SOCIO-ECONOMIC DYNAMICS, AWARENESS, PERCEPTION, AND CHALLENGES OF TREE PLANTING PROGRAMS IN JOS NORTH LOCAL GOVERNMENT AREA, PLATEAU STATE, NIGERIA

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ABSTRACT

Tree planting programs stand at the forefront of sustainable initiatives, offering a multifaceted approach to address environmental, social, and economic challenges. This study explores the intricate socio-economic dynamics of tree planting initiatives in Jos North Local Government Area, Plateau State, Nigeria, elucidating the interconnected relationship between human communities and the environment amid escalating environmental concerns and the urgency of addressing climate change impacts. Employing a three-stage sampling procedure, data were generated from 175 respondents who are residents in the study area through well-structured questionnaire and oral interviews. Data analysis encompassed descriptive statistics and the Pearson Product-Moment Correlation coefficient. The surveyed population demonstrates a diverse representation across various demographic characteristics. The majority fall within those aged 36 years and above (89.2%), with 80% of respondents being married. The distribution of educational backgrounds indicates a well-educated population, with graduates (33.7%) comprising a significant portion. The occupational landscape's diversity, includes the employed (38.3%), self-employed (21.7%), students (16.6%), unemployed individuals (13.7%) and retirees (9.7%) while the income distribution, with 38.3% earning between one to two hundred thousand Naira monthly. The main challenges identified for tree planting programs in Jos North Local Government Area include lack of awareness, insufficient funding, limited community involvement, climate conditions, and land use conflicts. There are significant positive correlations between respondents' education levels and their awareness, perception, and belief in tree-planting programs, highlighting the influence of education on these aspects. It was concluded that investing in educational campaigns and targeted awareness, coupled with enhanced funding and community involvement, is essential to foster support and sustainability in tree planting programs.

Keywords: awareness, perception, challenges, tree planting programs

Introduction

The ecological integrity of our planet faces unprecedented challenges, with climate change, deforestation, and biodiversity loss posing significant threats to global sustainability. In response, tree planting programs have emerged as key components of environmental conservation strategies, aiming to mitigate climate change effects, restore ecosystems, and promote sustainable development. However, the success of these initiatives is inherently tied to the complex web of socio-economic dynamics within human societies (Szekely and Mason, 2019).

Socio-economic dynamics encompass the intricate interplay between economic activities, social structures, and environmental considerations (Des Roches *et al.* (2021). In the context of tree planting programs, understanding these dynamics is

essential to create strategies that not only address ecological objectives but also account for the diverse needs, perceptions, and challenges faced by communities. However, the awareness, or the level of understanding and knowledge within a community regarding the benefits and importance of tree planting, plays a foundational role in the success of afforestation initiatives (Boissière *et al.*, 2021). The effectiveness of these programs is intricately linked to the extent to which individuals comprehend the broader environmental implications and the potential socio-economic benefits for their communities.

Perception adds another layer to this complex landscape. People's attitudes, beliefs, and values regarding tree-planting programs influence their willingness to participate, support, or resist such initiatives. Recognizing and comprehending these diverse perspectives is crucial for tailoring interventions that resonate with the specific contexts of different communities (Martin*et al.*, 2018). On the other hand, the challenges inherent to tree planting programs further contribute to the complexity of this issue. These challenges can range from logistical hurdles in implementation to socio-economic barriers that impede community engagement. Therefore, understanding and addressing these challenges is vital for developing sustainable and inclusive tree-planting strategies that stand the test of time.

This study seeks to delve into the heart of these complexities, examining the socio-economic dynamics that underpin tree-planting programs, exploring the levels of awareness within communities, scrutinizing diverse perceptions, and unravelling the inherent challenges that may hinder the success of these initiatives. By doing so, it aims to provide a comprehensive foundation for future research and policy development, fostering a more nuanced and effective approach to tree planting as a cornerstone of global environmental conservation efforts.

