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# **Books and Reports:**

Hart, P. (2003). *Teachers' thinking in environmental education: Consciousness and responsibility*. New York: Peter Lang.

Australian Government Department of the Environment Water Heritage and the Arts. (2009). Living sustainably: The Australian Government's National Action Plan for Education for Sustainability. Canberra: Commonwealth of Australia.

Chalkley, M. Haigh & D. Higgitt (Eds.). (2009). Education for sustainable development: Paper in honour of the United Nations Decade of Education for Sustainable Development (2005–2014) (pp. 199–213). New York: Routledge.

#### **Theses:**

Hillcoat, J. (1999). Beyond the commodity: Meaning-making, sustainability and the self. Unpublished PhD thesis, Queensland University of Technology, Brisbane, Australia.

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#### **Editorial Introduction**

The African Journal of Geographical Sciences (Vol. 5, No. 1 & 2, 2024) presents a collection of scholarly contributions that critically examine contemporary geographical, social and environmental challenges. This edition encompasses a diverse array of studies addressing issues related to climate change adaptation, land tenure, urbanization, infrastructure development, and environmental sustainability, offering peer reviewed empirically grounded insights and policy recommendations.

Within land use and urbanization, Anyokwu and Balogun conducted a spatio-temporal analysis of land cover and land surface emissivity in Benin City, underscoring the necessity for sustainable urban planning strategies. Also, Bombom and Okorie explored the application of geomatics in optimizing transportation infrastructure, integrating multi-criteria evaluation techniques with geographic information systems (GIS) to enhance highway route selection and planning.

The issue of land tenure remains a focal point in this edition. Edohen and Egharevba examined the phenomenon of land grabbing in the Benin region, identifying speculative investment, weak regulatory frameworks, and rising land values as primary drivers. Their findings emphasize the urgent need for legislative reforms and increased public awareness to safeguard land ownership rights.

Climate change adaptation emerges as another significant theme. Balarabe, Esu, and Ikpe assessed the accessibility of weather forecast information among farmers in Giwa, Kaduna State, revealing a predominant reliance on traditional communication channels such as radio and informal networks. Their study advocates for the expansion of digital platforms to enhance climate resilience. Goyol and Ibrahim explored climate change adaptation strategies among farmers in Maijuju, Jos East LGA, identifying shifts in planting dates, adoption of drought-resistant crops, and increased agrochemical use as prevalent adaptive measures. Their research underscores the need for policy frameworks that integrate localized adaptation strategies with broader climate resilience planning.

Danbaba, Hassan and Sunday explored the effects of climatic elements (rainfall, temperature, relative humidity, and solar radiation) variability on surface water in selected catchment areas of Kaduna state. The study found that climatic variables have no significant impact on the water level across the three catchment areas of Galma, Kaduna Central and Amere/Mada, though rainfall and solar radiation have a positive relationship with water level, which give rise to positive water level in the catchment area. They concluded that that water resources availability in the catchment areas will not be stressed by climate variation.

Water resource management and environmental sustainability were also examined in depth. Adams, Olowolafe, and Dabi analyzed heavy metal contamination in irrigated crops in Southern Kaduna, raising concerns about the presence of pollutants and emphasizing the necessity of improved water quality monitoring and regulatory enforcement. Salifu, Eziashi and Dabi investigated recurrent flooding in Kaduna Metropolis, providing an empirical assessment of its socio-economic impacts and proposing targeted flood mitigation strategies.

Dalyop, Zitta, Edward, Musa and Beka investigated the physicochemical properties of tin mining ponds on the Jos Plateau. Based on these findings, the appearance, color, taste, odor, electrical conductivity, turbidity, iron (Fe), lead (Pb), arsenic (Ar), total coliform and E. coli concentrations are above the WHO and NESREA limits. They concluded that though the tin mining ponds offer good promise for municipal water supply, they must be properly treated to ensure the physicochemical properties are within acceptable limits for municipal uses.

Agricultural sustainability is another key concern addressed in this volume. Moses, Ikpe, and Omede examined adaptation strategies employed by cassava farmers in Otukpo, Benue State, highlighting improved storage techniques, enhanced processing methods, and strengthened market linkages as crucial interventions for minimizing post-harvest losses and ensuring food security.

From a socio-economic perspective, Ariyo, Omole, and Gabriel examined the role of night markets in Ore, Nigeria, demonstrating their contribution to urban economic development through employment generation and commercial activity. Their study highlights the informal sector's role in fostering economic resilience and urban growth.

Nesla, Maton, Illenwabor, Cheson, and Molta examined medical waste management practices at Bingham University Teaching Hospital, Jos, Plateau State. Their findings highlighted challenges in waste segregation, collection, and disposal, emphasizing the need for stricter adherence to World Health Organization (WHO) guidelines to minimize environmental and health risks associated with medical waste.

Environmental health and air quality concerns are explored by Musa, Iliya, and Bello, who assessed the correlation between air pollution and respiratory health outcomes in Kano Metropolis. Their research established significant correlations between pollutant levels—particularly PM2.5, NO2, and CO—and respiratory diseases such as asthma, chronic obstructive pulmonary disease (COPD), and pneumonia. The study called for stricter air quality regulations and public health interventions to mitigate the adverse effects of urban air pollution.

Kwamande, Shabu, Ikape, Shabu, and Ngbea examined the contribution of the RUSHPIN programme to knowledge, attitude and practices towards sanitation and hygiene in Gwer LGA of Benue State. The study reported a significant increase in sanitation and hygiene after the implementation of the RUSHPIN programme. However, there are still pockets of challenges arising from the lack of awareness among rural people of the linkages between personal hygiene, sanitation and water supply. The study advocate for interventions by government and non-governmental organizations in educating rural people on this and other important connections in order to improve sanitation and hygiene.

Finally, aviation challenges related to environmental factors are addressed by Akintunde et al., who investigated the impact of low visibility on flight operations at Yakubu Gowon Airport, Jos. Their findings reveal a moderate correlation between poor visibility conditions and flight delays, advocating for the implementation of advanced meteorological forecasting technologies and improved aviation infrastructure to mitigate disruptions.

Through rigorous empirical analysis and interdisciplinary approaches, these studies among other articles in this edition, provide critical insights that inform policy-making, infrastructure development, and environmental governance.

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