

## **The Societal Role of Youth and Women in Global Conservation of the Environment for Sustainability**

Balongo Caleb Vincent<sup>1</sup>, James Wanjiku Gitau<sup>2</sup>

<sup>1</sup>Department of Development Studies  
Jomo Kenyatta University of Agriculture and Technology  
<https://orcid.org/0000-0001-9980-3548>  
bacalvin50@gmail.com

<sup>2</sup>Department of Cooperative Management;  
The Cooperative University of Kenya  
jkamamia@cuk.ac.ke

### **Abstract**

An overview of the global environmental condition is necessary for understanding variations of its quality around us. This is desk research aimed at understanding the role played by youth and women in local community conservation of the environment in support of marine life and life on earth. The environmental challenges the world continues to face are the Earth's triple planetary crisis, such as nature and diversity loss, climate change, and pollution. Biodiversity and ecosystem service loss is as a result of land degradation that is happening rapidly over the world. Degradation is caused by human activities and practices causing climate change, which is a global problem. Society has an obligation to mitigation of greenhouse emissions. The youth, specifically, have much knowhow through their connectivity globally to help conserve the environment through institutionalized and policy-making bodies. By using technology and global sharing of information on climate change and its impacts by the youth, members of local communities can adopt indigenous solutions to reversing trends through sustainable practices in achieving socioeconomic, cultural and environmental benefits. Thus, the protection of the environment begins with local-level initiatives through strengthening local bodies and ensuring

that the youth and women take center stage in the preservation of the environment since they have acquired academic knowledge and global interactions through conferences and seminars. The youth understand the challenges of environmental conservation. Since their behavior and attitude can influence their parents and guardians and be the future of our society, they have what it takes to change the world. Therefore, they ought to be given a chance to shape their future since, through their talents, innovation, and education, they understand the environment and its related issues and how to conserve it in their local community.

Keywords: Biodiversity, degradation, greenhouse emission.

### **Introduction**

Environmental conservation is one of the significant life impact issues that need to be dealt with keenly, as alluded to by the UN Decade on Ecosystem Restoration (2021-2030) (UNDP, 2021). Environmental hazards and risks directly impact young people's lives as they live in degraded environments resulting from earlier generations<sup>1</sup>. They have a compelling responsibility to restore the environment through different forms of actions that may counter ecological challenges. To tackle climate change, attention is required in the agricultural sector, the act of tending livestock, cultivating crops for crops and agroforestry, which has direct and indirect greenhouse gas emissions as its contribution is estimated to be 10-12% worldwide (Smith et al., 2008).

Grieg (2012) argues that in the next 30 years, the continued emissions from agriculture tend to increase as the population increases. Foresight (2011) suggests that a food system must be re-designed to cater to a population of 9 billion people by 2050. The challenge of food

---

<sup>1</sup> <https://www.unep.org/news-and-stories/speech/shifting-burden-environmental-degradation-youth-climate>.

demand results from stresses induced by climate change. Agriculture and land use tend to impact afforestation or deforestation; mitigation efforts leading to a modest shift in agriculture and land use helps reduce emission. Halting agricultural expansion and retaining carbon-rich forests and grassland is necessary for curbing further emissions. However, the reductions require an alternative way of meeting the demands for agricultural products from less land. Therefore, agriculture has enormous potential for climate change mitigation (Grieg, 2012). Since most of the countries which largely depend on agriculture as their economic engine are found in the developing world and Africa is part of these countries, a lot has to be done, starting from local initiatives by local communities through individual efforts, Community Based Organizations (CBO), and Civil Society Organizations (CSO) in their civic education and acquired knowledge from the school curriculum, workshops and seminars by local youth and women at the grass root.

### **Background**

Climate change, ozone layer depletion, and global warming are challenges affecting every life on earth. Since there are tremendous variations in the severity and nature of environmental degradation, measures have to be taken a right from local levels in society<sup>2</sup>. In addressing the present state of the environment and being able to predict the future, we must assess past trends. Cumulative global indicators of environmental preservation are essential in understanding the trends under which environmental conservation is measured. In 1972 in Stockholm, the United Nations General Assembly (UNGA) initiated World Environmental Day (WED) to be marked every 5<sup>th</sup> of June each year which also facilitated the establishment United

---

<sup>2</sup> [https://ashden.org/international-climate-solutions/?gclid=Cj0KCQjw4uaUBhC8ARIsANUuDjV3\\_vOMWqHY7qi8OACb2mtA8iVNdc2UtAjCYafmdHcXSjfsbl88SEwaAkLyEALw\\_wcB](https://ashden.org/international-climate-solutions/?gclid=Cj0KCQjw4uaUBhC8ARIsANUuDjV3_vOMWqHY7qi8OACb2mtA8iVNdc2UtAjCYafmdHcXSjfsbl88SEwaAkLyEALw_wcB)

