

GOVERNMENT OF PLATEAU STATE



**PLATEAU STATE WATER RESOURCES AND
SANITATION POLICY**

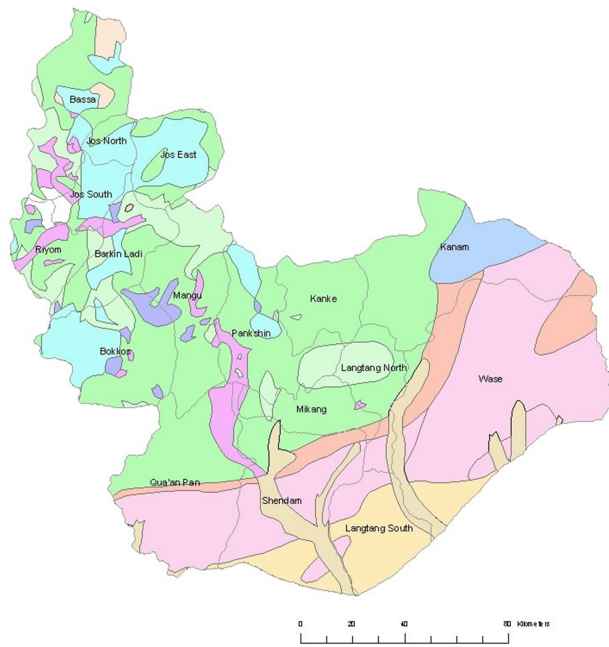
Ministry of Water Resources and Energy

July 2017

POLITICAL MAP OF PLATEAU STATE



GEOLOGICAL MAP OF PLATEAU STATE



DESCRIPTION

- Alluvium
- Basalts, trachyte, Rhyolite, newer basalts of Jos plateau
- Black shale and siltstone
- Felspathic sandstone sandy clays shale, calcareous sandstone
- Granite
- Grits, sands and clays
- Older Granite
- Older basalts of Jos Plateau
- Rhyolite
- Shale and limestone
- Undifferentiated basement complex with pebble beds
- LGA Boundary

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ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
BAT	Best Available Practices
CBM	Community Based Management
CBOs	Community Based Organization
CMA	Catchment Management Authority
CSOs	Civil Society Organizations
DRA	Demand Responsive Approach
EIA	Environmental Impact Assessment
ESAs	External Support Agencies
EU-WSSSRP	European Union Water Supply and Sanitation Sector Reform Program
GIS	Geographical Information System
HIV	Human Immunodeficiency Virus
IWRM	Integrated Water Resources Management
MDAs	Ministries Departments and Agencies
MDGs	Millennium Development Goals
M & E	Monitoring and Evaluation
NGOs	Non-Governmental Organizations
NSSD	National Strategy for Sustainable Development
PHAST	Participatory Hygiene and Sanitation Transformation
PPP	Public Private Partnership
PRUWASSA	Plateau State Rural Water Supply and Sanitation Agency
PSWB	Plateau State Water Board
SDGs	Sustainable Development Goals
STOWA	Small Towns Water Supply and Sanitation Agency
TAT	Technical Assistance Team
UFW	Unaccounted-for-Water
UN	United Nations
UNCED	United Nations Conference on Environment and Development

VLOM	Village Level Operation and Maintenance
WASH	Water Sanitation and Hygiene
WCA	Water Consumer Association
WSSD	World Summit on Sustainable Development

FOREWORD



It is an honour for me, as Governor of Plateau State, to unveil the first Plateau State Water Resources and Sanitation Policy for Sustainable Water Resources Development, Management and Utilization.

This document seeks to highlight the challenges of the Water Resources Sector in Plateau State and to provide a framework for meeting these challenges. I am aware that extensive insight has been drawn from the National Water Resources Policy and Strategy Document; the Water Resources Policies of other states in Nigeria; and also from International Conventions and Codes. As a legal professional, I am comfortable knowing that the principles and philosophy identified in this policy stem from internationally accepted principles on Integrated Water Resources Management (IWRM), as well as the United Nations Convention on Economic, Social and Cultural Rights which have identified access to water as a fundamental human right of every person.

It goes without saying that a policy is not an end in itself but a means to an end. This policy shall be translated into action by the development of a road map; and the development of the legislative framework necessary in this reform process for the allocation of rights, duties and obligations in the pursuit of an effective and efficient water sector.

I wish to extend a special word of commendation to the Commissioner for Water Resources and Energy, **Engr. David Jaafaru Wuyep** for the level of commitment and leadership demonstrated in promoting the vision of this administration to bring the necessary change and reform in the Water Resources Sector of the State. I also appreciate the support of the Technical Assistance Team (TAT), Hulla & Co Human Dynamics of the European Union Water Supply and Sanitation Sector Reform Program (EU-WSSSRP III), personnel of the Plateau State Ministry of Water Resources and Energy and other stakeholders in the water sector for their inputs to the development of this policy.

It is now pertinent on all of us to join hands to embrace the change that has come to the Water Resources Sector and play our parts in addressing the challenges of access to the abundant water resources of Plateau State and improve the quality of lives of our people now, while also laying a foundation for a better life for the generations coming after us.

Rt. Hon. Simon Bako Lalong
Executive Governor
Plateau State

EXECUTIVE SUMMARY



It is my pleasure to present to you the new Plateau State Water Resources and Sanitation Policy, 2017. It is hoped that this Policy document would guide us in setting our future goals and specific objectives to deliver results for the water and sanitation sector in decades to come, with contributions and support of all peoples of the State.

This Policy focuses on building a resilient sector based on a unified approach for a comprehensive social, economic and environmentally viable water sector development. While it recognizes the main sector stakeholders, their efforts and achievements so far, it proposes a policy-driven implementation plan that ensures coordination and integration of these efforts, based on individual and collective accountability and efficiency in their respective roles and responsibilities. Linking water scarcity with water security – and perhaps State security, puts a heavy responsibility on all custodians of water in Plateau State.

