

## **SCALING UP WATER SECTOR REFORM: STRATEGY FOR SUSTAINABLE WATER RESOURCES MANAGEMENT FOR INDUSTRIAL AND DOMESTIC PURPOSES**

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### **Abstract**

The provision of effective, efficient and sustainable water services to households, institutions, businesses and industries is necessary to support economic development. This capacity to provide services effectively and efficiently is a critical constraint in many areas in Nigeria. There is an urgent need for country-wide water sector reform, if we must meet the MDGs for the sector. In particular, sustainable improvement is needed in water resources management to services in unserved and low-income areas of the country. The paper attributed the entire crisis in the country's water sector to that of governance with little or nothing to do with engineering and technology. The paper noted that the role of the supervisory ministries of water resources should be that of the custodian of the water resource and overall leader of the water sector; which should not itself be involved in operating any water services infrastructure. Finally, the paper suggests that government should play a leading role in promoting institutional reform to ensure that capacity is used optimally and that efficient and sustainable water service providers are established. This process of institutional reform will promote the regional integration of water services where appropriate. Water boards will be transformed as part of this process. The role of the private sector in the provision of water services is also welcomed.

### **Background**

The water crisis in Nigeria is essentially that of governance. To improve access to water supply, which is due, to poor governance we must tackle the issues of sector reform head on. We must move from pilot reforms to galvanize the entire sector in the country to reform if we must meet the MDGs.

**Water and sanitation sector reforms have being restricted to four pilot States (Lagos, Cross River, Kaduna and Ogun States) supported by World Bank and African Development Bank. Of course, we know that only Cross River State has shown measurable success. In spite of their challenges, they are still better off than the rest who are stuck in the old ways. The problem with the other pilot States was with monitoring and evaluation. There was no accountability to even the users of such services who will eventually pay for it. The objective for the reform was not clear so the operators distorted it for their selfish purposes. However, Plateau State underwent their reform without external funding assistance based on their own theory, which is worthy of study. If we must meet the MDGs for water and sanitation in Nigeria we must fast-track every State in reform so that the sector can deliver clean and wholesome water sustainably to the people.**

### **Water Sector Challenges**

The major problem is fragmented institutional structures, often with overlapping and conflicting decision-making structures from the federal to the local government level. There is no strategic framework that set out a comprehensive approach with respect to water services in Nigeria, that will ensure that people and the industries have unhindered access to water supply. In Nigeria, progress has not been made in the following three areas.

1. Reforms of policies and institutions as the key to sustainable water development
2. Reform of water institutions and policies
3. Integrated Water Resources Management approaches not widely accepted as the main vehicle or instrument to manage water in more effective ways

The sector is characterized by serious under-performance, and this crisis will continue unless there is a fundamental reform of service arrangements. Consensus is growing on the principles of successful approaches, and some success

stories have been identified. However, these successes are not being replicated on a large scale in the country, nor are they transferred sufficiently to other States.

These problems are compounded on account of increasing water resource constraints, population pressures, higher service expectations, and environmental challenges, besides lack of political commitment, lack of sector coordination, lack of community involvement, inadequate finances, unskilled human resources and poor operation and maintenance.

Inadequate coverage, poor quality, as well as unreliable and unsustainable supply of water have an adverse impact on the socio-economic development of our country. It is becoming increasingly evident that governments alone, even with the assistance of international organizations, will not be able to provide the necessary expansion of quality services to a growing population. The role of government has to shift from service provider to that of a facilitator for providing financial and policy support to the communities and their institutions for fulfilling the desired levels of services on a sustainable and equitable basis.

The private sector is also becoming an increasingly important player in the provision of water supply and sanitation services. The potential for increased private participation is considerable, particularly for the management of service delivery in the urban areas. Suitably designed contracts and service delivery arrangements can ensure better focus even for the urban poor. On the rural side, we find that local government-led and community-based models of delivery of rural public services can provide sustainable solutions.

While the need for additional financial resources has traditionally been stressed, the emphasis is now to be shifted to conducting mass media campaign to create awareness about the need and benefit of reforms amongst the opinion makers and development practitioners. There is an increasing awareness of the need to strengthen technical and managerial capacity of different tiers of governments and the communities for implementing different and diverse models of service delivery.