Nations Environmental Program (UNEP)<sup>3</sup>. UNEP advocates for the environment to inspire, inform and enable people and nations worldwide to sustainably improve their quality of life sustainably<sup>4</sup>. Headquartered in Nairobi, Kenya, the significant responsibilities of UNGA are solid waste and wastewater management, minimizing air pollution and chemical waste, tackling climate change and biodiversity loss, and managing plastic waste and marine life<sup>5</sup>.

### *Africa and its present situation in terms of environment and sustainability*

The environmental situation in Sub-Sahara Africa is in dire need of intervention; most of the environmental challenges are blamed on regional poverty and population growth. The relationship between population growth and density, agricultural intensification, and sustainable implications may offer some valuable insights into the issues dealing with climate change. Protecting the environment in Sub-Sahara Africa must be re-examined by incorporating sustainable economic development strategies and informing young people's knowledge dispensation to salvage the current environmental situation (UNDP/GEF 2018).

A study carried out in West African countries indicated that smallholders are wrecking their physical resources in the face of land-intensive conditions, which negatively impact intensification and production. The environmental challenges are caused by anthropogenic effects on the natural environment impacting human life and all endemic life. Such challenges are water scarcity and sanitation. Modifying the environment to fit the needs of society contributes to severe effects of global warming, environmental degradation like ecological crisis and collapse, ocean acidification, mass extinction and loss of biodiversity. Environmental

---

<sup>3</sup><https://timesofindia.indiatimes.com/life-style/events/world-environment-day-history-importance-and-why-is-it-celebrated/articleshow/92017428.cms#:~:text=The%20concept%20of%20celebrating%20World,environment%20were%20given%20huge%20importance.>

<sup>4</sup><https://wedocs.unep.org/handle/20.500.11822/11179>

<sup>5</sup>[https://wedocs.unep.org/20.500.11822/11179.](https://wedocs.unep.org/20.500.11822/11179)

pollution at a global scale is due to human activities which contribute heavily to this either directly or indirectly; these include overconsumption, deforestation, overexploitation, and population growth (Banda, 2008).

Deforestation in Africa is at a large scale; a report by UNEP indicates that the rate of desertification in Africa is twice as high as in any other place on the globe. Clearance of forests for land cultivation, illegal logging and cutting wood as a source of fuel energy increases desertification<sup>6</sup>. Studies have indicated that Africa loses approximately \$17 billion of its forest to illegal logging<sup>7</sup>. The high demand for timber has led to an exacerbated international smuggling racket led by the Chinese at the heart of Africa; this has led to some tree species like Rosewood (Kosso) in Nigeria being most endangered, as documented by the United Nations Office of Drugs and Crime (UNDOC, 2017). The thriving business is because Chinese business people identified legal gaps in African countries on forest protection, thus capitalizing on this lacuna aided by corrupt government officials<sup>8</sup>.

Different rates of illegal logging take place in different countries. Cameroon has indicated that 50% of their forests disappear due to illegal logging, Liberia at 80%. In the Democratic Republic of Congo (DRC), deforestation is due to illegal logging and unsupervised mining resulting from its poor citizen's needs. In Ethiopia, the situation results from a growing population, which induces increased agriculture, livestock production, illegal logging, and fuel wood<sup>9</sup>. Food and Agriculture Organization's report (FAO, 2005) indicates that Nigeria had the highest rate of deforestation globally due to subsistence agriculture and wood for fuel. Nigeria had lost about 81% of its forests within 15 years, while West Africa only had 22.8 per cent of its

---

<sup>6</sup> <https://www.fairplanet.org/story/illegal-chinese-timber-business-that-is-devastating-african-forest/>.

<sup>7</sup> <https://www.fairplanet.org/story/illegal-chinese-timber-business-that-is-devastating-african-forest/>.

<sup>8</sup> <https://www.fairplanet.org/story/illegal-chinese-timber-business-that-is-devastating-african-forest/>.

<sup>9</sup> <https://www.unodc.org/unodc/en/ccp/activities/illicit-timber.html?testme>.

moist forest left, and 90% of African forest had been wiped out. As a country, Kenya's forest cover decreased from 10% to 1.7% in the last 43 years.