The Policy also comes in response to our recently missed milestone in the Millennium Development Goals (MDGs); the challenges of meeting the growing State water demand; the impact of continued water scarcity; the changing geo-political scenarios; the other emerging needs of the State; our commitment to the global Sustainable Development Goals (SDGs) for 2016-2030; and the need and opportunity to prepare for a water-secure future for our people and the coming generations.

The Policy stresses the integrated approach to management of water resources and sustainable water and sanitation services in light of future sector imperatives. The challenges and tasks at hand are vast. There is a need to protect state water resources while ensuring equitable and efficient water allocations to meet all the social and economic development needs of unserved populations, with the accompanying secure wastewater/sanitation services.

It essentially covers the state water sector goals and approach, taking a closer analytical look at the water sector in an integrated approach; water supply, sewage and sanitation services; water usage for agriculture (food production), energy, industry and tourism; crosscutting issues such as gender, institutional reform, capacity development, disaster risk management and climate change adaptation; and provides a set of strategic recommendations based on existing frameworks, driven by needs and challenges.

The Policy further sees the need to revise institutional and legal frameworks to streamline sector management and administration and recommends an overarching monitoring and evaluation framework for water sector performance. It also analyses financial mechanism, stressors and cost recovery that are essential to overcome deficiencies.

In conclusion, this Policy will attempt to create a new momentum to be better prepared; to do business differently and more efficiently; to add value to state development in conjunction with other state socio-economic sustainability initiatives; and to engage in institutional reform for greater efficiency and effectiveness, improve inter-sector linkages to generate greater synergy and impact on the health and economic well-being of all our people. In line with global best practices that ensure WASH access and sustainability, we need to treat water as more of an economic good than just a social service.

Engr. David Jaafaru Wuyep
Honourable Commissioner
Ministry of Water Resources and Energy

1.0. INTRODUCTION

The water resources and sanitation policy of Plateau State is, firstly, a statement of the Government's philosophy and objective for managing and conserving the state's freshwater reserves, including its strategies for achieving its set goals. In Plateau State, water is undoubtedly one of the most important natural resource but is unfortunately the most undervalued and neglected natural resource. The continuous and systematic abuse and mismanagement of the State's freshwater will surely deal a serious blow on the future status of this vital natural resource. In the face of water scarcity and over-exploitation, for example, the State's sustainable development is threatened. In a related manner, rapid economic and population growths have led to over-commitment of available surface water resources, over-exploitation of the groundwater; thus, leading to an unreliable access to water. All these combine to affect the livelihood of many, particularly the rural dwellers and the unserved poor.

For years, water services in Plateau State have adopted a top-down and supply-side approach. This has failed for many reasons, including poor community and other stakeholders' participation, poor management of infrastructure; and inadequate financial resources. Anthropogenic activities, climate variability, climate change with extreme weather events have significantly affected water availability in both quantity and quality. Demand is increasing as a result of population growth, other demographic changes (particularly urbanization) and agricultural and industrial expansion due to changes in consumption and production patterns. Thus, demand outstrips supply at critical times of the year or during years of low water availability.

The groundwater in Plateau State has always been a viable and critical source of water. It has been used for domestic, livestock, irrigation farming and industrial purposes. The on-going groundwater resources development in the state is carried out without sufficient data on the resources potential regarding quantity and quality, and lack of adequate regulations to monitor the activity. This has led to both underutilization and, in some places, overexploitation with interference in the existing groundwater sources.

The underlying philosophy of this Policy is the recognition that water is key to sustainable socio-economic development, as it has a direct effect on the populations' health conditions, environmental preservation and achievement of international development targets.

Water should also be seen as scarce commodity with real value which must, as a matter of urgency, be managed holistically. There are thus two major principal goals of this policy which are: protecting and enhancing the quality of the State's water resources; and promoting the wise and efficient management and use of water.

Water also has a function in contributing to maintaining the integrity of the natural environment. Water is one of a number of vital natural resources and it is imperative that water issues are not considered in isolation.

Managers often have to make difficult decisions on water allocation to competing uses as, increasingly, they have to apportion diminishing supplies between ever-increasing demands. Demand drivers such as demographic and climate changes further increase the stress on water resources.

Furthermore, while considering water, the twin member, sanitation, is equally a very important matter that lies at the heart of water integrity and human health. Natural water resources are confined to the land or underground; and the land could host lots of substances that would pose a threat to water integrity. Most of the time, these harmful substances could arise from negligence of the human population with respect to proper

disposal of wastes in solid and liquid forms. Accordingly, the issue of sanitation becomes something to be placed alongside and on the front-burner as water resources development and management.

1.1. BACKGROUND

Plateau state is endowed with a variety of natural resources comprising firstly, its groundwater associated with two major geological formations of sedimentary and basement complex. This groundwater resource has variable yields. Secondly, there is also an abundance of surface water formed from run-off occurring essentially in the rainy season. The accumulation of this run-off ranges from 135.75cm to 146cm per annum.

These water resources are not properly managed and regulated. Thus, there is a problem of utilization, resulting in serious deterioration and depletion. Apart from a dearth of water governance, a changing demography and increasing industrial settlements have continuously and systematically imposed a huge tax on these badly managed water resources. Consequently, the growing demands for domestic water supply and for industrial purposes are hardly satisfied. These situations have come to underscore the maxim that water is a finite resource.

Accordingly, a strong policy framework, with relevant strategies, must guide water conservation, allocation, and utilization. To this end, the Plateau State Government developed the first water supply, sanitation and hygiene policy, in September 2012, to provide a guide on the sustainable use of water and sanitation. However, the 2012 policy largely focused on water service delivery without taking into consideration other aspects like development, management, utilization, allocation, financing, monitoring, evaluation capacity building/research.

