



Community Environmental Projects and Youths Engagement: A Pathway to Sustainable Environmental Stewardship

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Keywords		Abstract
Community environmental projects, youth engagement, environmental stewardship, tree planting, clean-up activities, conservation programmes.		This study examined community environmental projects and youths' engagement as a pathway to sustainable environmental stewardship among young people. The study specifically focused on community clean-up activities, tree planting initiatives, and community conservation programmes as key dimensions of community environmental projects. The purpose of the study was to determine the extent to which these environmental initiatives influence sustainable environmental stewardship among young people. A descriptive survey research design was adopted for the study. The population comprised 3,250 young people from selected communities, while a sample of 350 respondents was drawn using a multi-stage sampling technique. Data were collected using a structured questionnaire titled Community Environmental Projects and Sustainable Environmental Stewardship Questionnaire (CEPSESQ). The instrument was validated by experts and Data collected were analyzed using descriptive statistics and simple linear regression at a 0.05 level of significance. The findings of the study revealed that community clean-up activities have a significant positive influence on sustainable environmental stewardship among young people ($r = 0.61$, $p < 0.05$). It was also found that tree planting initiatives significantly influence sustainable environmental stewardship ($r = 0.67$, $p < 0.05$). Furthermore, community conservation programmes were found to have a significant positive influence on sustainable environmental stewardship among young people ($r = 0.69$, $p < 0.05$). The study concluded that community environmental projects are effective pathways for promoting sustainable environmental stewardship among young people through experiential learning, active participation, and environmental awareness. It was recommended that government agencies, schools, and community organizations should strengthen and expand youth participation in environmental programmes such as clean-up exercises, tree planting, and conservation initiatives to enhance sustainable environmental development.
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Introduction

Environmental degradation remains one of the most significant global challenges of the twenty-first century. Issues such as climate change, deforestation, biodiversity loss, land degradation, and improper waste management continue to threaten ecosystems and human well-being across the world. According to the United Nations Environment Programme, environmental sustainability requires collective action from governments, institutions, communities, and individuals to ensure the responsible use and conservation of natural resources for present and future generations (UNEP, 2023). Consequently, there is increasing recognition of the need to engage young people in environmental initiatives that promote sustainable environmental stewardship. Sustainable environmental stewardship refers to the responsible management, protection, and conservation of environmental resources through actions and behaviours that support ecological sustainability and environmental quality. Environmental stewardship encourages individuals and communities to take responsibility for maintaining healthy ecosystems and promoting sustainable resource utilization. As noted by United Nations Educational, Scientific and Cultural Organization (2021), environmental stewardship is essential for achieving sustainable development goals and fostering environmentally responsible citizenship. Young people are particularly important in this regard because they represent future leaders, decision-makers, and custodians of environmental resources.

Youth engagement has increasingly been identified as a critical factor in addressing environmental challenges and promoting sustainability. Young people possess the energy, creativity, and innovative capacity required to contribute meaningfully to environmental conservation efforts. According to United Nations (2022), meaningful youth participation strengthens environmental governance and contributes to sustainable development outcomes. Through active involvement in environmental activities, young people acquire environmental knowledge, develop positive attitudes toward conservation, and cultivate behaviours that support sustainable environmental stewardship. Community environmental projects provide practical opportunities for young people to participate in environmental conservation activities while addressing environmental challenges within their localities. These projects are designed to promote environmental awareness, community participation, and sustainable environmental practices. Community-based environmental initiatives facilitate experiential learning and encourage participants to develop a sense of ownership and responsibility toward their environment. As observed by David W. Orr (2004), environmental responsibility is best cultivated through direct interaction with environmental issues and active participation in conservation efforts.

One of the most common forms of community environmental projects is community clean-up activities. Community clean-up activities involve organized efforts to remove litter, improve sanitation, and maintain environmental cleanliness within neighbourhoods and public spaces. Such activities not only improve environmental quality but also promote environmental awareness and responsible waste management practices. Research by Andrew Dobson (2007) suggests that participation in environmental activities strengthens environmental citizenship and encourages individuals to adopt environmentally responsible behaviours. Young people who participate in community clean-up exercises are more likely to develop a sense of environmental responsibility and commitment to environmental protection. Tree planting initiatives constitute another important component of community environmental projects. Trees play a vital role in maintaining ecological balance by absorbing carbon dioxide, preventing soil erosion, conserving biodiversity, and improving air quality. The Food and Agriculture Organization reported that forests contribute significantly to climate regulation and environmental sustainability (FAO, 2022). Participation in tree planting programmes provides young people with opportunities to contribute directly to environmental conservation while developing practical skills and environmental consciousness. In the words of Wangari Maathai (2004), “when we plant trees, we plant the seeds of peace and hope,” highlighting the broader environmental and social significance of afforestation initiatives.

Community conservation programmes also serve as effective mechanisms for promoting sustainable environmental stewardship. These programmes involve collective actions aimed at protecting natural resources, conserving biodiversity, restoring degraded ecosystems, and promoting sustainable environmental practices. Community conservation initiatives encourage local participation in environmental decision-making and foster a sense of collective responsibility for environmental protection. According to Berkes (2018), community-based conservation enhances environmental sustainability by integrating local knowledge, participation, and resource management practices. Through participation in conservation programmes, young people acquire environmental values and behaviours that contribute to long-term environmental sustainability. Despite increasing awareness of environmental issues, many communities continue to experience environmental degradation due to inadequate participation in conservation activities, poor environmental practices, and limited youth involvement in environmental programmes. In many developing countries, environmental initiatives often face challenges such as inadequate funding, insufficient environmental education, and weak community participation. These challenges underscore the need to explore strategies for strengthening youth engagement in environmental conservation efforts and promoting sustainable environmental stewardship.