The youth and women in the locality know that soil degradation results from erosion caused by rains, flooding of riverbanks, winds, and over-use of soils for agricultural production with low usage of manure, making soil infertile and unproductive for agriculture. The increased number of human beings is another factor attributed to the overuse of land leading to land degradation exerting pressure on the environment through clearance of forest cover, poor waste management damages ecology reducing the quality of living standard. Since most homesteads are not connected to electricity, wood fuel and coal are used rampantly, leading to combustion, and increased atmospheric carbon dioxide. In South Africa, for instance, mercury levels are severe, resulting from coal combustion and gold mining; from the air, mercury is absorbed into the soil and water, crops absorb the mercury, and through the food web, contaminated food through stages increases the levels of mercury in human leading to health risk such cancer.

Climate change is increasingly becoming a serious threat in Africa, making the continent more vulnerable due to dependence on ecosystem goods for livelihood, developed systems of agricultural production, and weak adaptive capacity. Managing the risks requires the integration of adaptation and mitigation strategies in managing ecosystem goods and services and agricultural production. Studies have indicated that by the year 2025, clean drinking water will be scarce, affecting two-thirds of the world population FAO (2012) report indicates that growing water scarcity is a significant challenge for sustainable development because an increasing number of river basins have reached conditions of water scarcity through combined demands of agriculture and other sectors. The impact of water scarcity ranges from health, women and

children affected in education, agricultural productivity, sustainable development, and the potential for more water conflicts.

Like other African countries, Kenya experiences climate change mainly through drought and floods, at times intense or unpredictable rainfall. There is high anticipation of rising temperatures by 0.5 to 2 degrees Celsius; in informal settlement areas, the impacts of climate change and disaster-related risks may be exacerbated. Larger informal areas often create a warmer micro-climate due to home construction materials lacking proper ventilation, sparse green space, and poor access to electrical power, which would otherwise mitigate and upgrade plastic waste management in urban areas.

### **Ways of solving climate change**

Different studies have shown that ‘regreening’ has a way of reducing global warming. This shows that nature-based solutions contribute up to 37% of the emission intake required to keep global warming below 2 degrees Celsius. The amount of carbon in the atmosphere is subsequently decreased through a process known as sequestration by vegetation cover. This process helps reduce the greenhouse effect leading to the mitigation of global warming; the vegetation will still enhance the cooling of the soil and retention of soil moisture, hence decreasing water evaporation from the soil. Reduced evaporation avails water for living things such as plants and animals. Furthermore, the greening process acts as a stimulator to the water cycle, which in the end causes rainfall, thus increasing agricultural activities with increased income of the locality<sup>10</sup>.

---

<sup>10</sup> [https://justdigg.it/climate-change/?gclid=Cj0KCQjw4uaUBhC8ARIsANUuDjV6t2S0Z8YC6QGEVR0cc1k\\_EFC9MD7zAD9gkSSx\\_Dq03UdeLm84rdYaAr0DEALw\\_wcB](https://justdigg.it/climate-change/?gclid=Cj0KCQjw4uaUBhC8ARIsANUuDjV6t2S0Z8YC6QGEVR0cc1k_EFC9MD7zAD9gkSSx_Dq03UdeLm84rdYaAr0DEALw_wcB).

Environmental global indicators can be categorized into two; a measure of human well-being and an assessment of the condition of the world's ecosystem, which determines all lives. According to economist's price measures, scarcity of products, thus the price of most natural resources such as gas, metals, oil, and coal are declining fast while life expectancy is rising with falling levels of infant mortality and an increasing proportion of the world population in accessing to clean drinking water<sup>11</sup>. These indicate that human well-being is growing positively while environmental conservation is at a crossroads. Human beings must mold the environment through developing science and technology that will transform the human environment<sup>12</sup>. According to the statement by the United Nations Secretary-General (António Guterres, 18 May 2022);

“We must end fossil fuel pollution and accelerate the renewable energy transition before we incinerate our only home.”<sup>13</sup>

### **Formalizing youth activities in environmental preservation**

The primary target of Sustainable Development Goal (SDG) number seven is to integrate the principles of sustainable development in every member country's policy and program to achieve a reversed loss of environmental resources<sup>14</sup>. If the role of youth in environmental conservation can be institutionalized in policymaking through advisory bodies such as the youth council and youth affairs, the participation of the youth in global environmental protection ranging from grass-root activism to international bodies, including NGOs, would be enhanced.

---

<sup>11</sup>[https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap22\\_FINAL.pdf](https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap22_FINAL.pdf).

<sup>12</sup> <https://www.un.org/en/conferences/environment/stockholm1972>. United Nations Conference on the Human Environment, 5-16 June 1972, Stockholm.