1.2. THE NEED FOR NEW WATER RESOURCES POLICY

The state and its local governments must follow the federal government's *Nigeria Economic Empowerment and Development Strategy (NEEDS) 2004* that is entry point for strategic development planning, and states must domesticate this as SEEDS, while local governments must domesticate it as LEEDS. For water resources development, management and utilization the SEEDS and LEEDS in Plateau State will comply, while identifying their peculiar challenges. Thus, the major challenges currently facing the Plateau State water sector are summarized as follows:

- Lack of coherent policy framework to guide water sector development. There is the need to establish policy and legislative framework.
- Inadequate institutional arrangement. There is need to review and clarify the functions of water sector institutions and roles and responsibilities of the sector organizations in relation to policy objectives.
- Low level access to basic water supply and sanitation services. The majority of the population lacks access to reliable supply of safe water and very few have access to basic sanitation facilities.
- Inadequate development of available water resources. Sustainable development and use of water resources are essential as bases for future economic growth. Providing services to the remote and dispersed rural populations is especially difficult.
- Limited participation by water users in sectoral development process. Low user participation in planning, management and financing of water resources development and management undermines sustainability.

- Sustainability of water infrastructure. Most of the existing infrastructure are not functional and the systems of operation and maintenance are extremely weak or absent.
- Growing environmental concerns. These include increased environmental degradation resulting in pollution of surface and groundwater resources.
- Management and mitigation of water related disasters. Frequent floods and drought events impact negatively on agriculture, food security and economic growth.
- Water use conflicts. There is need to strengthen mechanism for solving disputes over access to water which is often the source of conflicts between communities, especially at local government levels.
- Inadequate human resources and weak organizational capacity. Shortage of core technical personnel.
- Weak financing strategy. It is necessary to attract investment required for effective development and management of water resources and sustainable water supply and sanitation service delivery.

1.3. POLICY TARGET

The ideal situations in any water sector are good quality water resources, water supply infrastructure and qualified personnel for management of water supply infrastructure. Increased sources of funding from public and private sector interests complement these ideals. A state water policy will address the challenges preventing these ideal situations. The policy will ensure that the future demands are equitably met for all sectors of the economy, thus promoting improved water access in all parts of the State.

2.0. VISION

- i. **There will be adequate and safe water for all by 2025.**
- ii. **Improved water management will provide equitable access to water for socio-economic development and for enrichment of the State's ecosystem.**
- iii. **Poverty reduction, economic prosperity will be seen in all corners of Plateau State.**
- iv. **Water will actually assume the engine for social and economic development in Plateau State.**

3.0. POLICY GOALS, OBJECTIVES AND GUIDING PRINCIPLES

3.1 POLICY GOALS

The State water resources and sanitation policy will achieve the following:

- i. The water supply institutions, at the three tiers of the sector, will be reorganized in an institutional reform, and thus empowered to provide sustainable management and delivery of water services in all parts of Plateau State;
- ii. Water will be allocated on the basis of equitability and must present an acceptable quality and sufficient quantity for all competing needs and for all residents of Plateau State;
- iii. The relevant water and sanitation agencies will be used to provide efficient, appropriate and sustainable sanitation services for all citizens in the Small Towns and rural communities;
- iv. The social and economic dimensions of improved water and sanitation will be felt in all corners of the State;

- v. There will be improved management of water and sanitation as a result of revamped and ordered stakeholder participation from the lowest level of intervention to the highest level;
- vi. All water and sanitation institutions in Plateau State will be revamped and made attractive for private and outside sector investments; and
- vii. The entire ecosystems in the State will be protected and made to reflect their natural characteristics.

3.1.1. WATER RESOURCES MANAGEMENT AND DEVELOPMENT

This is at the heart of the matter in this policy. Therefore, the kernel of activities will involve the promotion of sustainable and integrated water resources management and development. This will facilitate and procure a ready availability of water and its equitable access for human development, socio-economic advancement and the Plateau State ecosystem.

3.1.1.1. HUMAN CAPACITY DEVELOPMENT

This policy understands the importance of this concept. Therefore, government will support the identification and development of human resources to implement the various items in this policy. Accordingly, there will be continuous and systematic training of adequate staff for the various water and sanitation infrastructure in the State.

These staff must be aware of and made ready to embrace the imperatives of joint venture enterprise between government and the private sector. Typical example will be the Public-Private-Partnership (PPP) arrangement.

3.1.1.2. WATER FINANCING AND PRICING

A negligent approach to this concept is the bane of the water sector. Therefore, it is important that adequate financial resources are provided for the water sector development and management. In line with a possible or proposed public-private-partnership arrangement, government, water and sanitation institutions will work out, before entering into the arrangement with the private sector, modalities for optimal and overall public benefits from this arrangement.

3.1.1.3. WATER REGULATION

This Policy will provide a first step towards codifying regulation of water uses, its financing and its conservation. Accordingly, there will be an appropriate and comprehensive legal framework that will give effect to the implementation of the policy. This framework will also place all water and sanitation institutions in central focus in the legislation.

3.1.2. WATER QUALITY AND POLLUTION CONTROL

This Policy will pursue the necessary multipartite approach in realizing the salutary effect of this concept. Accordingly, government will mobilize all relevant stakeholders, within and outside the water sector, to provide the conducive atmosphere that eliminates pollutions with the consequential high water quality in the State. This will be highlighted in a subsequent and follow-up legislation.

3.1.3. WATER UTILIZATION

3.1.3.1. URBAN WATER SUPPLY

The relevant water institutions in each urban area will be repositioned within to meet the challenges and the need for sustainable and commercially viable water supply services that are equitable and accessible to all competing demands in respect of socio-economic development.