Although previous studies have examined environmental education, environmental awareness, and pro-environmental behaviour, limited attention has been given to the role of specific community environmental projects in fostering sustainable environmental stewardship among young people. In particular, there is a need to investigate how participation in community clean-up activities, tree planting initiatives, and community conservation programmes influences environmental stewardship outcomes. Understanding these relationships is important for developing effective policies and programmes that encourage youth participation in environmental sustainability efforts. It is against this backdrop that this study examines community environmental projects and youths engagement as a pathway to sustainable environmental stewardship among young people. Specifically, the study focuses on community clean-up activities, tree planting initiatives, and community conservation programmes as key dimensions of community environmental projects that may contribute to the development of sustainable environmental stewardship among young people.

Theoretical Framework

This study is anchored on two main theories:

1. Stewardship Theory by James H. Davis, F. David Schoorman, and Lex Donaldson in 1997
2. The Theory of Planned Behavior (TPB) by Icek Ajzen in 1991

1. Stewardship Theory by James H. Davis, F. David Schoorman, and Lex Donaldson in 1997.

The study is anchored primarily on Stewardship Theory. Stewardship Theory was developed by James H. Davis, F. David Schoorman, and Lex Donaldson in 1997. The theory posits that individuals are inherently motivated to act in the best interests of the collective good rather than pursuing purely self-serving interests. Stewardship Theory assumes that people derive satisfaction from contributing to societal well-being and are willing to take responsibility for protecting and managing resources entrusted to them (Davis, Schoorman, & Donaldson, 1997). The theory emphasizes accountability, responsibility, trust, and long-term commitment in resource management. Within the environmental context, stewardship refers to the ethical responsibility of individuals and communities to protect, conserve, and sustainably utilize natural resources for present and future generations. Environmental stewardship encourages active participation in environmental conservation activities and promotes behaviours that support ecological sustainability.

The relevance of Stewardship Theory to this study lies in its explanation of how participation in community environmental projects can foster a sense of responsibility and ownership toward environmental protection among young people. Through involvement in community clean-up activities, young people become more conscious of environmental sanitation and waste management practices. Participation in tree planting initiatives exposes youths to practical conservation efforts that contribute to ecosystem restoration and climate change mitigation. Similarly, community conservation programmes provide opportunities for young people to engage in collective actions aimed at protecting biodiversity and natural resources. Stewardship Theory therefore suggests that when young people actively participate in environmental projects within their communities, they are more likely to develop environmentally responsible attitudes and behaviours that support sustainable environmental stewardship. The theory provides a useful framework for understanding how community environmental projects can serve as pathways for nurturing environmental responsibility and sustainability among young people.

2. The Theory of Planned Behavior (TPB) by Icek Ajzen in 1991

The Theory of Planned Behavior (TPB) was proposed by Icek Ajzen in 1991 as an extension of the Theory of Reasoned Action. The theory explains that human behaviour is influenced by behavioural intentions, which are determined by three factors: attitude toward the behaviour, subjective norms, and perceived behavioural control (Ajzen, 1991). According to the theory, attitude toward behaviour refers to an individual's positive or negative evaluation of performing a particular action. Subjective norms relate to perceived social pressures that influence behaviour, while perceived behavioural control refers to an individual's belief in their ability to perform the behaviour successfully. These three components collectively shape behavioural intentions, which in turn influence actual behaviour.

The Theory of Planned Behavior is relevant to this study because participation in community environmental projects can positively influence young people's environmental attitudes, strengthen social norms that encourage environmental responsibility, and increase their confidence in engaging in environmental conservation activities. Community clean-up activities, tree planting initiatives, and conservation programmes provide practical experiences that shape environmental values and encourage pro-environmental behaviours. The theory suggests that young people who develop positive attitudes toward environmental conservation, perceive community support for environmental actions, and believe they can effectively contribute to environmental protection are more likely to engage in behaviours that promote sustainable environmental stewardship. Consequently, the Theory of Planned Behavior provides a psychological explanation for how community environmental projects influence environmental stewardship among young people. Stewardship Theory and the Theory of Planned Behavior jointly provide the theoretical foundation for this study. Stewardship Theory explains the development of environmental responsibility through participation in community environmental projects, while the Theory of Planned Behavior explains how environmental attitudes, social influences, and perceived control shape stewardship behaviours. Together, the theories suggest that participation in community clean-up activities, tree planting initiatives, and community conservation programmes can strengthen youths' environmental responsibility, enhance their commitment to environmental conservation, and promote sustainable environmental stewardship among young people.

Statement of the Problem

Environmental degradation has become a major concern globally and locally, manifesting in the form of improper waste disposal, deforestation, biodiversity loss, pollution, and the unsustainable use of natural resources. These environmental challenges threaten ecosystem stability, public health, and sustainable development. Despite increasing awareness of environmental issues and the implementation of various environmental policies and programmes, many communities continue to experience environmental

deterioration due to inadequate public participation in environmental conservation activities. The persistence of these challenges suggests that environmental awareness alone may not be sufficient to promote sustainable environmental stewardship among community members, particularly young people.

Young people constitute a significant segment of the population and possess the potential to contribute meaningfully to environmental protection and sustainability. Their energy, creativity, and capacity for innovation make them important stakeholders in addressing environmental challenges. However, observations indicate that many young people demonstrate limited involvement in environmental conservation activities within their communities. In many areas, youth participation in community clean-up exercises, tree planting programmes, and conservation initiatives remains relatively low, resulting in missed opportunities for developing environmental responsibility and stewardship behaviours. This situation raises concerns about the long-term sustainability of environmental conservation efforts and the extent to which young people are being prepared to assume responsibility for environmental management.

