



Green Living: A Panacea for Secured Environment

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

An attempt has been made to establish that green living is a panacea for a secured environment. The paper noted that green environment also known as ecofriendly, nature friendly or nature green refers to goods and services, laws, guidelines and policies that help to reduce, minimize the harm upon the ecosystem or the environment. Going green activities that result to more environmentally friendly practices that help to safeguard the environment and sustains natural resources. Green science is all about sustainability to secure the ecosystem by reducing, reusing and recycling for continuity of species. Green spaces filter pollutants and dusts from the air. They produce shade and lower temperature in urban areas. They also increase productivity, promote green living that helps to conserve energy and prevent air, water and noise pollution. They are borne for the environment hence prevent health deterioration. Going green can improve general efficacy of a business and can trim operation costs for the business. The environment is the most important resource for life where we get water, power and oxygen hence regarded as our closest neighbour needed for survival. Going green is a choice and it contributes to the development of the planet and makes the place a healthier habitation to live for both present and future generations. Green homes are more durable, reduce carbon footprint, increase creativity, healthy air sufficiency, boost economy, increase floral diversity and allow non-toxicity of products. The study established that we have been living on nature and living green is the only time we pay back. Living green brings happiness and satisfaction to one because green is natural, wealthy, fruitful and productive hence helping to keep the environment secured. It is concluded that green living is a panacea for a secured environment.

Keywords: Green living; biodiversity conservation; secured environment.

1. INTRODUCTION

Green living also called sustainable living; ecofriendly is a routine that tries to reduce individuals or community use of earth's natural or personal resources. Studies after studies including that of Agbogidi et al. [1] and Agbogidi [2] have shown that our current lifestyle or living practices impact global warming, food shortages, water depletion and energy shortages. The only way out of this predicament is to adopt a green living. The United Nations Environmental Protection Agency [3] stated that green living means making sustainable choices about what we eat, how we travel, what we buy, how we use and deposit it. According to Okoh [4], green living is to sustain a healthy environment and economy. Dominant green productions include substantial growth in the organic farming sector, setting up plant based homes and using bicycles as means of transportation. Other forms of green economy are community engagement on climate context through sensitization, advocacy and awareness visits, tree planting of economic species such as *Tectona grandis* and *Gmelina arborea*; agricultural technology transfer such as yam minisets technology, high yielding improved cassava variety, production of compose manure, production and distribution of energy saving woodstoves, capacity building and solar power. Greenery projects in the world includes the following:

- 1) Eco industrial park development for improved ecosystems in USA, Netherlands and Turkey
- 2) Green transformation of industrial parks, Canada
- 3) Green and smart industrial estate model, Thailand
- 4) Green transformation of industrial parks in China
- 5) Eco industrial parks are found in Phillipines, Denmark and Indonesia

Organic farming is a type of farming that sustains the health of the soil, ecosystem and people. It relies on ecological process, biodiversity and cycles. It circles around crop rotation, green manure and compost. It is based on the principle of health, ecology, fairness and care. It is a regenerative farming essential to fighting climate change and other environmental crises and degradation. It is ecologically based and may not use agrochemicals [5].

2. DESIGN AND REPRODUCTION STRATEGIES AND TECHNOLOGIES

Green building strategies aim to minimize the impact of development on the environment and enhance health safety and wellbeing of residents.

Green computing which aims at reducing the carbon footprint generated by the information technology, systems business and related industries.

Going green with activities that lead to more environmentally friendly practices that help to protect the environment and sustain natural resources, thereby improving the economy. Green economy is aimed at decreasing ecological risks and environmental sacrifices for sustainable development without degrading the ecosystem [6]. In Africa, the top five greeniest economy are Mozambique, Ethiopia, Zambia, Kenya and Ghana.

3. WHY SHOULD WE GO GREEN?

In spite of all the benefits obtained from environment and the ecosystems [2], numerous threats are challenging, population explosion now estimated to be 7.7 billion [3] is an overriding factor. Anthropogenic forces and factors affect the environment negatively. These include deforestation, desertification, extractive industries like mining, dredging, oil and gas, global warming, climate change, poor/bad agricultural activities such as land clearing, inappropriate irrigation, overgrazing, intensive farming, over drafting, introduction of exotic species, flooding, soil erosions, pollution of all kinds, salinisation, unsustainable exploitation and consumption, acid rains, soil acidification, plastic pollution, mass extinction, urban sprawl and commercial development, drought. All these activities have led to different forms of environmental degradation, ecological crisis and ecological collapse [7] Stockton, 2015; UNEP, 2018). Green living reduces air pollution and environmental toxin that may affect the immune system of the body. Going green helps us to decrease the number of pollutants released to the environment. Going green helps us to live a healthier lifestyle. We must go green at home, work place and in our business. Going green slows down global warming, less pollution of all kinds (air, water, particle and soil). By going

green, we can save energy, water, waste reduction, protection of natural resources, slow down climate change, improvement of overall health and sustainable ecofriendly bright future.