3.1.3.2. SMALL TOWNS WATER SUPPLY

The relevant water institutions in each small town will be repositioned within to meet the challenges and the need for sustainable and commercially viable water supply services that are equitable and accessible to all competing demands in respect of socio-economic development.

3.1.3.3. RURAL WATER SUPPLY

The relevant water institutions in each rural community will be repositioned within to meet the challenges and the need for sustainable and commercially viable water supply services that are equitable and accessible to all competing demand in respect of socio-economic development.

3.1.3.4. IRRIGATION, FISHERIES AND LIVESTOCK

This Policy will promote efficient, equitable and effective utilization of water resources for sustainable irrigation, while also ensuring conservation of these resources. In addition, there will be machinery for an acceptable management and development of fishery and livestock services.

3.1.3.5. HYDRO-POWER GENERATION

This Policy is mindful of the dearth of power resources in the State in particular, and the nation in general. Accordingly, the Policy will promote effective and efficient utilization and conservation of water resources for sustainable hydro-power generation.

3.1.3.6. DISASTER MANAGEMENT

Plateau State, like other parts of Nigeria, is not isolated from flash floods resulting from rainfalls and accidental malfunctions in its dams, rivers and streams; and other pooled natural water resources. To hedge against any consequential catastrophe, the State will establish preparedness and contingency plans for water-related disasters and emergencies as an integral part of water resources management.

3.1.3.7. MONITORING AND EVALUATION

Establishing a feedback mechanism is a very important component of a policy. Therefore, an independent body will be put in place to assess the performance of policy implementation and its impacts on the overall socio-economic development of the state.

3.2. POLICY OBJECTIVES

At the moment, the outreach of water services is very limited and unsustainable. The three tiers of the water sector suffer from immense water shortages that could persist for long and unbearable periods. And these services cover only a paltry 24% of the entire population.

To reverse this ugly trend, government will mobilize a revamped and viable water institution, in conjunction with private sector involvement, to bring sanity and succour to Plateau State citizens and residents. This salutary change will make water accessible to

100% of the population by 2030, and thus bring the State in convergence with the demands of the SDG 6. Accordingly, the following objectives will be employed, taking cognisance of time-frame and population proportion already mentioned here:

- Government will revamp all state water institutions and reposition them to achieve sustainable and integrated water resources development, conservation and management; consequently, this will lead to equitable access and water use for all individuals and entrepreneurs.
- The revamped water institutions will produce and provide a strategic and contingency water resources development and management plan that guarantees availability of water in cases of droughts, floods and population pressures.
- The water institutions, mobilizing their associated sanitation component, will ensure that all persons have equitable access to water of acceptable quantity and quality, which will meet public health requirements at all times; these services must be within reach of safe and convenient distance.
- All water and sanitation institutions will promote, within their spheres of influence, the empowerment of user communities to own, manage and invest in water resources development. This will bond each community to the intervention and produce sustainability of the services.
- Government will, at all times, promote public and private sector participation in water resources development, management, supply and conservation. This will enhance adequate and appropriate funding for all water and sanitation infrastructure and sustainable services.
- The Plateau State government, in line with its quasi-sovereign authority, will participate in the enactment and implementation of local, regional, national and international obligations and agreements with regard to exploitation and management of water resources, in order to uphold and guard State integrity and security.
- Each water and sanitation institution will have viable intra-institutional desk for research, or a common desk to serve all the institutions. This research desk will be employed to initiate and facilitate scientific investigations and research on the occurrence, development, utilization of water resources and disposal of wastewater information. This information will serve as inputs for sustainable exploitation of water resources.
- All water and sanitation institutions will promote water and sanitation services at affordable but mutually beneficial pricing systems that recognize water as both a social and economic good, in order to institute cost recovery principles.
- All water and sanitation institutions will promote the mainstreaming of HIV and AIDS, and gender activities in the water and sanitation sub-sector. This will provide benefits for these sectors of the community.
- Government will facilitate the development and regular review of policies and regulations that promote water resources development, conservation, management, protection and utilization. This is essential to place the policy and regulation in line with any updated changes in the sector. Government will engage in this activity at a cycle whose initiation period kicks off every 5 years, at the minimum.
- All water and sanitation institutions will frequently promote user friendly technologies, produced from their research department. These technologies will further enhance easy access to water and sanitation by all people.

3.3. POLICY GUIDING PRINCIPLES

- Everybody in Plateau State shall have access to potable water and adequate sanitation services to reduce the incidences of water-related diseases.
- All water services must be provided using appropriate cost effective technologies that are sustainable in urban, small town water services and for the rural areas. Technologies shall conform to the village level operation and maintenance (VLOM) concept.
- Water resources management shall be based on the concept of decentralization and local participation so that the unit of water resources management shall be the catchment area.
- Development, management, conservation, protection and utilization of water resources shall be undertaken in an integrated manner.
- Water resources shall be optimally equitable and rationally allocated and regulated in a transparent and accountable manner to ensure sustainability.
- Water regulation shall be based on reliable continuous data collection, management and analyses to ensure accurate assessment of water resources and dissemination of information for effective planning of water resources development.
- Water development programmes shall be based on demand-responsive and demand-driven approach, beneficiary participation and empowerment.
- Pollution control of water resources shall adopt the “polluter-pay-principle” in order to ensure water user responsibility.
- Water demand management approach shall be adopted in all cases of water resources development and management, and water allocations shall consider ecosystems integrity and biodiversity.
- The protection and use of water resources for domestic water supply shall be accorded the highest priority over other uses, but without undue prejudice to these other uses, otherwise the principle of equitability would be violated.
- Data users shall appreciate that, due to the transient nature of the resource and the complexity of the natural environment, any water resources data are best estimations of the natural system that is dependent on the sophistication of the measuring infrastructure. However, data analysts and providers will always obtain these data using, as much as possible, state-of-the-art equipment.
- A water legal framework shall be created to guide the implementation of the Policy.
- Water shall be treated not only as a social good but as an economic good.
- Water facilities shall be registered using a numbering system developed and adopted by the relevant water and sanitation agency and backed by the Ministry of Water Resources and Energy. The information will be digitized.
- Water planning shall incorporate disaster preparedness and management to cope with the climatic change and climatic variability to minimize the impact of such changes on the socio-economic status of the state.
- All major water projects must undergo Environmental Impact Assessment (EIA).