<sup>13</sup><https://www.un.org/sg/en/content/sg/statement/2022-05-18/secretary-generals-video-message-the-launch-of-the-world-meteorological-organization%E2%80%99s-state-of-the-global-climate-2021-report-scroll-down-for-languages>.

<sup>14</sup><https://www.google.com/search?q=mdg+goal+7&og=MDG+goal+7&aqs=chrome.0.0i512j0i22i30i3j0i390i3.13282i0j7&sourceid=chrome&ie=UTF-8>. Millennium Development Goal 7 | UNDP.



Several conferences and workshops have focused on declarations geared towards improving the full involvement of the youth in environmental-related activities. In 1992 declaration by (UNCED) United Nations Conference on Environment and Development was adopted in Rio De Janeiro;

Youths from all parts of the world must participate actively in all relevant decision-making processes because it affects their lives today and has implications for their futures. In addition to their intellectual contribution and ability to mobilise support, they bring unique perspectives that need to be considered<sup>15</sup>.

Similarly, in 2002 at Johannesburg Summit, a resolution reached in paragraph 153 of the Plan of Implementation adopted indicates the need to;

promote and support youth participation in programmes and activities relating to sustainable development by, for example, supporting local youth councils or their equivalent and encouraging their establishment where they do not exist<sup>16</sup>.

The United Nations Development Program (UNDP) launched a Small Grants Programme (SGP), a corporate programme of the Global Environment Facility (GEF) engaged in supporting actions for global environmental issues through a local community-based organization (CBO) and civil society organizations (CSOs) empowerment programmes. The SGP can facilitate its initiatives through the country's level of decentralised governance and co-financing from the donors, communities and government and in conjunction with the private sector and other

---

<sup>15</sup> <https://www.un.org/esa/socdev/unyin/documents/worldyouthreport.pdf>.

World YOUTH Report 2003 The global situation of young people.

<sup>16</sup>Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August-4 September 2002. <https://digitallibrary.un.org/record/478154?ln=en>. World Summit on Sustainable Development (2002: Johannesburg, South Africa) (DHLAUTH)596591.

stakeholders to promote dialogues and decision-making for sustainable development and environmental issues at all levels<sup>17</sup>.

### **Contribution of youth in local communities for the conservation of the environment**

The role played by local communities in meeting the environmental agreements towards SDG Agenda 2030 cannot be neglected. SGP's actions in its engagement with the local communities have immensely contributed towards leveraging hunger and poverty among communities. These activities replicate life conservation on land without compromising the life below water and the general climate action<sup>18</sup>. SGP supports community-based initiatives on the restoration of land<sup>19</sup> through its seventh operational phase (2020-2024). It targets four specific areas in achieving the set goals: increased efficiency and effective environmentally sound food production, agrobiodiversity conservation, promotion of agroecological production methods, and implementing community-based actions in restoring degraded land. SGP is equally involved in community empowerment through training and promoting water harvesting, post-harvest management and business skills development for better management of natural resources for global benefits.

The Brundtland Commission (1987) describes sustainable development as satisfying the present needs without compromising the future generation's ability to meet them. Achievement of sustainability can be achieved by carrying out capacity, diversity, and ecological footprint as indicators of information on the ability of the terrestrial ecosystem that can support human life now and, in the future,<sup>20</sup>. Even though UN General Assembly declared the year 2011-2020 as the

---

<sup>17</sup><https://sgp.undp.org/>.

<sup>18</sup>[https://sgp.undp.org/index.php?option=com\\_sgpprojects&view=allprojects&Itemid=211](https://sgp.undp.org/index.php?option=com_sgpprojects&view=allprojects&Itemid=211).

<sup>19</sup> <https://sgp.undp.org/areas-of-work-151/climate-change/climate-change-mitigation-176.html>.

<sup>20</sup>

[https://scholar.google.com/scholar?q=brundtland+commission+1987+citation&hl=en&as\\_sdt=0&as\\_vis=1&oi=scholar](https://scholar.google.com/scholar?q=brundtland+commission+1987+citation&hl=en&as_sdt=0&as_vis=1&oi=scholar).

period of biodiversity, many are unaware of such happenings since little or no civic education is done despite several strategic plans and initiatives in mobilizing participants at different levels as stipulated targets<sup>21</sup>. Women and children are most vulnerable in their efforts to access resources; they inherit marginal and degraded land to produce agricultural products for domestic and commercial purposes. Often, young people cannot take action as they feel helpless and powerless during this period. This is because large corporations and governments take decisions excluding them. Individual persons are capable of taking action at their small levels, which in the end, have significant impacts, as a consumer man dictates the market, which has a major impact on the way goods are produced and traded through a change of consumption habits in this case the youth are the majority consumers. Antonio Guterres (UN. Secretary General, 2020) alludes that the world's hopes rest on the young people. Apart from having a stake in the future, they are better placed to promote environmental conservation and awareness as they can easily access information on environment-related issues. He argues that the outcome of not conserving and protecting the environment appropriately is profound and far-reaching.