Greening the environment will improve upon nature for the perceived benefits of humanity, promote actions to combat climate change and optimize ecosystem services. Going green improves soil conditions and subsequently the conditions, structure and functionality of soil organisms [8]. Soil ecosystem and soil organisms function best when the whole environment is green as against brown environment [9,10]. Green environment helps to restore missing glory of the environment. As earlier established, ecological collapse stemming from various environmental degradation needs to be restored and resuscitated and the only way out is green living.

The environmental consequence of energy consumption and harvesting is diverse. The heightened commercialization of various renewable energy resources also has their unfavoured environmental effects on man and his animals. Fleischer [11] noted that 77% of lands and 87% of the oceans have been influenced by anthropogenic activities and about 23% of the earth landmass remains as desert. Green living is not just about the ability to produce clean energy, but also, technologies that allow cleaner production processes as well as the growing market for products which takes a smaller amount of energy from fluorescent light bulbs to organic and locally produced food hence green living includes products, processes and services that lessen environmental effect or improves natural resource use. Going green makes cities more sustainable and ensures sustainable production and consumption models.

4. HOW TO GO GREEN

The following are some of the ways to start living green that can be incorporated into our daily lifestyle:

1. Reduce energy consumption. This can be carried out in the following ways:
 - a) Zero waste home: keep only belonging that you use and enjoy on a regular basis to reduce waste
 - b) Reduce purchases
 - c) Observe eco-Sabbath where you abstain from usage maybe one hour,

- week, some minutes, you don't use machines, no resource use
 - d) Replace dispose with reusable ones
 - e) Share with friends like books, magazines, games, movies, newspapers
 - f) Improvise to cut down waste
 - g) A free home. Replace paper napkins with cloth napkins.
 - h) Make bulk purchases. Buy only what you currently need. Avoid creating trashes, waste free lunches, mug – to – go, i.e. go with a mug.
 - i) Adopt environmentally responsible activities.
 - j) Shutdown your computers and some large energy users in the offices and homes. Turn off when not in use.
 - k) Select the right light; LED bulbs are more energy efficient light option.
 - l) Unplug idle electronics like television, microwaves, scanners, printers and phone chargers to reduce energy use.
2. Reuse: These can be done as stated below:
 - a. Buy new improves special products
 - b. Switch from disposable to reusable products like food, beverage containers, cups, plates, writing pads and towels.
 - c. Donation – donate and buy used household items, clothes, furniture, dishes, books, appliances, electronic containers.
 - d. Buy durables; teach thrifts frugal printing, use both sides of a paper piece for note taking, printing documents.
 - e. Rechargeable batteries, refurbished computers.
3. Recycle your plastic bottle tops, recycle bins, cell phones, CDs and DVDs, green papers, eco-jewelry.
4. Refuse – refuse product that create wastes, refuse give – away from individuals, business and other bodies.
5. Pot – warm composting, mulching, grass cycling (leave grass clipping on the lawn) as fertilizers [8].
6. Your food – switch to animal free vegan diet. It is a powerful way to safeguard our environment, improves your health and ensures everyone has enough to eat. United Nations [3] noted that the livestock sector (primary cows, chickens and pigs) are the top 2 or 3 most important contributors to our series of environmental

problems. Cutting beef out of diet reduces CO₂ emission by 2,400 pounds annually. Besides, the greatest amount of grains required for livestock feeding reduces the amount of food available for the hunger population in the world [10]. This can be carried out through the following:

- a) Responsible food shopping – shop at farmer's market, food co-ops, local health food stores.
 - b) Reduce food waste. Roughly 1/3 of food production every year gets lost or misused. Our God is against waste hence Jesus ordered his disciples to pick the left over after feeding the 5,000 people that came to pay attention to Him (Luke 9v12-17)
 - c) Support efforts to increase healthy food choices in school lunches.
 - d) Food's carbon footprint – eating a low carbon diet is critical for reducing climate change
 - e) No genetically modified food. The disadvantages of GMO far outweigh the advantages so buy goods not containing non-GMO such as cotton, corn.
 - f) Avoid processed foods. Eat unprocessed / unpackaged feeds where possible. Nature is rich, nature is green, and nature is wealthy.
7. Conserve energy. Paint your house / home light colour in warm climate and dark colour in cold climate.
8. Conserve water: These can be effected through the following:
- a) Plant natural plants
 - b) Be involved in mulching
 - c) Steam vegetables instead of boiling
 - d) Encourage restoration techniques.
 - e) Tree planting afforestation, reforestation. Trees perform a huge role in influencing climate by reflecting the heat back to the atmosphere [12]. They give shade from sun, purify the atmosphere by absorbing carbon monoxides and other greenhouse gases as well as helping to build up soil structure and serve as wind brake.
 - f) Home gardening / backyard wildlife habitat, nature can provide foods for birds, insects and other animals. Planting native species support 10 to 50 as many as species of wildlife as non-native plants [13,14].
9. Green your work. Be environmentally conscious. Green plants are primary

producers outside other environmental and ecological roles they play [2]. Make a deliberate attempt to pursue sustainable development. Reasonable productivity and consumption is the key to green living and environmental management.