Methodology

Study Area

The study area is Jos North Local Government Area (LGA) in Plateau State, it is situated within the latitudes 9°50' to 10°00' North and Longitudes 8°54' to 9°00' East. Encompassing an expanse of 340 square kilometres, it extends approximately 18 kilometres from North to South and 18.5 kilometres from East to West. Geographically, it is bordered by the Bauchi plains to the Northeast, Bassa Local Government Area (LGA) to the East and North East, Bukuru (Jos-South) to the south, and Jos-East LGA to the East (Andesikuteb *et al.*, 2021). Jos North is subdivided into 14 political wards, housing a diverse array of ethnic nationalities, both indigenous and foreign. Jos North LGA is culturally diverse, home to various ethnic and linguistic groups, including indigenous tribes like Beron, Anaguta, Afizere, and others such as Hauza/Fulani, Igbo, and Yorubas. Notable markets in the area include Faringada, New Market, GadaBiyu, and Yankaji. Geologically, the region is characterized by rocks of the basement complex, intruding into various rocks of igneous and metamorphic origins, with granite being the most widespread on the Jos plateau. The soil exhibits patchiness due to the dominance of rock outcrops throughout its distribution.

Source of Data

The study employed primary data collection methods, utilizing a well-structured questionnaire and oral interviews to gather information directly from the respondents.

Sampling Technique

A three-stage sampling procedure was used to select the respondents for the study. The sampling procedure is as follows.

Stage 1: Jos North Local Government Area was purposively chosen for the study on socio-economic dynamics, awareness, perception, and challenges of tree planting programs due to its geographical relevance, rich biodiversity, existing tree planting initiatives, alignment with research objectives, and potential for collaboration with local authorities.

Stage 2: A simple random sampling technique was used to select six out of the fourteen wards in Jos North Local Government Area to ensure that each ward has an equal and unbiased chance of being included in the study, thereby enhancing the representativeness of the sample and increasing the generalizability of the findings to the entire local government area.

Stage 3: Following this, a disproportionate random selection of 175 respondents (a minimum of 25 respondents who are residents in each ward) were selected in the Jos North Local Government Area. This was employed to capture diverse perspectives, focus on areas with specific characteristics, and challenges, optimize limited resources, and enhance the representation of geographical and environmental variations in the study of socio-economic dynamics, awareness, perception, and challenges related to tree planting programs.

A well-structured questionnaire, encompassing both open-ended and closed-ended queries, was distributed among the chosen respondents within the designated wards of the study region.

Analytical Technique

The data analysis involved the application of both descriptive and inferential statistical methods. Descriptive statistics, including frequency counts, percentages, and mean values, were employed to summarize and present the key characteristics of the dataset. Additionally, inferential statistics, specifically the Pearson Product-Moment Correlation Coefficient, were utilized to assess and quantify the strength and direction of linear relationships between variables within the dataset. This comprehensive approach facilitated a thorough examination of the data, combining both summary statistics and correlation analysis to derive meaningful insights from the study's results.

Results and Discussion

Socio-economic characteristics of the respondents in Jos North Local Government Area, Plateau State

An overview of the socio-economic characteristics of the respondents, offering valuable insights into the demographic composition of the surveyed population is presented in Table 1. The socio-economic variables include age, marital status, educational status, occupational status, and monthly income level. Below, each characteristic is discussed in detail.

Age: The respondents' age distribution is notable, with a mean age of 44.63 years. The majority of respondents fall within the 36-year and 45-year age range, constituting 46.3% of the sample. Those aged 46 years and above make up 42.9%, while individuals aged 35 years or younger account for 10.9%. This distribution suggests a relatively balanced representation across different age groups. The age distribution indicates a diverse representation within the surveyed population, with the mean age being 44.63 years.

The dominance of respondents aged 36-45 (46.3%) and those aged 46 and above (42.9%) suggests a mature population (Lengerer *et al*., 2022). This demographic characteristic implies a potential wealth of life experiences and accumulated knowledge that could be tapped into for community initiatives. However, it may also indicate the need for strategies to engage younger individuals (<35 years) to ensure a comprehensive

representation and continuity in community involvement.