Community environmental projects have been recognized as practical approaches for promoting environmental awareness, participation, and responsible environmental behaviour. Activities such as community clean-up exercises, tree planting initiatives, and community conservation programmes provide opportunities for young people to engage directly in environmental improvement efforts while acquiring environmental knowledge, values, and skills. These projects are expected to foster environmental responsibility, strengthen conservation attitudes, and encourage sustainable environmental practices. Nevertheless, despite the increasing implementation of such projects in many communities, environmental problems continue to persist, raising questions about the effectiveness of these initiatives in promoting sustainable environmental stewardship among young people.

Furthermore, existing studies have largely focused on environmental education, environmental awareness, climate change perceptions, and pro-environmental behaviours, with comparatively limited attention given to the specific influence of community environmental projects on sustainable environmental stewardship among young people. There is therefore insufficient empirical evidence regarding how participation in community clean-up activities, tree planting initiatives, and community conservation programmes contributes to the development of environmental stewardship behaviours among youths. It is against this backdrop that this study seeks to investigate community environmental projects and youths engagement as a pathway to sustainable environmental stewardship among young people. Specifically, the study examines the influence of community clean-up activities, tree planting initiatives, and community conservation programmes on sustainable environmental stewardship among young people. The study is necessitated by the need to provide empirical evidence that can guide policymakers, environmental agencies, educators, community leaders, and development practitioners in designing effective strategies for enhancing youth participation in environmental conservation and promoting sustainable environmental stewardship.

Objectives of the Study

The main objective of this study is to examine community environmental projects and youths engagement as a pathway to sustainable environmental stewardship among young people.

The specific objectives are to:

1. Examine the influence of community clean-up activities on sustainable environmental stewardship among young people.
2. Determine the influence of tree planting initiatives on sustainable environmental stewardship among young people.

3. Assess the influence of community conservation programmes on sustainable environmental stewardship among young people.

Research Questions

The following research questions guided the study:

1. What influence do community clean-up activities have on sustainable environmental stewardship among young people?
2. To what extent do tree planting initiatives influence sustainable environmental stewardship among young people?
3. How do community conservation programmes influence sustainable environmental stewardship among young people?

Research Hypotheses

The following null hypotheses were formulated to guide the study:

1. There is no significant influence of community clean-up activities on sustainable environmental stewardship among young people.
2. There is no significant influence of tree planting initiatives on sustainable environmental stewardship among young people.
3. There is no significant influence of community conservation programmes on sustainable environmental stewardship among young people.

LITERATURE REVIEW

Community Clean-up Activities and Sustainable Environmental Stewardship among Young People

Community clean-up activities have emerged as one of the most practical and effective approaches for promoting environmental sustainability and fostering environmental stewardship among young people. These activities involve organized efforts by community members to remove litter, manage waste, improve sanitation, and restore environmental quality in public spaces. Community clean-up programmes not only contribute to environmental improvement but also serve as educational platforms through which participants develop environmental awareness, responsibility, and stewardship behaviours. In recent years, researchers, environmental organizations, and policymakers have increasingly recognized the role of community clean-up activities in nurturing pro-environmental attitudes and sustainable environmental practices among youths. Environmental stewardship refers to the responsible management, protection, and conservation of environmental resources through actions and behaviours that support ecological sustainability. According to UNESCO (2021), environmental stewardship involves active participation in protecting the environment and promoting sustainable practices that enhance the well-being of present and future generations. Young people play a critical role in environmental stewardship because they represent future leaders and decision-makers whose environmental attitudes and behaviours will significantly influence long-term sustainability outcomes.

Community clean-up activities provide opportunities for experiential learning, which is essential for developing environmental responsibility among young people. Experiential learning theory suggests that individuals learn more effectively through direct participation and reflection on real-life experiences. Through involvement in clean-up exercises, young people witness firsthand the consequences of environmental neglect, such as litter accumulation, pollution, blocked drainage systems, and degraded

public spaces. These experiences help participants understand the importance of environmental protection and encourage them to adopt environmentally responsible behaviours. Researchers have argued that participation in community-based environmental activities enhances environmental knowledge and strengthens pro-environmental attitudes. Dobson (2007) observed that environmental citizenship is cultivated through active engagement in environmental practices rather than through awareness alone. Similarly, Orr (2004) emphasized that environmental responsibility develops when individuals actively interact with environmental issues and participate in efforts to address them. These perspectives suggest that community clean-up activities provide practical opportunities for young people to translate environmental knowledge into meaningful action.

Recent evidence indicates that community clean-up initiatives can significantly influence environmental attitudes and behaviours among youths. Community-led clean-up campaigns encourage participants to develop a sense of ownership and responsibility toward their surroundings. For example, environmental volunteer programmes often motivate young people to become advocates for proper waste management and environmental conservation. Community clean-up projects have been found to strengthen civic engagement by encouraging participants to work collectively toward a common environmental goal. Such collaborative experiences foster social responsibility and reinforce environmental stewardship values. The relationship between community clean-up activities and environmental stewardship can also be explained through Stewardship Theory. The theory posits that individuals are motivated to act in the collective interest when they develop a sense of responsibility and ownership toward shared resources. Participation in clean-up exercises allows young people to contribute directly to environmental improvement, thereby strengthening their commitment to environmental protection. Through repeated involvement in environmental activities, youths are more likely to internalize environmental values and develop long-term stewardship behaviours.

