

How Nigeria is wasting its rich water resources

By [Nelson Odume and Andrew Slaughter](#)

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Nigeria is so rich in water resources that many of its 36 states are named after rivers. In addition to surface water found in nearly every part of the country, [there's also plenty stored in the ground](#). The country has [215 cubic kilometres a year](#) of available surface water. This is a lot higher than many African countries, particularly those in the southern and northern regions of the continent. South Africa, for example, has about [49 cubic kilometres a year](#).



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One would imagine that Nigerians have plenty of water to drink.

But this isn't the case. In fact, only 19% of Nigeria's population has access to [safe drinking water](#). Although 67% of people have basic water supply, access is uneven. [In cities, 82% of people have a basic supply. In rural areas, only 54% do.](#)

Wealth also distorts access. About 80% of wealthy Nigerians have access to at least a basic water supply, in comparison to only 48% of poor Nigerians.

The lack of accessible, reliable and safe drinking water, together with poor sanitation and hygiene, is estimated to cost Nigeria about [USD\\$1.3 billion](#) in access time, loss due to premature death, productive time lost and health care costs.

Why is this happening in a country with abundant water resources? Nigeria suffers from “economic [water scarcity](#)” – the inability to properly manage, use and protect water resources for socioeconomic development and environmental sustainability.

Regulation challenges

Nigeria aims to provide water that meets the standards set out by the [World Health Organisation](#). In practice, poor regulatory, legal and institutional frameworks prevent this. It's no surprise that potentially toxic concentrations of metals have been [reported in Nigeria's drinking water](#).

Another major problem is that the country has adopted a “control and command” approach to water resource management. It focuses on engineering physical infrastructure and excludes other perspectives. This means that authorities managing water don’t sufficiently engage with the people using it. Infrastructure in communities tends to collapse when users aren’t involved in planning or running it. There has also been little coordination between federal, state and local government agencies.

New [research shows that](#) water management needs different approaches. These include broader stakeholder involvement, collaboration between sectors, more attention to the human dimensions of management, and recognition of the economic, social, ecological and cultural values of water.

South Africa provides a legal example that Nigeria can learn from. [The South African National Water Act](#) provides for the basic rights of humans and the environment. The first prescribes the minimum amount and quality of water required for domestic activities and hygiene, to which everyone is entitled. The latter prescribes the minimum amount and quality of water to which the environment is entitled to maintain and protect ecosystems. The Act also expects ordinary citizens to have a say in the water sector. In Europe, the [European Commission Water Framework Directive](#) also provides for broader stakeholder involvement in the management of water resources.

The role of pollution

Pollution is another major cause of water [scarcity in Nigeria](#). It’s common to see waste dumped in rivers and streams. In cities, storm water carries pollutants which contaminate water resources.

Pollution has led to high levels of toxic chemicals such as metals and pesticides being reported in Nigeria’s water resources.

Underground water is also being polluted through seepage from [waste dump sites](#). This is a major health risk.

Poor water quality affects people, the economy and the environment. Contaminated water is the primary cause of diseases such as [typhoid fever](#), diarrhoea and dysentery in Nigeria. These diseases kill people and are very costly to the economy.

In the Niger Delta, contamination by [oil exploration activities](#) is a big worry. It has led to declining fish harvests and [loss of biodiversity](#). [The poor](#) are affected the most.

What must be done

Nigeria needs to change the way it manages water.

Firstly, it should include a wider range of stakeholders. Secondly, it should draw on the knowledge and disciplines of a variety of sectors.

Providing potable water involves science, policy and practice. All these must be considered in developing the proper management system for water in the country. Such a system needs more flexible, adaptive and responsible institutions.

Federal, state and local governments should work together to update and tighten regulations controlling water quality.

Nigeria also needs a water quality monitoring network and a water quality database. The database would store physical, chemical, biological and ecological information.

It's also important to raise public awareness about the value of water and to increase public participation in water supply schemes. Getting people involved helps to sustain water infrastructure.

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