ASSESSMENT OF ECONOMIC RETURNS TO THE FOREST FROM CHARCOAL PRODUCTION AND TRADE IN OYO NORTH ZONE OF OYO STATE, NIGERIA



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INTRODUCTION

Chiteculo *et al.* (2018) stated that charcoal and firewood account for more than 80% of the primary energy supply in sub-Saharan Africa and many people generate their household income from the production. However, charcoal production has been identified as one of the activities that deplete natural resources. It is a sector that contributes to deforestation, biodiversity loss, decreased water catchment utility, atmospheric pollution, and environmental degradation. Thus, production and trade of charcoal has an impact on the ecosystem.

According to the World Bank (2009), the disparity in profits made across the charcoal value chain is one of the factors influencing the sustainability of forest resources (trees). Charcoal producers are reported to receive the lowest returns while the charcoal wholesalers with sufficient information and direct access to the consumers make the highest returns across the value chain.

There is therefore a need for a sustainable charcoal value chain to ensure proper woodland management and sustainable tree harvesting, which includes natural regeneration and enrichment planting of trees on degraded private and public lands.

OBJECTIVE

This study assessed economic returns from charcoal production, trade and returns to forestry sector in Oyo North zone of Oyo State, Nigeria, a major charcoal producing area in the State, to recommend possible policy interventions for sustainable charcoal production that promotes forest conservation

METHODOLOGY

A multistage random sampling procedure was adopted to obtain primary data needed using structured questionnaires. Oyo North Zone has 12 local government areas (LGAs), four (4) LGAs (Saki East, Iwajowa, Atisbo and Kajola) were purposively selected because the LGAs are the main charcoal producing areas in the region. Two communities were randomly selected in each LGAs. Five charcoal producers and marketers were then randomly selected in each of the major producing communities (Sepeteri, Ago-amodu, Tede, Ago-are, Ilero, Okeho, Iwere-ile and Elekokan) making a total of forty charcoal producers and forty marketers. Furthermore, six forest officials were randomly selected.

RESULTS

Results showed that 82.5% of charcoal producers were male, 42.5% had no formal education. Also, 57.5% of charcoal marketers were male and 77.5% had formal education. Ninety percent of charcoal producers used traditional earth mound method for production. Estimated expenditure for charcoal production per annum is №241,595.13k, revenue generated is №723,495.00k and profit made is №481,899.87k. With regards to charcoal marketing, estimated expenditure per annum is №19,429,344.00k, revenue generated is №24,962,580.00k and profit made is №5,533,236.00k. Investigation from forest officials confirmed that licence fee of №16,612.90k is paid per annum per charcoal producer and a haulage tariff fee which varies from №500 to №1500 per trip is collected from charcoal transporters.

CONCLUSION

Returns from charcoal production that goes to forestry management are so little, ditto for charcoal producers compared to marketers. There is a need to improve the earnings forestry sector by reviewing forest fees associated with charcoal production. Also, charcoal producers, marketers and forestry sector must come together and liaise with the policymakers to formulate appropriate policies and most importantly establish a marketing information system (MIS) for charcoal production, trade and consumption which will make available data to stakeholders on various aspects of the market and marketing of charcoal.

REFERENCES

- [1] Chiteculo Vasco, Lojka Bohdan, Surový Peter, Verner Vladimir, Panagiotidis Dimitrios and Woitsch Jiirí 2018. Value Chain of Charcoal Production and Implications for Forest Degradation: Case Study of Bié Province, Angola. *Environments* 5, 113; doi:10.3390/environments5110113.

 www.mdpi.com/journal/environments
- [2] FAO 2017. The Charcoal Transition: Greening the Charcoal Value Chain to Mitigate Climate Change and Improve Local Livelihoods
- [3] FAO 2020. Sustainable Charcoal Production for Food Security and Forest Landscape Restoration. African Forestry and Wildlife Commission.
- [4] Olasimbo Olarinde and Johnson Adeyinka Olusola, 2018. Socioeconomic Impacts of Charcoal Production in Oke-Ogun area of Oyo State, Nigeria. *Tropical Plant Research* 46-55
- [5] FAO 2020. Sustainable Charcoal Production for Food Security and Forest Landscape Restoration. African Forestry and Wildlife Commission.