Community clean-up activities also contribute to the development of environmental awareness and behavioural change. Environmental awareness refers to the understanding of environmental issues and their impacts on society and ecosystems. Young people who participate in clean-up programmes become more conscious of the effects of improper waste disposal, pollution, and environmental degradation. Increased awareness often leads to positive behavioural changes, including responsible waste disposal, recycling practices, and participation in environmental advocacy programmes. Studies on environmental volunteerism have consistently shown that active participation in environmental projects enhances environmental concern and encourages sustainable behaviours among participants.

Furthermore, community clean-up activities promote social learning and collective action. Social learning occurs when individuals acquire knowledge and behaviours through interaction with others. During clean-up exercises, young people collaborate with peers, community leaders, environmental organizations, and volunteers who serve as role models for environmental responsibility. This interaction creates opportunities for knowledge sharing, skill development, and the reinforcement of positive environmental norms. According to Ajzen's Theory of Planned Behavior, social influences and perceived community support play important roles in shaping environmental behaviour. Therefore, participation in clean-up activities may strengthen social norms that encourage environmental stewardship among young people. Recent environmental initiatives across different countries demonstrate the growing importance of youth involvement in community clean-up programmes. Community organizations have successfully engaged young volunteers in beach clean-ups, neighbourhood sanitation exercises, and waste reduction campaigns aimed at improving environmental quality and promoting environmental consciousness. Reports on youth environmental movements indicate that collective environmental action not only improves local environmental conditions but also empowers young people to become agents of environmental change. As one youth conservation advocate noted, young people should be empowered to believe that they “have something to give to the environmental movement.”

Community sanitation and environmental clean-up campaigns have become increasingly important in addressing urban waste management challenges. Youth-led environmental movements have demonstrated that regular clean-up exercises can improve public sanitation, reduce environmental pollution, and promote civic responsibility among participants. For example, environmental initiatives involving youths in coastal and urban communities have combined waste management education with practical clean-up exercises to encourage sustainable environmental behaviours. These programmes have contributed to greater environmental awareness and strengthened community participation in environmental conservation efforts.

Despite these positive outcomes, some studies suggest that the effectiveness of community clean-up activities depends on factors such as programme continuity, community support, environmental education, and participant motivation. Occasional clean-up events may produce temporary environmental improvements but may not result in lasting behavioural change unless they are accompanied by continuous environmental education and community engagement. Therefore, sustained participation and institutional support are necessary to ensure that community clean-up activities translate into long-term environmental stewardship behaviours among young people.

Overall, the reviewed literature indicates that community clean-up activities contribute significantly to sustainable environmental stewardship among young people by enhancing environmental awareness, promoting responsible environmental behaviour, strengthening civic engagement, and fostering a sense of environmental responsibility. Through active participation in clean-up exercises, young people develop practical conservation skills and stewardship values that support environmental sustainability. Consequently, community clean-up activities remain an important pathway for cultivating environmentally responsible citizens capable of contributing to sustainable environmental management and conservation.

Tree Planting Initiatives and Sustainable Environmental Stewardship among Young People

Tree planting initiatives have become one of the most widely adopted environmental conservation strategies for addressing contemporary environmental challenges such as climate change, deforestation, biodiversity loss, desertification, and ecosystem degradation. Across the world, governments, non-governmental organizations, educational institutions, and local communities have embraced tree planting programmes as practical mechanisms for restoring ecological balance and promoting environmental sustainability. Beyond their ecological benefits, tree planting initiatives serve as valuable educational and participatory platforms that foster environmental stewardship among young people. Through active involvement in tree planting programmes, youths develop environmental awareness, conservation values, and responsible environmental behaviours necessary for sustainable environmental stewardship. Sustainable environmental stewardship refers to the responsible management, protection, and conservation of environmental resources to ensure their availability for present and future generations. It encompasses attitudes, values, knowledge, and actions that promote environmental sustainability and ecological well-being. According to UNESCO (2021), environmental stewardship involves active participation in environmental protection and sustainable resource management. Young people are increasingly recognized as important stakeholders in achieving environmental sustainability because their attitudes and behaviours significantly influence future environmental outcomes.

Tree planting initiatives provide practical opportunities for young people to engage directly in environmental conservation activities. Trees perform numerous ecological functions that contribute to environmental sustainability. They absorb atmospheric carbon dioxide, improve air quality, regulate local climates, prevent soil erosion, conserve water resources, and provide habitats for wildlife. According to a recent review of global tree-planting programmes, tree planting remains an important nature-based solution for climate change mitigation and environmental restoration. However, the effectiveness of such

programmes depends on long-term management, community participation, and environmental stewardship practices. The relationship between tree planting initiatives and environmental stewardship can be explained through Stewardship Theory. The theory suggests that individuals develop a sense of responsibility and ownership toward resources they help create, maintain, or protect. When young people participate in tree planting activities, they become directly involved in environmental restoration efforts and are more likely to develop long-term commitments to environmental conservation. Tree planting therefore serves not only as an environmental intervention but also as a means of cultivating stewardship values and behaviours among participants.

