations ranged from creating private value (earning a living) to social value (creating and sustaining social and economic wellbeing for their communities, an inclusive approach). These GEs did not have the luxury of abundant resources and options. They had firsthand experience of the devastation of environmental degradation and had suffered the consequences, such as respiratory diseases, failed crops, extinct marine life, drought, etc. Therefore, for most of the GEs in our sample, the motivation was beyond earning a living or growing a venture with many speaking of community and cultural preservation as one of their goals. This observation is consistent with how Smith and his colleagues defined GEs " ... socially inclusive towards local communities in terms of the knowledge, processes and outcomes involved" ([26], p.114). Our contribution is advancing the conversation from simply viewing GEs motivations as linear, sequential, or dual to a better understanding of the multiplicity and complexity of GEs motivations. At its simplest form, GEs motivations may be viewed as a continuum, but we also propose that the motivational multiplicity of ecopreneurs is a web of motivation factors in which the domains are co-existing and consistently shaping each other. Similar to Haldar's model (2019) of sustainable entrepreneurship, which presents the practice as an integrated form of green, social, and institutional entrepreneurship, we can posit that the motivational model of sustainable entrepreneurship in the BoP reflects the same multi-dimensionality.

A potent illustration of this motivational multiplicity in BoP ecopreneurship can be seen in the afforestation and reforestation industry, for example. The GEs may have to wait for years before their efforts come to fruition. This does not only mean years without revenue, but ecopreneurship can mean increased costs due to the additional social and environmental obligation that these businesses assume [54,67]. For instance, avocado trees take roughly three to four years to mature, if grown from grafted trees or nursery stock trees. However, it may take anywhere from five to 15 years for an avocado tree to mature if grown from seed. How do the GEs sustain themselves during that long gestation period, market swings or seasonality that is inevitable in agribusiness? Our analysis revealed that the GEs at the BoP are driven by rather pragmatic issues, a realization that status quo is unsustainable (e.g., using carbon intensive fuel caused respiratory diseases and premature deaths, deforestation caused drought and failed crops, etc.), while at the same time they are confronted by the pressing demands for daily sustenance. Given the substantial challenges, such as deforestation facing these communities, a socially inclusive approach is imperative if worthwhile progress is to be realized. Invariably, the only models that are viable and sustainable among this sample of GEs are diversified, multi-revenue streams, and market driven models rather than product driven models. The pursuit of the triple bottom line of economic, social and environmental goals [36] does not seem deliberate, but rather a natural sequence of events. This is, however, consistent with research findings that suggest that GEs' models are shaped by local contingencies and culture [36,68]. Hence, in resonance with Parrish's (2010) regenerative rules of sustainable entrepreneurship, we observe how the motivational multiplicity lends ecopreneurs to convey the third rule of *strategic satisficing*, which manages the long-term trade-offs of ecological restoration by choosing a satisfactory threshold of resources usage and return (rather than seeking to fully exploit resources for maximized returns). In turn, such motivations at play lend to the formation of sustainable enterprises that prioritize qualitative outcomes, or the fourth rule, such that innovators are pursuing "better" life for themselves and their community, not just seeking to accumulate more resources [69]. True to the entrepreneurial action at the bottom of the pyramid, the sustainable business models call for the involvement of

all stakeholders with a *worthy contribution, or* Parrish's fifth rule (2010), to make towards preserving the natural environment and enhancing the wellness of all, not just a call to the most powerful and resourced.

Extant literature has established that grassroots innovation is a common phenomenon worldwide and not the exclusive privilege of complex industrialized societies [17]. We acknowledge that there are a number of scalable and transferable innovations attributed to GEs [36,58]. Research featuring grassroots entrepreneurial activity across various emerging markets and developing countries also highlight the motivational complexity of ecopreneurs in settings such as South Africa [70], Burundi [71], and Pakistan [72]. Additional motivations noted are the balance between the extrinsic awards—such as income security, financial independence, power and status—that emerges from generating value for both the community and environment [70]. This is coupled with the intrinsic awards of achieving a sense of satisfaction or purpose from doing good for society [70]. Mupfasoni et al. (2018) stress the role of attributes such as prior knowledge and proactiveness, which can inform how ecopreneurs at the BoP are motivated to build their enterprises. Our findings speak affirmatively to this existing discourse featuring ecopreneurship in emerging markets, and contribute an emphasized attention given to the simultaneous and interrelated nature across such motivations.