- a) We should learn to protect the environment in our own way because the environment is our closest neighbour. Deliberate attempt should be made by all and sundry to protect plants the foundation of food chains and webs. Natural areas like sacred groves, herbaria, botanical gardens, forest reserves, sanctuaries, natural reserves should be protected [15,16].
- b) In-situ and ex-situ conservation centers should be encouraged [17,18].
- c) Attention and focus should be shifted from the use of non-renewable energies like petroleum, gas, diesel, kerosene and coal towards the use of renewable sources of energy like wind, sun, water [5]. Biofuels can also be obtained from corn, wheat, sugar beet, sugar cane, vegetable oils, liquid animal fats, green diesel from algae and other plant sources like Jatropha, wood, soya bean, biogas from soil, animal manure and other digested organic materials like discarded food scraps and plant materials like lawn clippings.

Effects of threats to the environment

1. Food insecurity as currently being experienced. We eat Mr. available now. Hunger is looming everywhere in the world.
2. Heightened level of poverty.
3. Disease outbreak and epidermis
4. Loss of biodiversity, species endangerment and extinction and co-extinction
5. Unstable ecosystems
6. Reduction in the outputs and services rendered by ecosystems
7. Ecological crises and collapse

The way forward

1. Environmental education to all and sundry at every level of education starting from the home [19].

2. Importance of green environment and ecosystem services and benefits should be emphasized.
3. Aggressive public enlightenment programmes
4. Ecosystem approach to biodiversity conservation
5. Environmental greening, afforestation and reforestation
6. Responsible production and consumption
7. Everyone is an environmental steward.
8. Green budgeting provides useful instruments to identify the main misalignments and help to raise revenue component.
9. Green technology works with nanotechnology by helping to develop vital and practical protocols when producing nano-enabled products thereby minimizing the risk associated with nano products hence they have great environmental applications as they enhance sustainability. Caution should however be taken as they can be potential dangers to humans and the environment.

Environmental performance index: The Environmental performance index (EPI) is a method of quantifying and numerically marking the environment the environmental performance of a state. The EPI is based on air quality, water and sanitation, heavy metals, biodiversity and habitat forest, fisheries, climate and energy, air pollution, water resources and agriculture. The list of green countries in the world and their EPI grading or score is shown in Table 1.

Ripple et al. [21] noted that Johannesburg, South African city is the most important economic and

financial centre of the state in the entire African continent but it does not forget to protect its green area for the citizens [22-27].

Table 1. The green countries in the world and their EPI grading/score

Rank	Country	EPI Score
1	Switzerland	87.42
2	France	83.95
3	Denmark	81.60
4	Malta	80.90
5	Sweden	80.51
6	UK	79.89
7	Luxembourg	79.12
8	Austria	78.79
9	Ireland	78.77
10	Finland	78.64

Source: Fresher [20].

Table 2. The ten most ecofriendly cities of the world

S/N	Ecofriendly cities
1.	Copenhagen
2.	Amsterdam
3.	Stockholm
4.	Berlin
5.	Portland
6.	San Francisco
7.	Cape Town
8.	Vancouver
9.	Helsinki
10.	Reykjavik

Source: Fresher [20]

The nine most greenish cities around the world are presented in Table 3.

Table 3. The nine greenish cities around the world

S/N	Greenish cities around the world
1.	Oslo
2.	Helsinki
3.	San Francisco
4.	London
5.	Curitiba
6.	Vancouver
7.	Stockholm
8.	Amsterdam
9.	Copenhagen

Source: Fresher (2017)

The 20 most environmentally friendly countries are listed in Table 4.

Table 4. The 20 most environmentally friendly countries in the world

S/N	Countries	EPI rating
1	Finland	90.68
2	Iceland	90.51
3.	Sweden	90.43
4.	Denmark	89.21
5.	Slovenia	88.98
6.	Spain	88.91
7.	Portugal	88.63
8.	Estonia	88.59
9.	Malta	88.48
10.	France	88.20
11.	New Zealand	88.00
12.	United Kingdom	87.38
13.	Australia	87.38
14.	Santeria	87.04
15.	Croatia	86.98
16.	Switzerland	86.93
17.	Norway	86.90
18.	Austria	86.64
19.	Ireland	86.60
20.	Luxembourg	86.58

Source: Fresher [20]

5. CONCLUSION

Ecosystem services are useful from cradle to grave. Living green is the only way and time we pay back nature we have been living on. Green living indeed guarantees a secured environment. It brings happiness and satisfaction to one because green is natural, wealthy, fruitful and productive hence helping to keep the environment secured. The paper established that green living is a panacea to a secured environment. It recommends green technology including green computing and aggressive environmental education to all and sundry. The paper also established that green living is cost and energy savings.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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