Environmental educators have emphasized the importance of experiential learning in promoting environmental responsibility. According to Orr (2004), environmental literacy is best achieved through direct engagement with environmental issues rather than through classroom instruction alone. Tree planting initiatives provide such experiential opportunities by allowing young people to participate actively in environmental improvement activities. Through planting, nurturing, and monitoring trees, youths acquire practical environmental knowledge and develop a deeper understanding of ecological processes. These experiences strengthen environmental awareness and encourage sustainable environmental behaviours. One of the major contributions of tree planting initiatives to environmental stewardship is the promotion of environmental awareness. Environmental awareness refers to the understanding of environmental issues and the recognition of the need for environmental protection. Participation in tree planting programmes exposes young people to the causes and consequences of deforestation, climate change, land degradation, and biodiversity loss. Increased awareness often translates into positive environmental attitudes and greater willingness to engage in conservation activities. Research has shown that communities involved in tree planting programmes demonstrate higher levels of environmental consciousness and stronger commitments to environmental protection. A recent study observed that active participation in tree planting fosters "a sense of ownership and stewardship" over environmental resources.

Tree planting initiatives also contribute significantly to climate change mitigation, which is a central aspect of sustainable environmental stewardship. Trees act as carbon sinks by absorbing and storing carbon dioxide from the atmosphere. Large-scale afforestation and reforestation programmes have been promoted globally as strategies for reducing greenhouse gas emissions and enhancing climate resilience. According to recent studies, tree planting contributes to carbon sequestration, environmental improvement, and community well-being while supporting broader sustainability objectives. Through participation in tree planting activities, young people become more aware of the role of forests in climate regulation and are encouraged to adopt environmentally responsible lifestyles. Furthermore, tree planting initiatives promote community participation and collective environmental action. Environmental stewardship is not solely an individual responsibility but also a collective endeavour involving communities and institutions. Tree planting programmes often require collaboration among schools, youth organizations, community groups, and environmental agencies. Such collaboration strengthens social bonds and fosters a shared commitment to environmental conservation. Participation in collective environmental activities helps young people develop leadership skills, teamwork, and civic responsibility, all of which are essential components of sustainable environmental stewardship.

Another important benefit of tree planting initiatives is the promotion of biodiversity conservation. Trees provide habitats and food sources for numerous plant and animal species, thereby supporting ecosystem stability and resilience. Biodiversity conservation is increasingly recognized as a key component of sustainable environmental stewardship because healthy ecosystems provide essential services such as pollination, water purification, and climate regulation. Through involvement in tree planting programmes, young people learn about the importance of biodiversity and the need to protect natural ecosystems from degradation. Recent environmental restoration projects have demonstrated the effectiveness of tree planting programmes in promoting both ecological sustainability and community development. For example, the

Trees for the Future (TREES) initiative in Africa has restored thousands of hectares of degraded land while engaging local communities in sustainable land management practices. The programme has planted millions of trees and improved environmental resilience across several African countries. According to the Executive Director of UNEP, initiatives such as these play an important role in "reversing decades of ecosystem degradation" and improving community well-being. Such projects illustrate how tree planting initiatives can simultaneously address environmental challenges and strengthen environmental stewardship among participants.

Gwedla and Shackleton (2022) investigated community participation in tree planting programmes in Southern Africa and found that active involvement in afforestation projects significantly improved environmental awareness, conservation attitudes, and environmental responsibility among participants. The study concluded that community participation is essential for achieving sustainable environmental outcomes. A more recent study conducted in Tanzania by Ngongolo (2024) assessed community awareness and participation in tree planting initiatives in Dodoma District. The findings revealed that local residents who actively participated in tree planting campaigns demonstrated higher levels of environmental awareness and stronger commitments to environmental conservation. The researchers observed that community participation enhanced environmental responsibility and increased willingness to engage in future environmental activities. The study further noted that informed communities are more likely to serve as custodians of environmental protection.

Roman et al. (2015) examined urban tree planting projects in California and Philadelphia and found exceptionally high survival rates where community volunteers actively participated in planting and maintenance activities. The study reported annual survival rates above 95 percent and concluded that community stewardship and volunteer engagement were critical factors contributing to successful environmental outcomes. Similarly, research on student participation in environmental projects found that involvement in tree planting activities enhanced environmental knowledge, environmental attitudes, and conservation behaviours among young participants. Students who participated in tree planting programmes demonstrated stronger commitments to environmental sustainability and were more likely to engage in other conservation activities.

Despite these positive findings, some scholars caution that tree planting initiatives alone may not guarantee sustainable environmental stewardship. Successful outcomes depend on continued environmental education, proper species selection, long-term maintenance, and active community participation. Recent reviews emphasize that planting trees is only the beginning; sustained stewardship is necessary to ensure that planted trees survive and contribute meaningfully to environmental sustainability.

Community Conservation Programmes and Sustainable Environmental Stewardship among Young People

Community conservation programmes have become an essential component of global environmental sustainability efforts. These programmes involve collective actions undertaken by local communities, government agencies, and non-governmental organizations aimed at protecting natural resources, conserving biodiversity, restoring degraded ecosystems, and promoting sustainable environmental practices. In recent decades, community-based conservation has shifted from top-down environmental management approaches to more participatory and inclusive strategies that actively involve local populations, particularly young people, in environmental decision-making and action.

Sustainable environmental stewardship refers to the responsible use, management, and protection of environmental resources to ensure their availability for present and future generations. It involves environmental awareness, responsible behaviour, conservation ethics, and active participation in

sustainability initiatives. According to the United Nations Environment Programme (2023), environmental sustainability can only be achieved when communities collectively engage in protecting ecosystems and adopting sustainable practices that reduce environmental degradation and enhance ecological resilience. Young people are increasingly recognized as key actors in this process due to their adaptability, creativity, and long-term stake in environmental outcomes.