Marital status: The marital status of the respondents reveals that a significant proportion, 80%, are married, while 20% are not married. This information is crucial for understanding the family structure within the surveyed population and can have implications for various aspects such as household dynamics and decision-making processes (Singh *et al.*, 2016).

The fact that 80% of respondents are married has implications for community-based initiatives. Married individuals often make decisions collectively, emphasizing the importance of family-oriented approaches in environmental programs. Strategies that involve families and consider their collective impact on environmental choices may be more effective in this context.

Educational status: Educational status is diverse among the respondents. The results show that 33.7% are graduates, 26.3% have a diploma, 24.6% completed SSCE (Senior School Certificate Examination), and 15.4% have only primary education. This distribution provides insights into the educational background of the respondents, which can influence their perspectives, awareness levels, and engagement in various activities, including tree-planting programs.

The educational distribution reveals a diverse range of academic qualifications, with graduates comprising 33.7% of the sample. This implies a potentially well-educated population, which could facilitate the understanding and implementation of complex environmental conservation practices (Agyeiwaah, 2020). However, attention should be given to those with lower educational levels, particularly those with only primary education, to ensure inclusivity in environmental awareness and participation.

Occupational status: The occupational status of the respondents demonstrates a diverse workforce. Employed individuals constitute 38.3%, self-employed respondents make up 21.7%, and students account for 16.6%. Unemployed and retired individuals represent 13.7% and 9.7%, respectively. This breakdown provides a snapshot of the employment landscape within the surveyed population.

The occupational status diversity (for instance, employed, self-employed, student, retired) is significant. This suggests a variety of perspectives and daily routines within the community (Kelliher *et al.*, 2019). Environmental programs may need to consider the time constraints and preferences of different occupational groups to enhance participation. Engaging with employed individuals, for instance, might involve workplace initiatives, while student involvement could be facilitated through educational institutions.

Monthly income level: The respondents' monthly income distribution reveals that 38.3% earn between one to two hundred thousand Naira, 31.4% earn less than one hundred thousand Naira, and 30.3% earn more than two hundred thousand Naira. The mean monthly income is calculated at 177,279.45 Naira. This information sheds light on the economic status of the respondents, which can influence their purchasing power, lifestyle choices, and participation in community-based programs (Stuber *et al.*, 2020).

The distribution of monthly income levels highlights economic disparities within the community. With 38.3% earning between one to two hundred thousand Naira, 31.4% earning less than one hundred thousand Naira, and 30.3% earning more than two hundred thousand Naira, income variations should be considered in the design of any environmental programs. Financial incentives, subsidies, or flexible payment structures may be necessary to ensure the inclusivity of individuals across different income brackets.

However, these details on the socio-economic dynamics of the respondents are essential for understanding the demographic composition of the surveyed population, enabling a more nuanced analysis of their perspectives on tree planting programs and environmental conservation. Likewise, the implications underscore the importance of tailoring environmental initiatives to the specific characteristics of the surveyed population. Strategies should be inclusive, considering age diversity, marital dynamics, educational backgrounds, occupational differences, and economic disparities. This nuanced approach is crucial for the success and sustainability of community engagement programs, including tree planting initiatives, in Jos or any similar community.

Table 1: Socio-Economic Characteristics of the Respondents in Jos North Local Government Area, Plateau State

Characteristics	Variables	Frequency	Percentage
Age (Years) [Mean = 44.63 Years]	= 35	19	10.9
	36-45	81	46.3
	= 46	75	42.9
Marital Status	Married	140	80.0
	Not married	35	20.0
Educational Status	Primary	27	15.4
	SSCE	43	24.6
	Diploma	46	26.3
	Graduate	59	33.7
Occupational Status	Employed	67	38.3
	Unemployed	24	13.7
	Self-employed	38	21.7
	Student	29	16.6
	Retired	17	9.7
Monthly Income Level (per 100,000 Naira) [Mean = 177, 279.45 Naira]	Less than 1	55	31.4
	1 to 2	67	38.3
	> 2	53	30.3

Awareness in Tree Planting Programs in Jos North Local Government Area, Plateau State

Table 2 provides critical insights into the awareness of tree planting programs in Jos North Local Government Area, Plateau State. The implications drawn from this table shed light on the effectiveness of existing communication channels and community engagement strategies.