4.0. WATER RESOURCES DEVELOPMENT AND MANAGEMENT

4.1. POLICY ISSUE: Plateau State has abundant surface water and groundwater resources. However, these resources are of variable quality and quantity, unevenly distributed in time and space and are not effectively developed and managed.

Resolving this issue will be contingent on the adoption of the following policy objectives and strategies. The under-mentioned objectives are to be realized by 2030 to meet the requirements of the SDG 6. It will take a combination of the state government, the private sector and institutional efforts for this achievement to occur. And it is envisaged that 100% coverage of water access will be achieved by this stated period.

SPECIFIC OBJECTIVES	SPECIFIC STRATEGIES
<ul style="list-style-type: none"> ● The water institutions will achieve sustainable and integrated water resources development and management in the entire State. ● The water institutions, mobilizing the entire stakeholders in the three tiers of their influence, will empower them on methods of avoiding water wastage, thus bringing about the promotion of water conservation that will make water available for socio-economic development and sustenance. ● The water institutions will frequently provide knowledge base and capacity building to all stakeholders on water management at all levels. This will promote effective and efficient utilization and management of water resources. ● The water institutions will initiate and promote strategic contingency water resources development and management schemes in the State. ● The water institutions will always have the awareness of water quantity at the forefront. This first step will help in subsequent promotion of equitable allocation and apportionment of water to all sectors for socio-economic production and services. ● The Plateau State Government, within its quasi-sovereign status, will recognize, support and implement national conventions, riparian and regional 	<ul style="list-style-type: none"> ● Ensuring that the Ministry of Water of Water Resources and Energy provide implementing machinery. ● Empowering the stakeholders to efficiently and effectively manage the state’s water resources using IWRM approach. ● Promoting efforts towards water resources conservation, harvesting and protection in an integrated manner. ● Promoting local and international resources mobilization for project financing to supplement and complement public investment in water resources development and management. ● Ensuring appropriate integration between surface and groundwater resource management. ● Identifying, delineating and protecting water resources conservation areas. ● Developing and instituting water use fees and other charges. ● Establishing a sustainable ground and surface water Monitoring and Evaluation unit (quality and quantity). ● Designing and implementing an appropriate water resources assessment methodology, including establishment of a computerized network database. ● Instituting mechanism for water

agreements for mutual benefits but without compromising the state's integrity and security.

- The water institutions will frequently meet with stakeholders in their areas of influence to address peculiar and general problems associated with the extant and proposed water infrastructure. This will empower communities to effectively and efficiently develop and manage water resources, and for the eventual sustainability of this infrastructure.
- The Plateau State Government will create a friendly and business atmosphere for the various water institutions to grow and mature adequately to perform their statutory functions. This activity will promote and encourage public and private investments in water resources management in all water-related programmes.
- The water institutions will frequently produce working designs of outreach in their areas of influence. Each design will apply mutatis mutandis of a pre-existing one in order to create the status of continuous updating. This practice will promote good catchment management to protect and sustain the ecosystem bio-diversity and wetlands.
- The water institutions, in their supervisory role, will ensure that all stakeholders comply always with water sector policies, standards and guidelines. This will help in creating effectiveness, efficiency and sustainability of infrastructure and services.
- The water institutions will, in their supervisory role owe it a duty to their areas of influence and to the State in general, mobilize the relevant stakeholders in protecting water resources from over-exploitation and pollution. This activity will procure sustainability of infrastructure and water services.

developers and users to submit prescribed water resources data to the appropriate institutional unit in accordance with the existing legislation.

- Conducting comprehensive research and studies to establish surface and groundwater resources potential to guide management and development of the resources.
- Enforcing the minimum allowable distance from a groundwater source to pit latrines and similar waste disposal facilities as well as from one source to another on a case by case basis, depending on the type of aquifer.
- Promoting research in surface and groundwater development to determine affordable and Best Available Technologies.
- Reviewing and disseminating procedures, guidelines and regulations governing surface and groundwater activities.
- Establishing and maintaining a register of all NGOs, CBOs, CSOs, the private sector and individuals involved in water and sanitation activities.
- Involving the private sector in full or part ownership of water resources management and development.
- Organizing workshops with relevant stakeholders to develop, implement and review the anticipated Water Resources Master Plan.

<ul style="list-style-type: none"> • Government will regulate the activities of private partners in water resources development and management. These partners will include PPP partners or private bodies acting alone. This activity will protect the interests of the Plateau State population, while ensuring that water services are not in any way compromised. • In order to remain current in this area of water services, the Plateau State Government will develop the Water Resources Master Plan with major key players from the private sector, and this will be reviewed every five (5) years. 	
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4.2. WATER INFORMATION

- A Water Resources Information Management System will be established to enhance water resources management, in an effective and efficient manner.
- Data collection and management shall be viewed as a continuous activity for proper planning and coordination of the development of water resources. A compatible system for data and information acquisition management shall be adopted by all stakeholders, and periodic reports on sector performance will be issued.
- All stakeholders shall be encouraged to sign a memorandum of understanding (MOU) on the sharing of data/information on water resources.

4.3. CAPACITY DEVELOPMENT

- **Human resources Development**
Government shall develop and implement a human resources development plan for the implementation of this Policy.
- For efficient development and management of water resources, adequate human resources, skills and knowledge are required. Therefore, a human resource plan to develop and enhance capacity of planners, managers, operators and users' associations shall be an integral part of the institutional capacity building measures.