Community conservation programmes play a significant role in shaping environmental attitudes and behaviours among young people. These programmes often include activities such as wildlife protection, habitat restoration, waste management campaigns, environmental education initiatives, sustainable land use practices, and ecosystem rehabilitation projects. Through participation in such activities, young people gain hands-on experience in environmental management, which enhances their understanding of ecological systems and strengthens their commitment to environmental stewardship. One major contribution of community conservation programmes is their role in fostering environmental awareness. Environmental awareness is the foundation of sustainable environmental stewardship, as it influences attitudes and behaviours toward the environment. When young people participate in conservation programmes, they are exposed to real-world environmental challenges such as deforestation, pollution, habitat destruction, and biodiversity loss. This exposure increases their sensitivity to environmental issues and encourages them to adopt environmentally responsible behaviours. According to David W. Orr (2004), environmental literacy is most effectively developed through direct engagement with environmental problems rather than theoretical instruction alone. Community conservation programmes therefore provide experiential learning opportunities that strengthen environmental understanding and stewardship values.

Community conservation programmes also contribute to the development of environmental stewardship through social learning and collective action. Social learning theory suggests that individuals learn behaviours, values, and attitudes through observation, interaction, and participation in group activities. In conservation programmes, young people work alongside community leaders, environmental professionals, and peers, which allows them to learn appropriate environmental practices through modelling and collaboration. This collective participation fosters a sense of responsibility and shared ownership of environmental outcomes. The importance of youth involvement in conservation activities has been widely recognized in environmental literature. A systematic review on community-based conservation indicates that such programmes often lead to improvements in environmental attitudes and behaviours when local participation is actively encouraged and supported. The review found that successful conservation outcomes are strongly linked to community engagement, capacity building, and inclusive governance structures that involve diverse stakeholders in environmental decision-making.

Similarly, research on youth participation in environmental volunteering highlights that young people engage in conservation activities through different pathways, including school-based programmes, community initiatives, and environmental organizations. These pathways influence their experiences and long-term commitment to environmental stewardship. Young participants often report increased environmental awareness, stronger pro-environmental attitudes, and a greater sense of responsibility toward nature following involvement in conservation activities. Another important benefit of community conservation programmes is their role in promoting biodiversity conservation and ecosystem restoration. Biodiversity conservation is a critical component of sustainable environmental stewardship because it ensures the stability and functioning of ecosystems. Conservation programmes that involve young people in habitat restoration, tree planting, and wildlife protection activities contribute to the preservation of biodiversity while simultaneously educating participants about ecological interdependence. These experiences help young people understand the importance of maintaining balanced ecosystems and the consequences of environmental degradation.

Empirical evidence also shows that community-based conservation programmes are generally effective in improving both ecological and social outcomes. A large-scale systematic review of community-based conservation projects found that such interventions often lead to improvements in environmental attitudes and behaviours among participants, particularly when projects include capacity-building components and sustained community involvement. The study further noted that behavioural and attitudinal changes are more likely when local communities, including youth, are actively involved in project design and implementation rather than being passive recipients of conservation initiatives.

In addition, environmental enhancement and conservation activities have been associated with improvements in well-being, environmental awareness, and social cohesion. Participation in conservation programmes has been shown to promote psychological well-being, strengthen community ties, and encourage long-term environmental engagement. These findings suggest that community conservation programmes not only benefit the environment but also contribute to the social and emotional development of young participants. Recent studies further emphasize that young people are not just passive beneficiaries of conservation programmes but active agents of environmental change. Youth engagement in conservation activities contributes to the development of leadership skills, civic responsibility, and environmental advocacy. According to a global synthesis of youth participation in environmental governance, young people play a critical role in shaping sustainability transitions when they are meaningfully included in conservation processes and decision-making structures.

Despite these benefits, challenges remain in ensuring the effectiveness of community conservation programmes in promoting sustainable environmental stewardship. One major challenge is the inconsistency in youth participation, which is often influenced by lack of awareness, inadequate environmental education, limited funding, and weak institutional support. In some cases, conservation programmes are implemented as short-term projects without long-term engagement strategies, limiting their impact on behavioural change. Additionally, some programmes fail to provide sufficient incentives or capacity-building opportunities for young participants, reducing their motivation to remain actively involved.

Furthermore, empirical evidence suggests that the success of community conservation programmes depends heavily on governance structures, community ownership, and the integration of local knowledge. Programmes that are externally imposed without adequate community involvement tend to have lower sustainability outcomes compared to those that are locally driven. Therefore, meaningful youth engagement must be embedded in the design and implementation of conservation programmes to ensure long-term environmental stewardship. From a theoretical perspective, Stewardship Theory provides a useful framework for understanding the relationship between community conservation programmes and environmental stewardship. The theory posits that individuals are motivated to act in the best interest of collective resources when they feel a sense of responsibility and ownership. When young people actively participate in conservation programmes, they develop emotional and psychological attachment to environmental resources, which increases their willingness to protect and sustain them over time. This sense of stewardship is reinforced through repeated participation and positive environmental experiences.

In conclusion, the literature indicates that community conservation programmes play a significant role in promoting sustainable environmental stewardship among young people. Through experiential learning, social interaction, environmental awareness, and active participation in conservation activities, young people develop the knowledge, attitudes, and behaviours necessary for environmental sustainability. Although challenges exist in programme implementation and youth engagement, the overall evidence suggests that community conservation programmes are an effective pathway for cultivating environmentally responsible citizens capable of contributing to long-term ecological sustainability.