Currently, the population of youth aged 15-24 alone is over 1.2 billion with potential growth; hence, investing in them has to be channeled to adopt environmental conservation sustainably. These should be done in their early lives by imparting a sense of environmental awareness and stewardship from home through schooling processes as they gain general knowledge and information about life<sup>22</sup>. Unlike the previous years, when environment preservation and related issues are e, the youth could only commemorate world environmental

---

<https://www.google.com/search?q=brundtland+commission+on+environment+and+development&oq=Brundtland+commission&aqs=chrome.6.0i355i512j46i512j0i512l8.9769j0j7&sourceid=chrome&ie=UTF-8>.

<sup>21</sup> <https://www.cbd.int/undb/home/undb-strategy-en.pdf>. UNITED NATIONS DECADE ON BIODIVERSITY 2011-2020.

<sup>22</sup><https://www.un.org/development/desa/youth-flash/feature/2018/06/beyond-2030-youth-taking-charge-of-the-environment/>.

days through awareness initiation and sharing of ideas with members of their community on the ways of conserving the environment in today's world of technologies and information sharing; the youth are very active through innovation and creativity harnessing the opportunity to have a solution for sustainable environment<sup>23</sup>.

Research has shown that youth are on the rise in advocating, lobbying, networking, and leading campaigns towards adopting environmentally friendly policies and behavior. This can be attested to the recipient of the United Nations Environmental Programme (UNEP) Young Champions of the Earth award (2017), which a young leader (Liliana, 29) earned through her experience as a biologist bringing back the disappearing flora and fauna due to air pollution by coming up with a cost-effective environmental solution in Ecuador. Liliana emphasis was on native plant species that can adapt to urban environments and be resilient to climate change which in the end helped in reducing air pollution and vulnerability to natural disaster<sup>24</sup>.

Through social media, the youth can mobilize their colleagues in discussions, debates, and advocating for conventional and unconventional methods that can contribute to environmental conservation. These campaigns are at all levels of interaction, ranging from local initiatives to international campaigns. Their sharing is increasingly enabling many to access technology and information and shaping the policies linked to 'SDG 15', which focuses on life on land, thus restoring and conserving the earth's terrestrial ecosystems and biodiversity. Youth participate crucially; therefore, an inclusive and holistic approach must be adopted for meaningful engagement on platforms. It requires their commitment, talents and innovative mind to

---

<sup>23</sup>

<https://www.google.com/search?q=youth+creativity+and+innovation+for+sustainable+development&oq=youth+creativity+and+innovation+for+&aqs=chrome..69i57j33i160l2j33i22i29i30l7.17656j0j7&sourceid=chrome&ie=UTF-8>.

<sup>24</sup><https://www.unep.org/youngchampions/>. Young Champions of the Earth - UN Environment Programme.

implement and create goals for a sustainable environment. Their involvement has to be that of equal partnership at all levels of engagement. This is because their contribution based on talents and time through advocacy and education towards protecting the environment is proactive. The youth understands that environmental conditions can determine access to clean water, how greenhouse gases are harmful to the cosmos, the impact of pollution on life below water and how life on land is affected by global warming<sup>25</sup>. Through their lifestyles, the youth can play a role in improving the environment around them. Places like schools, their homes, and organizations they belong to can be made environmentally friendly by adopting necessary practices such as resource preservation like electricity and water and recycling different materials. Their engagement in environmental preservation changes behavior and attitude and goes up to their parents, who tend to emulate their commitment to environmental conservation through generations.

### **Youth and the Environmental Education**

Environmental education plays a crucial role in promoting awareness and the knowledge base of a society and its capacity. According to Janicke (2005), environmental education is the first step while enhancing the knowledge base, its condition under which knowledge concerning the environment is produced, dispensed, applied and interpreted<sup>26</sup>. School curricula have also been designed to engage learners from primary education to high levels of learning by teaching them the importance of sustaining the environment. Pupils and students actively participate in campaigns to protect some species and local habitations, planting trees and creating and owning community and home gardens; they learn about renewable energy and the importance of solar

---

<sup>25</sup> [https://www.unep.org/news-and-stories/story/unep-unveils-young-champions-earth#:~:text=This%20year's%20Young%20Champions%20are,and%20Fatimah%20Alzelzela%20\(Kuwait\).](https://www.unep.org/news-and-stories/story/unep-unveils-young-champions-earth#:~:text=This%20year's%20Young%20Champions%20are,and%20Fatimah%20Alzelzela%20(Kuwait).)