Specific Objectives

- There will be regular and uninterrupted management training geared at increasing staff productivity and welfare. This move will retain at least 90% of staff to provide continuous and sustainable water delivery function in order to make the State convergent with the requirement of the 2030 SDG goal in water services.
- The water sector shall establish, at all levels, a participatory approach to include a 100% population of stakeholders, embracing also NGOs, CBOs, CSOs, and the private sector. This setup will be charged with water resources development and management that would lead to full access of water to the entire population of the State.

4.4. WATER FINANCING AND PRICING

Specific Objectives

- All water and sanitation institutions will, irrevocably, endeavour to obtain full recovery of investment using appropriate and sustainable water pricing. This will also provide increase in institutional revenues and improved water allocation efficiency. However, water pricing shall factor in economic status of the poor and vulnerable members of society.
- All water and sanitation institutions will always provide affordable and people-friendly options for water pricing. This practice will objectively make it possible for all sections of the society to pay for their water uses, thus enabling sustainable cost recovery for operation and maintenance and renewal of water sector assets.
- Government will identify, mandate and empower finance authorities to employ sound financial management. These finance authorities shall, without time limits, mobilize complementary resource for investment in the water sector. Government will equally empower these finance authorities to strengthen their capacities to develop bankable water sector project proposals in order to increase the outreach of water services provision in all parts of the State.
- Government will prepare detailed water sector investment plans to create the State's development planning and budgeting process. Government will develop also a resource mobilization strategy using multiple financing sources. These efforts will enhance regular monitoring of these plans on the water sector, including the level and extent of water accessibility in all parts of the State.
- Government will coordinate and ensure that the funding in the water sector is based on the State's water sector objectives, policy and strategies.
- The putative *Plateau State Regulatory Agency* will always employ economic tools for assessing water demand management and to promote environmentally sustainable practice. This will help in assessing the economic, social and environmental dimensions inherent in water services and delivery which the relevant water institutions will procure.
- All water and sanitation institutions will always educate the paying public on the effects of sustainable management. This practice will create customers' awareness to this fact and will make these customers become primed and sensitized as to the cost of both water and sanitation services. Furthermore, the water and sanitation institutions will intimate customers with the cost for the mobilization and management of the water resources (dams and groundwater, pumping, treatment and distribution), cost of collection and treatment of wastewaters. As always, these water and sanitation institutions will adjust tariffs, as appropriate, to achieve greater cost recovery.

4.5. WATER REGULATION

- This water and sanitation policy shall be captured in a water legislation encoding specific provisions of the water with the view to facilitating and providing unambiguous modes of implementation.
- The legal framework shall provide for active and meaningful participation of all relevant stakeholders. The legal provisions that have an impact on water resources management shall be reviewed as required and as necessary so that changes and amendments can be brought for efficient water services.

5.0. WATER QUALITY AND POLLUTION CONTROL

5.1. POLICY ISSUE: Environmental degradation, agriculture (land husbandry practices and agro-chemicals), industrial and mining practices and poor sanitation services have combined to negatively affect the surface and groundwater quality. The Plateau State Government has an on-going water resources conservation and protection measures which require scaling up with strong instruments for control and regulation.

To make this scaling up possible and more effective, the State government, working with all the water and sanitation agencies, will adopt and implement specific objectives with their strategies. These objectives will affect all surface, groundwater, dams and other pooled water resources in order to check and eliminate pollution and provide consequential high water quality. It is envisaged that the State will achieve a 100% success therefrom and provide safe, clean and affordable water for all citizens of the State by 2025. Accordingly, the State will adopt the following policy objectives and strategies:

SPECIFIC OBJECTIVES	SPECIFIC STRATEGIES
<ul style="list-style-type: none"> • The water and sanitation institutions will mobilize all stakeholders in their areas of influence for the purpose of transferring knowledge on ways to improve sanitation and eliminate water pollution. This activity will improve the efficiency and effectiveness in managing the quality of the State’s water resources. • All water and sanitation agencies will be very active in capacity building in their various areas of influence. This knowledge transfer will centre on ways of checkmating pollution. Accordingly, this activity will procure water pollution control that will, in turn, promote clean water, promote sound public health and hygiene, and environmental sustainability. • The State Government, through its various water and sanitation agencies, will support and enforce regulations regarding water pollution control in all parts of the State. 	<ul style="list-style-type: none"> • Promoting the protection and rehabilitation of water from source to safeguard, improve and restore the quality of surface and groundwater. • Ensuring and promoting proper management and disposal of wastes. • Developing and promoting coherent state water and sanitation policy and standards. • Establishing an effective user-friendly data on water quality. • Promoting robust public awareness on water quality guidelines and standards on water quality, public health, hygiene and pollution control mechanisms. • Strengthening institutions responsible for environmental management. • Developing and disseminating guidelines and standards on water quality and pollution control. • Developing skills and Best Available Technologies (BAT), techniques in water quality, sanitation and pollution control in institutions responsible for standards, and

	<p>regulation in water quality and environmental sanitation.</p> <ul style="list-style-type: none"> • Promoting Public Private Partnership (PPP) in water quality and pollution control. • Facilitating the development of self-monitoring systems by all service providers and operators. • Undertaking and promoting research and technologies in water quality and pollution control. • Promoting multi-agency collaboration approach in the management of water quality.
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6.0. WATER UTILIZATION

6.1. POLICY ISSUE: Sustainable water use is the underlying principle of water development. The water suppliers and users in Plateau State need to adopt the concept of demand management in order to ensure cost effective water use. There is a pressing need for increased and improved water delivery services in the State due to an inexorable increase in high demand from a growing population of rural, urban and small town users. There is equally an increasing demand for water for irrigation, fisheries, livestock, and hydropower generation, amongst many other uses.