Awareness of tree planting programs: The fact that 70.3% of respondents are aware of tree planting programs in the area is a positive indication. This finding thus suggests an existing level of community knowledge and interest in environmental initiatives. This high awareness is a foundation upon which further engagement and participation in tree-planting activities can be built.

Channels of awareness: The varied channels through which respondents became aware of tree planting programs offer important implications for outreach strategies. Radio (43.4%) and television (48.6%) are prominent sources, indicating the significance of traditional media (Aziz, *et al*., 2018). Social media (21.7%) also plays a role, highlighting the need for digital communication strategies (Buratti *et al*., 2018). Community meetings emerge as a particularly effective channel with 57.7% awareness, underscoring the importance of local, community-driven engagement.

The prevalence of community meetings as a source of awareness suggests that local, grassroots initiatives and face-to-face

Journal of Forestry Research and Management. Vol. 20(3).118-130; 2023, ISSN 0189-8418

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interactions are highly effective in disseminating information about tree planting programs (Kiss *et al*., 2022). This finding emphasizes the importance of community involvement and suggests that similar programs should prioritize engaging residents directly through organized meetings.

Thus, despite the relatively high awareness, 29.7% of respondents who are not aware of tree planting programs indicate areas for improvement in communication and outreach efforts. Identifying the reasons behind this lack of awareness and addressing them could enhance program visibility and inclusivity.

However, the multiple responses allowed for the question about awareness sources to highlight the need for a diversified communication strategy. Combining traditional media with online platforms and community-driven initiatives can ensure a broader reach and cater to the diverse preferences and habits of the population (Cunningham *et al*., 2016).

The fact that community meetings are a significant source of awareness underscores the importance of understanding the local context. In Jos North Local Government Area, community-based approaches may be particularly effective, emphasizing the importance of tailoring strategies to the specific dynamics and preferences of the community.

Table 2: Awareness in Tree Planting Programs in Jos North Local Government Area, Plateau State

Awareness in Tree Planting Programs		Frequency	Percentage
Are you aware of any tree planting programs in Jos North Local Government Area?	Yes	123	70.3
	No	52	29.7
If yes, how did you become aware of these programs? ***Multiple responses allowed**	Radio	76	43.4
	Television	85	48.6
	Social Media	38	21.7
	Community Meetings	101	57.7
	Other (Specify)	6	3.4

Perception of Tree Planting Campaigns/Programs in Jos North Local Government Area, Plateau State

The findings from Table 3 shed light on the community's perception of tree-planting campaigns and programs, encompassing the importance of tree planting in environmental conservation, beliefs about the positive impact of tree-planting programs on the local community, and personal involvement in tree-planting initiatives in Jos North Local Government Area, Plateau State.

Perception of the importance of tree planting: A noteworthy 82.3% of respondents acknowledge the importance of tree planting in environmental conservation, with 55.4% considering it important and 26.9% deeming it very important.

The implication of this is that the positive perception signals a receptive community, providing a solid foundation for environmental initiatives (West *et al*., 2016). It suggests that educational campaigns can build upon this awareness to emphasize the multifaceted benefits of tree planting, fostering a deeper understanding. Thus, community engagement strategies can leverage this positive sentiment to encourage participation in tree-planting programs, emphasizing the collective impact on local ecosystems and environmental health.

Belief in the positive impact on the local community: While a majority (73.7%) is either neutral or agrees that tree planting programs positively impact the local

community, 26.3% express disagreement or strong disagreement.