<sup>26</sup> [https://www.unep.org/explore-topics/education-environment.](https://www.unep.org/explore-topics/education-environment)

energy<sup>27</sup>. The unemployed youth can be engaged in participating in eco-friendly tourism activities, providing tricycle services to tourists, and allowing the youth to convert unused land into greenhouses and conservation areas; the government can invest in youth by providing water for irrigation in dry land<sup>28</sup>. When students are taught the medicinal value of some tree species, they can develop an interest in conservation and change their lifestyle and how it affects the environment<sup>29</sup>.

Recycling unused papers reduce raw material demand for production and help conserve the forest ecosystem. Through smart technology, there has been reduced use of paper and shifting from paper-based activities, thus reducing landfill pollution and decomposition of individual carbon footprint<sup>30</sup>. It is important to conserve resources like freshwater ecosystems. It is mindful of energy consumption to preserve fossil resources and alternative and eco-friendly energy sources to reduce marine and soil degradation<sup>31</sup>.

It is important to be responsible consumers to reduce waste by buying only what we shall use. Since natural resources are becoming scarce excessive consumption can become counter-productive, thus undermining the planet's biodiversity. Decreasing consumption of animal-related, most potent greenhouse gas that contributes to global warming. Overstocking also may lead to deforestation damaging the natural ecosystem<sup>32</sup>.

---

<sup>27</sup> <https://www.unep.org/explore-topics/education-environment/what-we-do/youth-and-education-alliance>.

<sup>28</sup> <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1134&context=envstudtheses>.

<sup>29</sup> [https://www.researchgate.net/publication/265599832\\_Youth\\_and\\_Environmental\\_Education\\_for\\_Sustainable\\_Development](https://www.researchgate.net/publication/265599832_Youth_and_Environmental_Education_for_Sustainable_Development).

<sup>30</sup> [https://protecttheharvest.com/what-you-need-to-know/farmers-and-ranchers-are-stewards-of-the-land/?gclid=Cj0KCQjw4uaUBhC8ARIsANUuDjUyhrBez6aF8P1QBXtn1xh1h4Atlxv03-tlX4t5jgKQlIRIYhA7S48aApVwEALw\\_wcB](https://protecttheharvest.com/what-you-need-to-know/farmers-and-ranchers-are-stewards-of-the-land/?gclid=Cj0KCQjw4uaUBhC8ARIsANUuDjUyhrBez6aF8P1QBXtn1xh1h4Atlxv03-tlX4t5jgKQlIRIYhA7S48aApVwEALw_wcB).

<sup>31</sup>

<file:///C:/Environmental%20Issues/The%20Impacts%20of%20Environmental%20Education%20on%20Youth%20and%20their%20Environ.pdf>.

<sup>32</sup> <https://www.google.com/search?q=Encourage+use+of+eco-friendly+alternatives+that+can+replace+such+materials+like+plastics+minimizes+carbon+footprint&og=Encourage+use+of+eco->

## Conclusion

Youth and local communities have a great role in implementing sustainable development goals, more so the environment-related ones through innovation and their acquired knowledge and long-life expectancy of environmental degradation consequences. Environmental preservation is a major key in achieving sustainable development goals. It can be achieved through a bottom-up model whereby actions are implemented through a community-based approach. Individual local actors like women and youth and through their local organizations such as CBOs and CSOs play major roles in sustainable land management. This goodwill and participation by local actors have demonstrated higher crop yields in different areas that have embraced the idea. An estimate of over 2 billion hectares of land all over the world could be put under rehabilitation through the application of sustainable land and water management techniques. SGP, a UNDP functionary, is committed to supporting local communities in their efforts to reduce land and ecosystem degradation and restoration in achieving global goals.

Fortunately, the youth, through their talents and creativity, can invent new forms of action and activism to generate more effective responses to environmental issues. Environmental issues present some of the most profound and complex challenges requiring attention today and in the coming decades. One foundation-building step in enhancing local, regional, national and global capacities to respond to those challenges is increasing civic education on environmental awareness. Here the role of youth is central, for it is in the rising generations that heightened awareness can most easily be achieved.