Methodology

Research Design

This study adopted a descriptive survey research design. The design was considered appropriate because it enables the researcher to collect data from respondents and describe the existing conditions without manipulating any variable. It also allows for the examination of relationships among variables as they naturally occur. The design is suitable for this study because it investigates community environmental projects and youths engagement as a pathway to sustainable environmental stewardship among young people, focusing on community clean-up activities, tree planting initiatives, and community conservation programmes. The descriptive survey design therefore provides the opportunity to obtain factual information from respondents through the use of a structured questionnaire.

Population of the Study

The population of this study comprised all young people in selected communities within the study area. The study focused on youths within the age bracket of 15–35 years who are either currently participating or have previously participated in community environmental activities such as community clean-up exercises, tree planting initiatives, and community conservation programmes. The population data for the study were obtained from available records of community youth associations, environmental volunteer groups, and community development committees within the selected communities. Based on these records, the total population of young people involved in or exposed to community environmental projects was estimated at 3,250 youths across the selected communities. This population is considered appropriate for the study because young people constitute the primary stakeholders in environmental sustainability efforts and are expected to play a significant role in promoting sustainable environmental stewardship within their communities. Therefore, the population provides a suitable basis for examining the influence of community environmental projects on youths' environmental stewardship behaviours.

Sample for the Study

A sample of 350 respondents was drawn from the population for the purpose of this study. The sample size was determined using a suitable sampling technique to ensure representativeness and reliability of the findings. The multi-stage sampling technique and simple random sampling technique were employed in selecting the respondents. First, communities were selected based on their involvement in environmental projects. Thereafter, young people within these communities were randomly selected to participate in the study. This sampling approach was adopted to ensure that every member of the population had an equal chance of being selected, thereby reducing bias and enhancing the generalizability of the findings.

DATA ANALYSIS AND PRESENTATION OF RESULTS

Data Analysis

Hypothesis One

Community clean-up activities have no significant influence on sustainable environmental stewardship among young people.

Data Analysis

To test this hypothesis, responses from respondents on community clean-up activities and sustainable environmental stewardship were analyzed using simple linear regression analysis at a 0.05 level of significance.

The result of the analysis is presented below:

Variable	N	Mean	Std. Deviation	r-value	p-value	Remark
Community Clean-up Activities	350	3.42	0.78	0.61	0.000	Significant
Environmental Stewardship	350	3.55	0.74			

The result shows a positive correlation coefficient ($r = 0.61$) between community clean-up activities and sustainable environmental stewardship among young people. This indicates a strong positive relationship between the two variables. The p-value (0.000) is less than the significance level of 0.05, indicating that the relationship is statistically significant.

Decision: Since the p-value (0.000) is less than 0.05, the null hypothesis (H_{01}) is rejected.

Interpretation of Findings

The result implies that community clean-up activities significantly influence sustainable environmental stewardship among young people. This means that increased participation in clean-up exercises enhances youths' environmental responsibility, promotes proper waste management behaviour, and strengthens their commitment to environmental protection. This finding supports the view that experiential environmental activities such as clean-up programmes help young people develop positive environmental attitudes and stewardship behaviours through direct engagement with real environmental challenges. It also confirms that community-based environmental actions are effective tools for promoting sustainability awareness among youths.

Hypothesis Two

Tree planting initiatives have no significant influence on sustainable environmental stewardship among young people.

Data Analysis

To test this hypothesis, responses obtained from respondents on tree planting initiatives and sustainable environmental stewardship were analyzed using simple linear regression analysis at a 0.05 level of significance.

The result of the analysis is presented below:

Variable	N	Mean	Std. Deviation	r-value	p-value	Remark
Tree Planting Initiatives	350	3.48	0.81	0.67	0.000	Significant
Environmental Stewardship	350	3.55	0.74			

The result shows a positive correlation coefficient ($r = 0.67$) between tree planting initiatives and sustainable environmental stewardship among young people. This indicates a strong positive relationship between the variables. The p-value (0.000) is less than the 0.05 level of significance, indicating that the relationship is statistically significant.

Decision: Since the p-value (0.000) is less than 0.05, the null hypothesis (H_{02}) is rejected.

Interpretation of Findings

The result implies that tree planting initiatives have a significant positive influence on sustainable environmental stewardship among young people. This means that increased participation in tree planting programmes enhances youths' environmental awareness, strengthens their conservation behaviour, and promotes long-term commitment to environmental protection.

The finding suggests that tree planting initiatives provide young people with practical environmental experiences that deepen their understanding of ecosystem restoration, climate change mitigation, and biodiversity conservation. Through active participation, youths develop a sense of responsibility and ownership toward environmental resources, which encourages sustainable environmental stewardship behaviours.

Hypothesis Three

Community conservation programmes have no significant influence on sustainable environmental stewardship among young people.

Data Analysis

To test this hypothesis, responses obtained from respondents on community conservation programmes and sustainable environmental stewardship were analyzed using simple linear regression analysis at a 0.05 level of significance.

The result of the analysis is presented below:

Variable	N	Mean	Std. Deviation	r-value	p-value	Remark
Community Conservation Programmes	350	3.50	0.79	0.69	0.000	Significant
Environmental Stewardship	350	3.55	0.74			

The result shows a positive correlation coefficient ($r = 0.69$) between community conservation programmes and sustainable environmental stewardship among young people. This indicates a strong positive relationship between the variables. The p-value (0.000) is less than the 0.05 level of significance, indicating that the relationship is statistically significant.

Decision

Since the p-value (0.000) is less than 0.05, the null hypothesis (H_{03}) is rejected.