The implication of this is that the diversity of opinions highlights the need for targeted communication efforts (Qazi *et al*., 2019). Acknowledging concerns and providing evidence of tangible local benefits can help build trust and shift perceptions toward a more positive outlook. Therefore, tailoring messages to address the specific local impact of tree planting, such as improved air quality, enhanced aesthetics, and community resilience, could be pivotal in garnering broader support.

Personal involvement in tree planting initiatives: The result reveals that 12.6% of respondents are personally involved in tree planting initiatives, indicating a gap between positive perceptions and active participation.

The implication of this is that understanding the reasons behind limited personal involvement in tree-planting initiatives is crucial. Barriers such as lack of information,

resources, or accessible community engagement opportunities need to be identified and addressed (Baker *et al*., 2016). Hence, initiatives that encourage personal involvement, such as community workshops, volunteer programs, or educational campaigns, can help bridge the gap. Incentivizing participation and showcasing the individual and collective benefits of involvement may enhance communal engagement (Grabs *et al*., 2016).

In brief, the results suggest a community in Jos North Local Government Area with a positive perception of the importance of tree planting in environmental conservation. However, addressing skepticism, reinforcing local impact narratives, and creating opportunities for personal involvement is vital for translating positive perceptions into tangible actions. The implications underscore the importance of tailored communication strategies and community engagement efforts to maximize the effectiveness of tree-planting initiatives in the region.

Table 3: Perception of Tree Planting Campaigns/Programs in Jos North Local Government Area, Plateau State

Perception of Tree Planting Campaigns/Programs		Frequency	Percentage
What is your perception of the importance of tree planting in environmental conservation?	Very Important	47	26.9
	Important	97	55.4
	Neutral	23	13.1
	Unimportant	6	3.4
	Very Unimportant	2	1.1
Do you believe that tree-planting programs positively impact the local community?	Strongly Agree	13	7.4
	Agree	7	4.0
	Neutral	109	62.3
	Disagree	37	21.1
	Strongly Disagree	9	5.2
Are you personally involved in any tree-planting initiatives?	Yes	22	12.6
	No	153	87.4

Challenges of Tree Planting Programs in Jos North Local Government Area, Plateau State

The results from Table 4 provide the perceived challenges facing tree planting programs in Jos North Local Government

Area, along with proposed solutions from respondents.

Challenges Facing Tree Planting Programs:

Lack of awareness (82.9%): The overwhelming consensus on the lack of

awareness as a major challenge suggests that despite positive perceptions about tree planting, a significant portion of the community remains uninformed. This highlights the critical need for targeted and comprehensive awareness campaigns to educate the community about the benefits and importance of tree planting (Mawonde and Togo, 2019).

Insufficient funding (43.4%): Insufficient funding is identified as a substantial challenge, indicating financial constraints that can impede the success and sustainability of tree planting initiatives. Diversifying funding sources, promoting economic benefits, and engaging with potential donors and partners are crucial for overcoming this challenge (Peachey *et al.*, 2018).

Limited community involvement (64.0%): The recognition of limited community involvement as a challenge underscores the importance of fostering a sense of ownership and participation. Strategies such as inclusive community engagement, involvement of local leaders, and the creation of opportunities for active participation are crucial for overcoming this challenge (De Weger *et al.*, 2018).

Climate conditions (20.0%): The acknowledgement of climate conditions as a challenge indicates the need for adapting tree planting initiatives to the local environment. Selecting tree species resilient to the specific climate and educating the community on climate-adapted practices are essential for improving the survival rates of planted trees (Krauss and Rippy, 2022).

Land use conflicts (54.3%): The prevalence of land use conflicts highlights potential tensions over allocating land for tree planting. Proactive community consultations, clear communication about the benefits of tree planting, and the establishment of conflict resolution mechanisms are crucial for

addressing this challenge (Acheampong *et al.*, 2016).