We observe that as many GEs neither have the resources nor the capacity to develop their own innovations [73], their motivation to both serve needs and to thrive lends them to build collaborative initiatives among farmers, research institutions and universities, NGOs, corporations, governmental ministries and agencies towards supporting their sustainability efforts. This observation is consistent with other agricultural grassroots innovation movements such as the practice of permaculture (A creative design process based on whole-systems thinking informed by ethics and inclusivity. These design principles result in sustainable and productive systems. These systems are vastly varied and encompass a wide spectrum of issues such as architecture, food production, land management and community.) worldwide [74,75]; System of Rice Intensification (SRI) in India [76,77] and the agroecology movement ("Applying ecological concepts and principles to optimize interactions between plants, animals, humans and the environment while taking into consideration the social aspects that need to be addressed for a sustainable and fair food system" http://www.fao.org/agroecology/en/ (accessed on 17 August 2022) (Food & Agriculture Organization of the United Nations)) [78,79]. The poor are not too poor to eco-innovate [36,58] and we are not advocating for agricultural innovations created by science and agribusiness, which tend to be capital intensive while ignoring the local knowledge and inventiveness of farmers [78,80,81]. The ecopreneurs' varied and creative actions towards building their business solutions for the environment align with Koe et al.'s (2014) assertion that most SMEs find sustainability entrepreneurship attractive as they grow more attuned to the societal pressures placed on the environment. Hence, we posit that their motivational multiplicity may inform how they navigated the duality of logics existent in the sustainability field, according to De Clercq and Voronov (2011) as they figured out how to balance sustainability and profitability. In this study, we observed farmers using cost appropriate technologies that are created by both local and foreign research institutions and adapted to meet the skills, resource capacity, and cultural context of the locals. Some of the techniques created by research institutions, such as vertical farming, were later modified by the GEs. The GEs improvised sisal gunny bags for vertical farming in place of the ultraviolet (UV) light protected bags. Consistent with Sarkar and colleagues' observation, we observed frugal adaptations and reengineering of pre-existing technologies, such as clay stoves, sisal gunny bags and briquettes made from recycled waste, etc. [36,82]. These initiatives improved the social and environmental preservation and economic empowerment of the communities.

GEs' motivations to launch new ventures cannot be reduced to a simplistic dualistic model. Their motivation appears to be multifaceted. Moreover, GEs may be motivated by both necessity and opportunity drivers, and these may not necessarily occur in a linear or

sequential manner as suggested by 84. We also observed that this phenomenon is more widespread than suggested by Minniti et al. (2005). The GEs in our study pursued viable business models that were financially self-sustaining and most of them diversified their revenue streams.

Given that roughly 80 percent of the population of Kenya lives on just 16–20 percent of the country's land, we observed that a number of GEs were driven by environmental motives. This observation is consistent with extant literature [83,84]. There is a paucity of research on GEs motivations in emerging economies. Extant literature posits that GEs' motives can originate from internal (economic gains, attitudes and values of the entrepreneur) as well as external sources (socio-economic factors or regulations) [83–88]. While we observed similar motives in our sample, what was unique about these BoP GEs were activities and socio-ethical motives, the GEs' concerns toward other members of the community.

The sampling framework of this study suffers from at least two limitations. We used purposive sampling, a nonprobability sampling technique, which involved selecting participants with specific characteristics and experiences [45,46]. As with all nonprobability sampling techniques, it is impossible to know how representative the sample is. Moreover, it is not possible to compute confidence intervals and margins of error. The sample is also derived from a single nation and therefore is not as rich as that used in a cross-cultural study.

Our theoretical contribution is detailed in the two propositions which can be valuable avenues for future research. A mixed methods approach or a quantitative approach can further explore these concepts and generate a deeper understanding. Moreover, replicating this study using other nations with similar characteristics in regions such as sub-Saharan Africa, Latin America and Asia can help establish its validity and its transferability. Understanding GEs' motivations and market mechanisms that may impede or promote grassroots ecopreneurship can guide the restructuring of all facets, thus leading to strengthening entrepreneurial competitiveness at the national and international levels.

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Institutional Review Board Statement: The proposed study met all Washburn University IRB requirements.

Informed Consent Statement: We would like to record this interview only if you consent (both audio and Video). The recordings will be stored with the principal investigator and will be accessible to only the principal investigator and the co-authors. It will never be shown to a third party. You have a right to decline the recording of this interview. You may still choose to participate in the study but decline recording. Individual names/identity will be disguised using pseudo names. The participants may simply use 'I' to identify self and the researchers will change the names of other people in the narration so that anonymity can be preserved. Participants' will be identified only by a code number. Identifying information will be either anonymous or confidential. The data will be stored with the principal investigator until the academic article is published and data will be destroyed thereafter. Your participation is solicited, but strictly voluntary. Do not hesitate to ask any questions about the study. Be assured that your name will not be associated in any way with the research findings without your explicit and written consent. We appreciate your cooperation very much.

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