Accordingly, the following objectives and strategies, further explained under relevant services, will provide guidelines for sustainable utilization. It is envisaged that these objectives will help in reversing the problem by 2020.

6.2. URBAN WATER SUPPLY AND SANITATION

Specific Objectives	Specific Strategies
<ul style="list-style-type: none"> • This Policy plans to reorganize and empower the Plateau State Water Corporation to inculcate and promote further the development, management and utilization of water supply and associated sanitation services. This will increase the quantity, quality and distribution of water supply services in an equitable, efficient and effective manner. In addition, there will consequently be 100% accessibility of water services by all citizens and residents in all urban areas of Plateau State. 	<ul style="list-style-type: none"> • Increasing service coverage for water supply and sanitation to meet the desired level of socio-economic demand target in the State. • Promoting access to clean water and basic sanitation for all. • Supporting initiatives towards affordable water supply and sanitation services. • Promoting separation of organizational responsibilities for regulation for services provision and establishment of accountable, independent and financially viable

<ul style="list-style-type: none"> • Government will create an enabling environment for investment through Public Private Partnership (PPP) in the provision and access to potable water and sanitation services. The effect of this will be to extend accessibility of water and sanitation to a 100% population of all urban areas of Plateau State. • Government will always play its supervisory role over the water and sanitation institutions in the area of standards. Accordingly, a regime of National Water Standards will always prevail. • The Plateau State Water Corporation will rely continuously on its research and development division, to be established. One of the areas of research will involve new and peculiar trends in water management that suits the Plateau environment, without undue recourse to generic management types. The output of this research will form input for advocating effective and efficient development and management of water supply and sanitation systems. • The State Water Corporation will be on a continuous drive to study problems that give rise to pollutions and provide solutions. Subsequently, the Corporation will employ the results in improving pollution control. This will form a basis for the fostering of hygiene and promotion of public health. • The Plateau Water Corporation will always be on the alert for any changes in demography in the Small Towns zone. This knowledge will help the Corporation adopt a smooth transfer of a Small Town community to the urban set-up, when the conditions are met. 	<p>water service providers operating under a regulated policy framework.</p> <ul style="list-style-type: none"> • Adopting the national monitoring and evaluation framework.
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6.3. SMALL TOWNS WATER SUPPLY AND SANITATION

Specific Objectives	Specific Strategies
<ul style="list-style-type: none"> • Government will establish the Small 	<ul style="list-style-type: none"> • Promoting water conservation and

Towns Water Supply and Sanitation Agency by 2018. Subsequently this nascent Agency will strengthen its ability on development, management and utilization of water supply and sanitation services. It is envisaged that this agency empowerment will be completed by 2019. The Agency will subsequently improve and increase the quantity, quality and distribution of water supply services and provide water in an equitable, efficient and effective manner in all members of the Small Towns category.

- Government will, by 2020, create an enabling environment for investment through Public Private Partnership (PPP). This will reposition this Agency to make water and sanitation services accessible to all citizens and residents in the Small Towns.
- Government, in continued exercise of its supervisory role, will continue to promote and enforce the national water standards. This activity will provide water of appropriate quality and lead to improved hygiene and health in the Small Towns.
- Using the efforts of its research department, this Agency will be in continuous search for peculiar and pragmatic method of achieving efficient development and management of water supply and sanitation systems. This will produce ease of water management and provide sustainability in this drive.
- The Agency will continue to study causes and methods of controlling water pollutions in its area of influence. Accordingly, this will improve water pollution control and consistently contribute to the promotion of public health and hygiene in the Small Towns.
- The Agency will always be aware of the various demography of communities under its influence. This activity will help the Agency make

catchments management for sustainable development.

- Developing and expanding raw water sources for sustainable water supply services.
- Incorporating local governments and communities in planning, development and management of water supplies and sanitation services.
- Promoting the involvement of water users through a consultative forum.
- Encouraging Private Sector Participation (PPP) in the provision of water services and sanitation.
- Mobilizing funds for water supply and sanitation facilities improvement and development through participatory investment among and other alternatives sources.
- Promoting Best Available Technology (BAT) and innovation for efficient water supply and sanitation services.

any smooth transition from a Small Town community to an urban community or to a rural community when a demographic statistic changes.	
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6.4. RURAL WATER SUPPLY AND SANITATION

Specific Objectives	Specific Strategies
<ul style="list-style-type: none"> To emphasize the principle of stakeholder participation, this Policy will, through the Plateau Rural Water Supply and Sanitation Agency (PRUWASSA), always promote demand driven approach in rural water supply and sanitation services. Given the low economic powers of people in this part of the State, Government, however, will not confine itself to the role of facilitator; government will contribute, in cash or in kind, to the proposed project in order to prevent any stall or unsustainability of the project. The PRUWASSA will always endeavour to mobilize all relevant stakeholders in any project or intervention in order to build up support and sustainability for the project. Accordingly, the Agency will encourage user participation in catchments protection, water conservation and sanitation related activities. The PRUWASSA will always study all events and reasons for any pollution and document its findings and solutions. These data will be helpful in promoting water pollution control in order to contribute to public health and hygiene. In line with exercising the principle of stakeholder participation, the PRUWASSA will always promote community-based management in rural water supply and sanitation programmes, in consultation with relevant MDAs. This is very essential since it would ensure sustainability in the intervention and increase the 	<ul style="list-style-type: none"> Promoting planned monitoring and rehabilitation of rural water supply schemes. Promoting of appropriate technologies for the provision of water and sanitation services to the rural communities. Promoting the use of alternative energy sources for rural water supply schemes such as solar, wind, mini-hydro and geo- thermal etc. Adopting demand responsive and demand driven approaches in the provision of water and sanitation services. Promoting the training and management of water supply and sanitation at community level; (WASHCOMs). Promoting water supply and participatory hygiene and sanitation transformation at community level; (PHAST) Promoting participation of women, youths, person with disabilities and vulnerable persons in water and sanitation activities; Promoting partnership in the delivery of rural water supply and sanitation Schemes. Promoting cost recovery principles in the operation and maintenance of rural water supply sanitation services. Promoting the engagement of the organized private sector in the delivery of goods and services for rural water supply and sanitation. Developing and disseminating

benefits to all members of the community.