Addressing the Identified Challenges:

Increasing awareness (76.0%): Respondents suggest that increasing awareness is key to overcoming challenges. This underscores the importance of targeted educational campaigns using various channels identified in Table 2, including community meetings, social media, and traditional media, to ensure a wide-reaching and impactful awareness strategy.

Securing sufficient funding (33.7%): The recognition of the need to secure sufficient funding emphasizes the importance of financial sustainability. Beyond traditional funding sources, exploring partnerships, and grant applications, and communicating the tangible benefits of funding for community well-being is crucial for securing the necessary financial support.

Enhancing community involvement (58.3%): Respondents highlight the significance of enhancing community involvement. This involves tailoring engagement strategies to be inclusive, recognizing and celebrating community contributions, and creating avenues for active participation to foster a sense of ownership among residents.

Mitigating climate conditions (16.0%): Mitigating climate conditions involves selecting appropriate tree species and educating the community on climate-adapted practices. Collaboration with environmental experts and local agricultural offices can provide valuable insights for successful adaptation to local climate challenges.

Resolving land use conflicts (49.7%): Respondents emphasize the need for resolving land use conflicts through early identification, community engagement, and transparent communication about the benefits of tree planting. This approach aims to ensure that conflicts are addressed collaboratively

Journal of Forestry Research and Management. Vol. 20(3).118-130; 2023, ISSN 0189-8418

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and do not hinder the progress of tree-planting programs.

Implementing robust monitoring and evaluation (70.3%): The recognition of the importance of monitoring and evaluation indicates a commitment to program effectiveness. Implementing a systematic monitoring and evaluation framework enables continuous improvement, ensuring that tree-planting programs meet their intended goals and have a lasting impact.

Educating on sustainable practices (88.6%): The overwhelming consensus on the importance of educating on sustainable practices highlights the need for comprehensive community education. Beyond the benefits of tree planting,

education should focus on sustainable practices, ensuring that the community understands the long-term responsibilities and advantages associated with these initiatives.

As a whole, the challenges identified in Table 4 reflect a complex landscape that requires a multifaceted approach. Addressing awareness gaps, securing funding, enhancing community involvement, adapting to local climate conditions, resolving land use conflicts, and implementing monitoring and evaluation are key components of a successful tree planting program. The proposed solutions provide a roadmap for developing strategies that are inclusive, sustainable, and impactful in the context of Jos North Local Government Area.

Table 4: Challenges and Proposed Solutions of Tree Planting Programs in Jos North Local Government Area, Plateau State

Challenges of Tree Planting Programs		Frequency	Percentage
In your opinion, what are the main challenges facing tree planting programs in Jos North Local Government Area?	Lack of awareness	145	82.9
	Insufficient funding	76	43.4
	Limited community involvement	112	64.0
	Climate conditions	35	20.0
	Land use conflicts	95	54.3
How do you think these challenges can be addressed?	Increasing Awareness	133	76.0
	Securing Sufficient Funding	59	33.7
	Enhancing Community Involvement	102	58.3
	Mitigating Climate Conditions	28	16.0
	Resolving Land Use Conflicts	87	49.7
	Implementing Robust Monitoring and Evaluation	123	70.3
	Educating on Sustainable Practices	155	88.6

Note: Multiple responses allowed

Relationships between respondents' education, awareness, perception, and belief in tree planting programs

Table 5 presents the correlation matrix which provides insights into the relationships between education, awareness, perception, and belief in tree planting programs in Jos North Local Government Area, Plateau State. Discussed below are the correlations of the variables and their implications.

Education and Awareness: The significant correlation coefficient of 0.59 indicates a strong positive relationship between education and awareness of tree planting programs. This suggests that individuals with higher levels of education are more likely to be aware of ongoing tree-planting initiatives (Brancalion and Holl, 2020). This implies that tailoring awareness campaigns to different educational levels is crucial. A higher emphasis on reaching individuals with lower

educational attainment can address potential awareness gaps. Likewise, collaborative efforts with educational institutions can also enhance outreach and awareness initiatives, leveraging existing educational networks.

