

SUPPLEMENTARY METHODOLOGICAL DOCUMENTATION

Source Data and Methodological Documentation

1. Purpose of the Supplementary Document

This supplementary document identifies the documentary and secondary sources used in the study and explains how they informed the analysis and the preparation of Tables 1-3. It is intended to improve transparency, traceability, and verification of the evidence presented in the manuscript.

2. Sources Underlying Table 1

Table 1, titled “Selected Indigenous Ecosystem Governance Institutions in Nigeria,” was developed from scholarly literature, historical studies, institutional publications, and documented accounts of indigenous environmental governance practices. The table presents selected examples rather than an exhaustive inventory of all indigenous institutions in Nigeria.

3. Sources Underlying Table 2

Table 2, titled “Empirical Indicators of Climate-Linked Environmental Insecurity in Nigeria and the Lake Chad Basin,” was compiled from institutional reports, policy documents, humanitarian assessments, environmental publications, and scholarly studies cited in the manuscript. The indicators are used analytically to illustrate documented relationships between environmental stress, livelihood vulnerability, displacement, resource competition, and insecurity.

4. Sources Underlying Table 3

Table 3, titled “The Ekuri Initiative: Case Study Snapshot,” is based on documented reports and published materials relating to the Ekuri community’s forest-management and conservation initiatives. The case study is used to illustrate the potential contribution of community-based environmental governance and should not be interpreted as representative of all Nigerian communities.

5. Documentary Materials Used

The study draws on:

Scholarly books and journal articles;

Reports of international organisations;

Publications of Nigerian government agencies;

Environmental and climate policy documents;

Humanitarian and development reports;

Documented case studies;

Historical and ethnographic literature; and

Publicly available institutional materials cited in the reference list.

6. Analytical Procedure

The materials were examined through qualitative historical and documentary analysis. Relevant information was identified, compared, thematically organised, and interpreted in relation to Indigenous Knowledge Systems, political ecology, ecosystem governance, climate change, and insecurity. The tables were developed as analytical summaries of the documentary evidence rather

than as outputs of statistical computation.

7. Formulae, Statistical Code, and Computational Scripts

No mathematical formulae, statistical code, or computational scripts were used or generated in this study. This is because the article employed qualitative historical and documentary analysis and did not involve statistical modelling, quantitative surveys, experiments, or computational data processing.

8. Availability and Verification

The principal documentary sources are publicly available through the institutional publishers, scholarly databases, official organisational websites, and other sources identified in the manuscript's reference list. The supplementary document provides additional clarification regarding the relationship between the sources and the evidence presented in Tables 1-3.