Political activism on environmental issues and climate change is crucial as the youth are well-placed to develop new forms of activism and bring new energies and perspectives to environmental affairs. Young people participating in the World Summit on Sustainable Development demonstrate that they can inject sociocultural values and notions of equity into debates on sustainability. It proves that they understand better than most humankind is not living in a zero-sum, environment-versus-economy world. Young people can deal with environmental concerns more effectively through environmental education. They can be introduced to essay writing competitions on climate change amongst their school peers. Demonstrating agricultural gardens with smart climate approaches at an early age is key for comprehensive knowledge; learning institutions should hold organized debates on climate change for knowledge exchange amongst learners, gives them confidence and acts as a knowledge base.

### **Recommendations**

The future of environmental sustainability as one of the SDGs highly depends on applying environmental technology and innovation. This enhances global society by upgrading their living styles and protecting biodiversity and the ecosystem. Innovation and technology are essential elements in the future of environmental sustainability. Since youth are creative and involved in research daily, this becomes an achievement for them. Through their academics, conferences, and global interactions, they understand the challenges of environmental preservation. Their behavior and attitude can influence their family members as they are the future of any. They should be given a great opportunity to shape the environmental future of our society as they are better placed in environmental awareness, promotion, and access to information.



Programmes and policies initiated must consider first mitigation efforts that will help achieve climate change adaptation and environmental sustainability with an objective of poverty reduction—here building capacity through training and exchange programmes, building learning hubs and other facilities and giving special attention to sustainable land management programmes that will maintain and increase carbon sequestration in the soil to conserve humidity. All stakeholders must participate decision making, mitigation projects and policies affecting them, such as increased efficiency inputs and waste reduction.

### References

- "Land and Environmental Degradation and Desertification in Africa". FAO.
- "Soil Degradation". Goodplanet.info. Archived from the original (2013).
- "Types of Environmental Issues: Meaning, Pollution, Videos, Examples". Toppr-guides. (2018).
- Banda, Jr, S. (2008). "Deforestation reaches worrying level – UN". africanews.com.
- Climate Analytics. "Africa's Adaptation Gap, Technical Report: Climate Change Impacts, Adaptation Challenges, and Costs for Africa" (PDF). Climate Analytics.
- CO2 Emissions | Global Carbon Atlas". [www.globalcarbonatlas.org](http://www.globalcarbonatlas.org).
- Darame, M. (2019). "En Afrique de l'Ouest, une pollution mortelle mais d'ampleur inconnue".
- Edoo, R., (2022). Local Action on Sustainable Land Management. UNDP.  
<https://www.sgp.undp.org/>.
- Favretto, (2018). "Links between Climate Change Mitigation, Adaptation and Development in Land Policy and Ecosystem Restoration Projects: Lessons from South Africa". Sustainability. 10 (3): 779. doi:10.3390/su10030779. ISSN 2071- 1050.

<file:///C:/Environmental%20Issues/Environmental%20sustanance.pdf>.

[file:///C:/Environmental%20Issues/Youth\\_at\\_the\\_forefront\\_of\\_sustainability](file:///C:/Environmental%20Issues/Youth_at_the_forefront_of_sustainability).

Foresight, (2011). The Future of food and farming final project report. The government office for science.

Hackett, S. (2015). Environmental and Natural Resources Economics. Theory, Policy, and the Sustainable Society.

Hillstrom, M., & Hillstrom, S. (2003) The Worlds environments. a continental overview of environmental issues, pp. 85–86

Hillstrom, M., & Hillstrom, S. (2003) The Worlds environments. A continental overview of environmental issues, pp. 207–208. "Air pollution and development in Africa: impacts on health, the economy, and human capital".

[http://www.enn.com/news/enn-stories/2001/10/10302001/young\\_45320](http://www.enn.com/news/enn-stories/2001/10/10302001/young_45320). Asp.

[http://www.planeta.com/ecotravel/period/period\\_enviro.html](http://www.planeta.com/ecotravel/period/period_enviro.html).

[http://www.planeta.com/ecotravel/period/period\\_enviro.html](http://www.planeta.com/ecotravel/period/period_enviro.html).

<http://www.sustainability.com/publications/engaging/good-news-and-bad-more1.asp>

[http://www.undp.bg/en/homepage\\_files/young\\_environmental\\_leaders](http://www.undp.bg/en/homepage_files/young_environmental_leaders). Html.

[http://www.undp.bg/en/homepage\\_files/young\\_environmental\\_leaders](http://www.undp.bg/en/homepage_files/young_environmental_leaders). Html.

<http://www.yesworld.org.au/execsumm.html>.