### **Water Sector Organization**

The Federal Ministry of Water Resources and Rural Development is the sector leader, support and the regulator. The Ministry formulates national policies in the development of water resources in the country. The draft National Water Resources Bill (2007) put the Ministry as the coordinator of the activities of other tiers of government in the sector. At the State level, the State Water Agencies (SWA) are responsible for the development, operation and maintenance of water supply schemes. Owing to historical antecedents, the SWA nationwide are children of circumstances. The SWAs suffered truncated growth, being constantly unsure of the autonomy from the supervising ministries, Okereke, (2000).

The creation of States has also had its own toll on the structural growth of SWAs nationwide, as each new State created destabilizes the organizational structure of both the parent and child States. In some State, functions are merged with other agencies involved in activities entirely different from water supply. Of more grievous consequences is the question of autonomy, Okereke, (2000).

### **Theory and Concept of scaling up**

Scaling up of water sector reform is to move from the four pilot Water Sector States to reform the entire water sectors in the remaining thirty-two States. It means to expand coverage rates rapidly to meet the needs of the millions of people who currently go without safe drinking water; and to make sure that the successful, sustainable approaches to providing water supply services that are currently “islands of success” can be maintained at this expanded scale, (IRC, 2004). It is time to re-assess the way in which we do business to meet the demands of those living without proper access to safe drinking water.

Regardless of the preferred route to scaling up, there are many common objectives and it is useful to consider from the outset what we mean by this concept. Scaling up of water sector reform may mean:

1. Maximum coverage within a geographic area to serve the entire population; this implies setting strategic targets at 100%.
2. Improved, sustainable services are provided to the vast majority of the target population within a reasonable timeframe.
3. Ensuring adequate, sustained capacity is built up to effectively manage water supply systems.

4. Scaling up of institutions and frameworks to support expanding physical coverage.
5. Changing the focus from implementing discrete water supply projects to the provision of indefinite water supply services.
6. Scaling up is not limited to merely expanding size or coverage, but also encompasses scaling up of functions and strategic approaches to service delivery.

Although the momentum for scaling up is relatively new in the sector, some definitions already exist for water sector reform:

1. That scaling up must include the majority, if not all, of a target population;
2. That services should be provided in a reasonable time frame; and
3. That there is a corresponding scaling up of institutions and frameworks that support services indefinitely.
4. One of the key concepts in scaling up is the transition from a water supply project approach, which is limited in time and space, to a water supply service approach which supports full coverage over an indefinite time period.

(*IRC; www.irc.nl/scalingup; Davis and Iyer; 2003*)

Scaling up must have two basic elements which are:

1. **Inclusion:** the vast majority of the target population is provided with sustainable, improved services within a reasonable time frame. Inclusion should not necessarily be equated with full coverage.
2. **Institutionalisation:** a system of actors and institutions (public, private, and/or civic) is in place with the necessary capacity and resources to deliver sustainable services indefinitely.

Sources: *“From System to Service – Scaling Up Community Management”*, IRC, 2001 and Davis and Iyer 2003:5

Scaling up is more than just expanding physical implementation. Scaling up therefore should not just be considered as the “technical” task of increasing coverage in the short-term, but should also address the necessary institutional frameworks and governance issues which must be in place to support expanded coverage indefinitely. Scaling up can be considered as an expanded level of coverage of services in both space and time. With the latter comes the specific requirement to make water supply services sustainable and this implies supporting action at both community and higher levels, notably capacity building of all institutions to be involved in the scaling up.

To build capacity at intermediary levels implies sharing more resources with them, and inevitably a greater degree of power and autonomy; therefore there is a political dimension to scaling up. While financing will be required at lower levels of government, this can often run counter to the interests of politicians and decision-makers inside supervisory government ministries/agencies.

### **Water Supply Projects Vs Water Supply Services**

One of the most important implications on how we approach the issues of scaling up of water sector reform is that there should be a fundamental difference between the execution of water supply projects and the provision of water supply services.

Under conventional approaches water supply infrastructure is generally provided by executing discrete projects or groups of projects in stand-alone programmes. The vast majority of such projects have a limited time frame which, depending on the technology and scale, normally lasts few years. By taking this discrete approach, these types of programmes essentially take a “slice” out of time and tend to ignore past and future needs and activities.

In most instances, conventional project approaches also have a limited perspective in space: that is to say they operate in some areas and not in others. This is due to resource constraints, or to criteria which include some and exclude others. In many cases, project managers choose not to work in particular areas because they are just too difficult (poor water sources, bad access, on-going conflicts and so forth).