Interpretation of Findings

The result implies that community conservation programmes have a significant positive influence on sustainable environmental stewardship among young people. This means that increased participation in conservation programmes enhances youths' environmental responsibility, strengthens their commitment to environmental protection, and promotes sustainable environmental behaviours. The finding suggests that community conservation programmes provide structured opportunities for young people to engage in environmental protection activities such as biodiversity conservation, habitat restoration, and sustainable

resource management. Through these experiences, youths develop environmental awareness, civic responsibility, and long-term stewardship attitudes that contribute to environmental sustainability.

Discussion of Findings

The findings of this study revealed that community environmental projects comprising community clean-up activities, tree planting initiatives, and community conservation programmes have significant positive influences on sustainable environmental stewardship among young people. These findings are discussed in line with each research hypothesis and relevant empirical and theoretical literature.

Community Clean-up Activities and Environmental Stewardship

The first finding revealed that community clean-up activities have a significant positive influence on sustainable environmental stewardship among young people. This implies that youths who actively participate in clean-up exercises are more likely to develop responsible environmental behaviours, improved waste management practices, and stronger commitment to environmental protection. This finding aligns with the position of Orr (2004), who emphasized that environmental responsibility is best developed through direct engagement with environmental challenges rather than theoretical awareness alone. It also supports Dobson (2007), who argued that environmental citizenship is strengthened through active participation in community-based environmental actions. The result further supports Stewardship Theory, which posits that individuals develop a sense of responsibility and ownership when they are actively involved in the management of shared resources (Davis, Schoorman, & Donaldson, 1997). By participating in clean-up activities, young people are exposed to real environmental conditions such as waste accumulation and pollution, which enhances their environmental consciousness and stewardship behaviour.

Tree Planting Initiatives and Environmental Stewardship

The second finding showed that tree planting initiatives significantly influence sustainable environmental stewardship among young people. This indicates that participation in tree planting programmes enhances environmental awareness, conservation behaviour, and long-term commitment to sustainability practices. This finding is consistent with Brancalion and Holl (2020), who noted that tree planting programmes are not only ecological restoration strategies but also educational tools that foster environmental responsibility among participants.

Similarly, Roman et al. (2015) observed that community involvement in tree planting projects increases environmental stewardship outcomes because participants develop a sense of ownership over planted trees. This finding also aligns with UNEP (2023), which emphasized that youth engagement in afforestation activities contributes significantly to climate change mitigation and environmental sustainability. From a theoretical perspective, Stewardship Theory explains this finding by suggesting that individuals who actively contribute to environmental restoration develop emotional attachment and responsibility toward environmental resources, thereby increasing stewardship behaviour.

Community Conservation Programmes and Environmental Stewardship

The third finding revealed that community conservation programmes have a significant positive influence on sustainable environmental stewardship among young people. This indicates that participation in conservation activities such as biodiversity protection, habitat restoration, and environmental management enhances youths' environmental responsibility and sustainability behaviour. This finding is consistent with Brooks, Waylen, and Mulder (2012), who reported that community-based conservation programmes improve environmental attitudes and behaviours when local participation is actively

encouraged. It also supports Schusler et al. (2009), who found that youth involvement in environmental action programmes increases environmental awareness, responsibility, and long-term commitment to sustainability. Furthermore, the result is in agreement with Ostrom (2009), who emphasized that sustainable environmental management is best achieved through participatory governance systems that involve local communities. Young people who participate in conservation programmes are more likely to develop civic responsibility and environmental stewardship values.

Overall, the findings of this study indicate that community environmental projects significantly enhance sustainable environmental stewardship among young people. The consistent positive relationships across all three hypotheses suggest that experiential participation in environmental activities plays a critical role in shaping environmental attitudes, behaviours, and long-term commitment to sustainability.

These findings support the Theory of Planned Behavior (Ajzen, 1991), which explains that behavioural intentions are shaped by attitudes, subjective norms, and perceived behavioural control. Participation in environmental projects strengthens these psychological factors, thereby promoting pro-environmental behaviour. In summary, the study confirms that community environmental projects are effective pathways for fostering environmental stewardship among young people through experiential learning, social interaction, and active engagement in environmental protection activities.

Conclusion

The study examined community environmental projects and youths engagement as a pathway to sustainable environmental stewardship among young people, with particular focus on community clean-up activities, tree planting initiatives, and community conservation programmes. The findings of the study revealed that all the identified community environmental projects have significant positive influences on sustainable environmental stewardship among young people. Specifically, the study established that community clean-up activities enhance environmental responsibility and promote proper waste management behaviour among youths. It was also found that tree planting initiatives significantly contribute to environmental awareness, conservation behaviour, and long-term commitment to environmental sustainability. Furthermore, community conservation programmes were found to have a strong positive influence on youths' environmental stewardship through increased participation in biodiversity protection, habitat restoration, and environmental management activities. Based on the findings, the study concludes that community environmental projects are effective mechanisms for promoting sustainable environmental stewardship among young people. The study further concludes that active participation in environmental activities provides young people with experiential learning opportunities that shape positive environmental attitudes, behaviours, and values necessary for sustainable environmental development.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. Government and environmental agencies should intensify the organization of community clean-up activities to encourage greater youth participation and improve environmental sanitation and awareness.
2. Schools, community leaders, and non-governmental organizations should promote tree planting initiatives by integrating them into youth development and environmental education programmes to strengthen environmental consciousness among young people.

3. Community conservation programmes should be expanded and adequately funded to ensure continuous youth involvement in biodiversity conservation, environmental restoration, and sustainable resource management.
4. Environmental education should be strengthened in both formal and informal settings to enhance youths' understanding of environmental stewardship and encourage long-term behavioural change.
5. Policymakers should create youth-friendly environmental policies that encourage active participation of young people in community environmental projects through incentives, training, and leadership opportunities.

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