[https://en.wikipedia.org/wiki/Environmental\\_issues\\_in\\_Africa#:~:text=According%20to%20the%20report%2C%20sub,this%20reinforced%20by%20a%20greater](https://en.wikipedia.org/wiki/Environmental_issues_in_Africa#:~:text=According%20to%20the%20report%2C%20sub,this%20reinforced%20by%20a%20greater).

<https://www.un.org/en/observances/youth-day>.

IFA: International Fertilizer Industry Association – Soil Degradation in Africa /

SUSTAINABILITY / HomePage / IFA". [fertilizer.org](http://fertilizer.org). IFA.

IFA: International Fertilizer Industry Association – Soil Degradation in Africa /

SUSTAINABILITY / HomePage / IFA". [fertilizer.org](http://fertilizer.org). IFA.

IFA: International Fertilizer Industry Association-Soil Degradation in Africa IFA".

[fertilizer.org](http://fertilizer.org). IFA.

J.G. Lusilao, E.M.Cukrowskaa, E.Tessier, D.Amouroux, I.Weiersbyec (2013). "The impact of post gold mining on mercury pollution in the West Rand region, Gauteng, South Africa". *Journal of Geochemical Exploration*. 134: 111–9. DOI: 10.1016/j.gexplo.2013.08.010.

Jacobson, Z. (2008). "On the causal link between carbon dioxide and air pollution mortality". *Geophysical Research Letters*. 35 (3): L03809. Bibcode: 2008 GeoRL.35.3809J. doi:10.1029/2007GL031101. S2CID 16440166.

Jänicke, M. (2005). Trend-setters in environmental policy: the character and role of pioneer countries. *European environment*, 15(2).

Lanly, J. P. (1982) *Tropical Forest Resources*. Food and Agriculture Organization of the United Nations. Rome, Italy: United Nations. <http://www.fao.org/docrep/015/an778e/an778e00.pdf>.

Lomborg, B. (2001). *The Skeptical Environmentalist: Measuring the Real State of the World*.

Mambondiyani, A. (2021). "Air Pollution Killed a Million People in Africa in 2019". *Eos*.

Quinn, C. (2018). "Links between Climate Change Mitigation, Adaptation and Development in Land Policy and Ecosystem Restoration Projects: Lessons from South Africa". *Sustainability*. 10 (3): 779. doi:10.3390/su10030779. ISSN 2071- 1050.

Scorgie, Y. "Air Quality and Regulation". NACA.

Smith, P. (2008). Greenhouse gas mitigation in agriculture, *philosophical transactions of the Royal Society B*, vol. 363, pp. 789–813.

Sustainability, food security and climate change: three intertwined challenges | Climate- Smart Agriculture Sourcebook | Food and Agriculture Organization of the United Nations". [www.fao.org](http://www.fao.org).

The State of Food Security and Nutrition in the World. [www.fao.org](http://www.fao.org). Food and Agriculture Organization of the United Nations. 2021. doi:10.4060/CB4474EN. ISBN 978-92-5-134325-8. S2CID 241785130.

Thomashow, M. (2002). *Bringing the Biosphere Home: Learning to Perceive Global Environmental Change*.

UNDP/GEF (2018). *Climate Change Adaptation in Africa UNDP: Synthesis of Experiences and Recommendations (PDF)*. UNDP/GEF.

UNEP (June 2007), *Sudan Post-Conflict Environmental Assessment (PDF)*, Nairobi, Kenya: UNEP, ISBN 978-92-807-2702-9, archived from the original (PDF) on 2016-03-04.

Papu-Zamxaka, V. Mathee, A. Harpham, T. Barnes, B. Reollin, H. Lyons, M. Jordaan, W., & Cloete, M. (2009). "Elevated mercury exposure in communities living alongside the Inanda Dam, South Africa" (PDF). *J. Environ. Monit.* 12 (2): 472–7. doi:10.1039/B917452D. hdl:2263/15981. PMID 20145889.

Wollenberg, E., Tapio-Bistrom, M. L., & Grieg-Gran, M. (2013). *Climate change mitigation and agriculture*. <http://pubs.iied.org/>

Wood, T. S., & Baldwin, S. (1985). "Fuelwood and Charcoal Use in Developing Countries". *Annual Review of Energy*. 10: 407–29.  
doi:10.1146/annurev.eg.10.110185.002203.

World Bank Climate Change Knowledge Portal. "Kenya (Vulnerability)".

World Health Organization (2013). Mental Health – DALYs/YLDs definition. Accessed from [2] "Nigeria General Health Risks: Air Pollution".

World Health Organization (2013). The regional burden of disease due to indoor air pollution.