Water supply projects are often implemented or driven by donors and international NGOs who tend to work with an emphasis on their own particular concepts and objectives. For example, some donors put a lot of stress on gender, others on environmental aspects of water supply. Unfortunately, these types of projects often do not coordinate well and there is the tendency to create a parallel structure to government, especially where government capacity is weak.

Ultimately of course, (foreign) donors will pull out of a particular sector or country, or will decide to re-direct assistance away from service delivery projects. All of these factors contribute to a patchwork of implemented systems in many countries.

The conventional project approach contrasts with the perspective of providing a water service which has both a longer time frame and is broader in terms of geographic coverage. Because communities and individuals will always need a water service the time dimension increases from a finite number of years (linked to the project cycle) to the indefinite future; this implies building service structures not only for execution, but for follow-up support as well.

Taking a water service approach does not only change the time dimension. It also changes the space dimension. By this we mean that a service approach looks beyond the focal point of the individual community (or groups of communities) in which a system is being planned and constructed, and instead addresses the support structures needed to cover complete areas. These areas will perhaps be defined at the district level, or municipalities or provinces, depending on the country context.

Making this distinction between the project approach and a water service perspective is an important conceptual step and represents a strategic dimension to scaling up; it shows that we can no longer only aspire to doing more (a quantitative scaling up), but that we must also do things in a different way. We must seek both “horizontal” and “vertical” scaling up. This has far-reaching consequences, not just for the planning and execution of water sector reform projects, but also for the institutional frameworks which will support them in the long-term, and for policy development, regulation, legislation and approaches to financing the entire process. (Lockwood, 2002)

### **Governance and Sector Reform**

The Second World Water Forum in Hague in 2000 identified water governance as one of the highest priorities for action and expressed the need to govern water wisely through the involvement of the public and in the interests of all stakeholders. (Mead 2004)

Governance is essentially preoccupied with questions of financial accountability and administrative efficiency. Others may focus on broader political concerns related to democracy, human rights and participatory processes. There are those who look at governance with a focus on the relationship between the political-administrative and the ecological systems. Other approaches see governance entirely in terms of management, and the operation and maintenance of infrastructure and services.

Sound and effective governance of water resources and related services are paramount to facilitating and supporting an enabling environment for Integrated Water Resources Management (IWRM). If we do not change the way in which water is governed, negative development impacts will be even more widely felt.

The United Nations Development Programme (UNDP) defines governance as the exercise of economic, political and administrative authority to manage a country's affairs at all levels. It comprises the mechanisms, processes and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences. It also encompasses the political, economic and social processes and institutions by which governments, civil society, and the private sector make decisions about how best to use, develop and manage water resources. (Mead, 2004)

In this particular context, governance refers essentially to the manner in which power and authority are exercised and distributed in society, how decisions are made and to what extent citizens can participate in decision-making processes. As such, it relates to the broader social system of governing, as opposed to the narrower perspective of government as the main decision-making political entity. Governance of water is perceived in its broadest sense as comprising all social, political and economic organizations and institutions, and their relationships, in so far as these are related to water development and management.

Governance is also concerned with how institutions rule and how regulations affect political action and the prospect of solving given societal problems, such as efficient and equitable allocation of water resources. The rules may be formal (codified and legally adopted) or informal (traditionally, locally agreed and non-codified). Sound and

effective water governance systems are crucial to pursuing various sustainable water development and management goals.

In essence, water governance refers to the range of political, social, economic and administrative systems that are in place to develop and manage water resources and the delivery of water services, at different levels of society.

### **Policy and Legislation**

Effective water sector reform and governance is rest upon sound policy and legislative framework. These policies and legislation should address and reflect the following in water policy, law, institutions and management:

1. Equity and efficiency in water distribution and allocation, water administration. They need to be holistic and integrated in management approaches. There is need to balance water use between socio-economic uses and uses to maintain ecosystem integrity.
2. Clarification of the roles of the government, civil society and the private sector and their responsibilities regarding ownership, management and administration of water resources. Under this heading the following issues should be addressed:
  - absence of or conflicting water rights legislation;
  - lack of effective mechanisms for intersectoral dialogue;
  - lack of economic incentives;
  - fragmentation of water management and administration;
  - lack of mechanisms for the participation of the community or other stakeholders;
  - the role of women in water management;
  - the effects of vested interest;
  - the absence of water quantity and quality standards; and
  - the absence of mechanisms for coordination and conflict resolution.
3. Issues related to IWRM, including:
  - inappropriate price regulation and subsidies to resource users and polluters;
  - inappropriate tax incentives and credits;
  - overregulation or underregulation;
  - bureaucratic obstacles or inertia and corruption;
  - conflicting or absent regulatory regimes;
  - mechanisms to incorporate upstream and downstream externalities (environmental, economic and social) in water-planning processes; and
  - mechanisms to resolve disputes.

