PEST Analysis Example for a young biotech company seeking to manufacture nuclease free water in Nigeria.

NB: This analysis is incomplete and should be viewed as a foundation for your own PEST analysis.

POLITICAL ECONOMIC

- Regulatory frameworks in place: Nigeria has the National Biosafety Management Agency (NBMA) and National Biotechnology Development Agency (NABDA) which regulate biotech activities and could support safe development and commercialization.
- Government drive for local manufacturing: Policies encouraging import substitution and local production (especially in pharmaceuticals and biotech reagents) can benefit a domestic supplier.
- Political stability risks: Election cycles, shifts in government policy, or bureaucratic hurdles could delay approvals or alter incentives.

- Import dependency and high costs: Most reagents are imported, subject to high shipping costs, currency devaluation, and customs tariffs. Local production can reduce these costs.
- Market growth potential: The global biotechnology reagents market is projected to grow at ~11% CAGR through 2032¹, suggesting long-term demand even in emerging markets.
- Currency fluctuations: The naira has been volatile, raising costs for imported raw materials and lab equipment. This may benefit local production but also raises financial risk.
- Funding availability: Access to venture capital and biotech funding in Nigeria is still developing.

SOCIAL TECHNOLOGICAL

- Local preference for affordability: Researchers and labs value cost-effective supplies without compromising quality. A domestic brand could win loyalty through competitive pricing and local support.
- Cultural emphasis on self-sufficiency:
 National pride in local innovation may boost acceptance of domestically manufactured reagents.
- Need for precision and quality:
 Nuclease-free water must be rigorously tested
 to ensure freedom from DNesses and RNesses

to ensure freedom from DNases and RNases, requiring specialized filtration, sterilization, and QC technology.

- Global best practices available: Technology transfer from established reagent manufacturers or collaborations with international biotech suppliers could accelerate capacity building.
- Emerging African biotech hubs: Nigeria (with facilities like <u>SHESTCO</u>) is positioning itself as a regional biotech hub, making reagent manufacturing strategically aligned.

Reference:

1. Zion Market Research. (2024, September 9). *Biotechnology reagents market size to reach USD 1,053.74 billion by 2032, at a CAGR of 10.89%.* Zion Market Research. https://www.zionmarketresearch.com/report/biotechnology-reagents-market

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