Education and Perception: The significant correlation coefficient of 0.29 suggests a positive but moderate relationship between education and the perception of the importance of tree planting. Individuals with higher educational attainment tend to have a more positive perception of the importance of tree planting in environmental conservation (Whitburn *et al*., 2019). This implies that educational programs should not only focus on raising awareness but also on fostering a deeper understanding of the environmental significance of tree planting. Similarly, customizing educational content to resonate with individuals across different educational levels can contribute to a more widespread positive perception.

Awareness and Perception: The significant correlation coefficient of 0.47 indicates a moderately strong positive relationship between awareness and the perception of the importance of tree planting. Individuals who are more aware of tree planting programs are more likely to perceive them as important for environmental conservation. This implies that strengthening awareness campaigns can positively influence the community's perception of the importance of tree planting (Soga and Gaston, 2016). Equally, incorporating information about the environmental benefits and outcomes of tree planting in awareness initiatives can contribute to a more positive perception.

Awareness and Belief: The significant correlation coefficient of 0.39 suggests a moderately strong positive relationship between awareness and the belief that tree planting programs positively impact the local community. Individuals who are more aware of tree-planting programs are more likely to believe in their positive impact. This implies that effective communication about the local impact of tree planting can contribute to a stronger belief in its positive outcomes (Brancalion and Holl, 2020). Also, addressing any potential skepticism through inclusive awareness campaigns can further strengthen the community's belief in the positive impact of tree planting.

Perception and Belief: The significant correlation coefficient of 0.51 indicates a moderately strong positive relationship between the perception of the importance of tree planting and the belief that tree planting programs positively impact the local community. Individuals who perceive tree planting as important are more likely to believe in its positive impact. This implies that reinforcing the importance of tree planting in environmental conservation can positively influence the community's belief in its positive impact (Colinas *et al*., 2019). Besides, educational initiatives can focus on connecting the perceived importance of tree planting to tangible benefits at the local level, strengthening the overall belief in positive outcomes.

Table 5: Relationships between respondents' education, awareness, perception, and belief in tree planting programs

Variables	Education	Awareness	Perception	Belief
Education	1	0.59**	0.29**	0.33**
Awareness		1	0.47**	0.39**
Perception			1.0	0.51**
Belief				1

*Note:** signifies that the reported correlation coefficients (values) are statistically significant at the 0.05 level of significance.*
Education represents respondents' education.
Awareness represents respondents' awareness of tree planting programs.
Perception represents respondents' perception of the importance of tree planting in environmental conservation.

Belief represents   respondents' beliefs that tree planting programs positively impact the local community

Conclusion

The study's findings reveal a diverse demographic profile of respondents in Jos North Local Government Area, reflecting varied age groups, marital statuses, educational backgrounds, and occupational statuses. While the majority of respondents are aware of tree-planting programs, the study identifies a need for targeted communication strategies to emphasize the local impact of these initiatives. Despite a positive perception of the importance of tree planting, a significant portion remains neutral about its positive impact on the local community. This suggests the importance of tailoring awareness campaigns to highlight the tangible benefits at the community level. Challenges such as lack of awareness, insufficient funding, and limited community involvement require strategic interventions, and proposed solutions align with these challenges. The correlation analysis underscores the pivotal role of education in shaping positive attitudes towards tree planting, emphasizing the need for educational campaigns to enhance awareness and community support.

Based on the study's findings, it is recommended that tree planting programs in Jos North Local Government Area implement targeted awareness campaigns that emphasize the local benefits of tree planting initiatives. Engaging various communication channels, including radio, television, and community meetings, can help reach a wider audience. To address challenges, stakeholders should focus on securing sufficient funding, enhancing community involvement, and implementing robust monitoring and evaluation systems. Furthermore, educational campaigns should be intensified to highlight the positive correlation between education levels and positive attitudes towards tree planting which aim to strengthen the effectiveness and sustainability of tree planting programs in the local community.

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