### **Criteria for Effective Water Governance and Sector Reform**

Effective governance of water resources requires the combined commitment and effort of governments and various civil society actors, particularly at local/community levels, as well as the private sector. Policies must deliver what is needed on the basis of clear objectives and informed decision-making, which should occur at the appropriate level. Policies should also provide clear economic and social gains for society as a whole. Given the complexities of water use within society, managing it effectively and equitably entails ensuring that the disparate voices are heard and engaged in decisions concerning the waters in which they have an interest.

Water governance can be said to be effective when there is equitable, environmentally sustainable and efficient use of water resources and its benefits. Such efficient use includes minimizing transaction costs and making the best use of a resource. Although there is no single model for effective governance strategies, the following basic attributes are likely to represent some of its features.

1. **Participation:** all citizens, both men and women, should have a voice – directly or through intermediate organizations representing their interests – throughout processes of policy and decision-making. Broad participation hinges upon national and local governments following an inclusive approach.
2. **Transparency:** information should flow freely within a society. The various processes and decisions should be transparent and open for scrutiny by the public.
3. **Equity:** all groups in society, both men and women, should have opportunities to improve their well-being.
4. **Accountability:** governments, the private sector and civil society organizations should be accountable to the public or the interests they are representing.

5. **Coherency:** the increasing complexity of water resource issues, appropriate policies and actions must be taken into account so that they become coherent, consistent and easily understood.
6. **Responsiveness:** institutions and processes should serve all stakeholders and respond properly to changes in demand and preferences, or other new circumstances.
7. **Integrative:** water governance should enhance and promote integrated and holistic approaches.
8. **Ethical considerations:** water governance has to be based on the ethical principles of the societies in which it functions, for example by respecting traditional water rights.

(DWAF, 2003)

Due to the fact that these examples are generic, we need wide participation and consensus-building aimed at identifying those attributes and actions most relevant to us.

### **Institutional Reform of Water Services**

**The institutional crises being experienced in the water sector in the country is the major reason we cannot meet the MDGs. The Ministry of Water Resources, Utilities especially at the State level etc are yet to see themselves as the custodian of the water resource and overall leader of the water sector; which should not itself be involved in operating any water services infrastructure. Their responsibility should be restricted to oversee the activities of all water sector institutions and regulate water resources and water services. The ministry should be responsible for water resource planning and not to be seen constructing facilities. But the Ministry wants to do everything even in States with established water agencies.**

For instance, the Rivers State Ministry of Water Resources and Rural Development claim to be responsible for policy formulation and regulation, infrastructure development evaluation, monitoring and standardization of water quality and delivery practices in Rivers State. This is a State that has a law establishing the Rivers State Water Board, with the responsibility of infrastructural development and service delivery. This law has never been in full operation since the creation of the State. This is similar to what is happening in other States.

The way out of this situation is institutional water and sanitation sector reforms. This is because it is the responsibilities of the water agencies (and not the ministry) to make suitable arrangements for water services provision within their areas of jurisdiction. The following factors should provide further motivation for the reform of water services provision in Nigeria:

1. **Financial viability:** Some water service providers, as presently constituted, are not financially viable.
2. **Under-investment:** Poor revenue collection, rising input costs and downward pressure on retail water tariffs are placing many water services providers under financial pressure and are resulting in inadequate spending on maintenance and under-investment in rehabilitation. This will result in the deterioration of assets over time and a breakdown in service provision.
3. **Revenue management:** Late payment and poor rates of payment are critical issues for many water service providers in Nigeria. The physical functions of service provision are separated from revenue management in the case of most municipal water services providers. This often hinders effective consumer and revenue management.
4. **Financing:** Considerable ongoing investment is required to expand and sustain water services infrastructure in Country. This investment is of both a social nature (to meet basic needs) and an economic nature (to meet economic demands). It is important that the water service sector has the ability to attract financing in the form of loans, bonds or equity particularly for investments necessary to meet economic demand. The development of financially strong water service providers will greatly assist in this.
5. **Lack of capacity:** The capacity required for effective water services provision is in short supply in many parts of the country. It is important, therefore, to make the best use of existing capacity.
6. **Inefficiencies and economies of scale:** The current institutional framework for water services provision is highly fragmented, with a substantial number of water services institutions acting as water service providers. Many Water Ministries in the country under the illusion of better management have resorted to building small water schemes which is more expensive and labour duplication. This fragmentation may result in the loss of economies of scale, duplication of administration and technical functions, inability to attract and retain good management and technical staff, and inability to invest in the development and training of specialist skills. (DWAF, 2003)

**Scaling up Reform Objectives: The key objectives of Scaling up Reform Process of the Water Sector should be to:**

1. Ensure the provision of an appropriate level of water and sanitation services which are sustainable to all households in Nigeria and to implement the free basic water of at least a minimum of 100 litres per day for all Nigeria and sanitation policies effectively and efficiently;
  2. Improve the performance of water services providers;
  3. Improve the financial viability and sustainability of the water services sector by significantly enhancing revenue collection (from those who use in excess of a basic service) and improving consumer management;
  4. Improve the accountability of water services providers to water services authorities and to consumers;
  5. Use existing capacity, skills and resources in the water services sector in an integrated and optimal way and to attract, develop and retain the necessary professional and technical skills, and improve employment and gender equity;
  6. Improve the efficiency of water use so as to ensure the wise use of Nigeria's scarce water resources through appropriate demand management and conservation initiatives; and
  7. Improve the regulation of water services providers to ensure technical and environmental standards are met, services are provided efficiently and services are appropriately priced.
- (DWAf, 2003)

**Scaling Up Reform Principles and Approach: The key principles that will inform the reform process should include the following:**

1. The primary responsibility for ensuring the provision of water services rests with water services authorities.
  2. All water services providers are ultimately accountable to the water services authority (or authorities) to whom (or on behalf of whom) they render a service.
  3. Ministry of Water Resources shall exert a leadership role in the reform process to protect the public interest by ensuring that parochial interests do not lead to adverse outcomes.
  4. Reform will be incremental and done on a case-by-case basis. (There will be no "one size fits all" institutional model.)
  5. The institutional reform of water services provision will be informed by existing institutional capacity and resources and must be underpinned by a sound business case.
  6. Where regionalisation will clearly yield advantages (for example, through economies of scale, retention and development of skills and capacity to raise finance), then this should be pursued. However, the accountability of regional entities to water services authorities must also be addressed.
  7. Wherever practical and appropriate, existing institutions will be transformed and rationalised in preference to new institutions being established.
- (DWAf, 2003)

Protecting consumer interests must be the key consideration when water services authorities consider how water and sanitation services should be provided. This means that, irrespective of whether water services are provided by the water services authority itself or an external water services provider, a water services authority must ensure that water services are provided effectively, efficiently and sustainably and that at least basic water services are provided universally (the first step) and higher levels of service are provided progressively (stepping up the services ladder). Water services authorities have the constitutional responsibility to ensure that all poor people have access to at least a basic water supply and sanitation service which is affordable. (DWAf, 2003)

**Appointment of Public or Private Water Service Providers: Where a water services authority needs to appoint a public or private external water services provider, must:**

1. follow due process (that is, the procedure followed must be administratively fair and transparent);
  2. make a sound business case for the benefits to be achieved;
  3. show how the risks and rewards are allocated, and how risks will be managed;
  4. ensure that consumer interests are protected; and
  5. Enter into a contract with the water services provider which meets legislated requirements and which is subject to national oversight
- (DWAf, 2003)

## **Conclusion**

The way forward toward scaling up sector reforms are: Sound communication strategies, sector policy and legislation review, stakeholders participation in strategies development, institutional reforms, sustainable financial options, best affordable technology for infrastructural development, sound monitoring and evaluation, accountability, develop guidelines and tools and publish state of sector report.

Addition to the above, institutional reform strategy should be developed. This strategy will include a framework for co-operation and decision making, detailed guidelines and principles, the identification of key stakeholders, the allocation of roles and responsibilities, key priorities to be addressed, a detailed process plan and a budget. The strategy will address the rationalisation of water services providers, particularly where regional infrastructure is involved, and the strengthening of public sector institutions providing water services where appropriate. The strategy will also provide support to water services authorities in establishing appropriate water services provider arrangements within their areas of jurisdiction.

These reforms are key to ensuring sustainable water supply for domestic and industrial use in our country. It is imperative that all States begin to push for reform if change will be achieved. More engineering works will not lead to make water. Better water governance is the cure to what ails our water sector.

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