- Since the overall approach to water and sanitation management is the IWRM, the PRUWASSA will always operate within that principle by promoting an integrated approach to rural water supply and sanitation services. This activity will extend all the benefits of the IWRM to all parts of the community.
- In applying one of the requirements of a multi-stakeholder approach in water and sanitation management, the PRUWASSA will always endeavour to carry every stakeholder along. Accordingly, this agency will always promote active participation of the youth, women and persons with disabilities, and vulnerable persons in planning and implementation of rural water supply and sanitation activities. This will create a bonding of stakeholders with the project and thus provide the required sustainability and outreach of services to all parts of the community.
- After the implementation of stakeholder approach in the siting and development of a project, the PRUWASSA will have transferred knowledge to the community. Accordingly, this will facilitate a smooth transfer of all development and functional rural water supply and sanitation facilities to beneficiary communities. This activity will create sustainability of project and increased services to all members of society.
- While working under the principle of the IWRM, the PRUWASSA will always remain creative in fashioning out peculiar locally applicable models to adopt in management. Accordingly, this activity will promote appropriate arrangements in the management of rural water schemes.
- The PRUWASSA will always avoid or

standards and guidelines for rural water supply and sanitation in liaison with relevant MDAs and stakeholders.

- Ensuring that all water supply and sanitation projects are designed based on peculiarity of the local community.
- Promoting a shift in approach from over dependence on drilling boreholes to construction of small earth dams.

<p>not succumb to political considerations when projects are being proposed. Accordingly, the Agency will always promote and proffer professional advice to government to make appropriate siting of water supply schemes using only hydrological, hydro-geological, and peculiarity of the community as viable and objective parameters.</p> <ul style="list-style-type: none"> • The PRUWASSA will always promote integrated water resources management through data collection, training and research. This will add value to and increase outcome to its services. • In continuous bid to exercise compliance with multi-stakeholder approach in water and sanitation, the PRUWASSA will always promote private sector, CSOs, CBOs and NGOs participation in WASH programmes. 	
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6.5. IRRIGATION, FISHERIES AND LIVESTOCK MANAGEMENT

Specific Objectives	Specific Strategies
<ul style="list-style-type: none"> • If necessary, government may consider establishing a new agency to be called, <i>The Plateau State Agro-Allied Agency</i>, to take charge of this. It will have all the status the extant institutions currently enjoy. Accordingly, this putative agency will always promote participation of irrigation, fisheries and livestock services in Integrated Water Resources Management (IWRM). This will reposition the agricultural sector along the path of increased and viable food production for Plateau State in particular, and the nation in general. Furthermore, it will fulfil, by the Year 2030, the requirements of SDGs: 2, 6, 9, and 15. • This putative agro-allied agency will be the clearing ground for all the water needs of its branches. Accordingly, it will always liaise with 	<ul style="list-style-type: none"> • Improving data collection, processing and dissemination of information on water demand required for Irrigation, Fisheries and Livestock. • Harmonizing and mutually enforcing Fisheries and water Resources Legislation for Protecting water and Fisheries resources from degradation. • Promoting private sector participation in Irrigation, Fisheries and Livestock sub-sectors. • Promoting collaboration with Research Institutions. • Improve Livestock and Husbandry practices • Formations of Livestock cooperatives for sustainable and clusters Livestock, Industry Development. • Providing provision for extension staff/ranch guards. • Identification of suitable mining

the contiguous water and sanitation agency to agree on the quantity, quality and sustainability of water for its area of influence. This activity will generate a state of equitable and affordable access to water for this industry.

- The putative agency will study this policy and extract all parts of it that relate to members of its industry. Accordingly, it will always be on top of its game in making water always available to members of its industry.
- The putative agency will always adopt the principle of IWRM in planning, development and management of irrigation, fisheries and livestock all over Plateau State.
- While adopting sound management principles, this putative agency will mobilize all available water resources to promote aquaculture in small water bodies, reservoirs and other water courses. The principle of conserving the ecosystem integrity will always be maintained in this venture.
- Like the other already established agencies, this putative agency will have a research department where matters concerning its industry will always be in continuous study and research. Accordingly, any result obtained from such research will be ploughed back into the promotion of the concept related to Integrated Research and Development.
- Noting that water is always a finite resource, this putative agency will assist in the conservation of all the water resources in the State. Accordingly, it will promote and create awareness on rain water harvesting. This activity will help in reducing its demand from the pooled water resources of the State, thereby freeing up excess allocated water for other purposes in the State. This will help in a continuous availability of water for other uses, thereby aiding

paddocks for Irrigation, Fisheries and Livestock production.

- Distilling, re-enforcing existing mining paddocks to conserve more water for Fisheries, Irrigation and Livestock production.
- Diversion and construction of river courses e.g. From River Wase, Shemankar River and Longkat River to conserve water for Irrigation, Fisheries and Livestock production.
- Constructing and equipping modern hatcheries for the production of high quality fingerlings for stocking man-made ponds all year round.
- Subsidising cost of feeds to be more accessible for fish farmers.
- Encouraging formation of Fisheries cooperative societies.

<p>the much-desired access of water to all users in the State.</p> <ul style="list-style-type: none"> • This putative agency will play a great role in conflict resolution among water users. Accordingly, it will liaise always with pastoralists to intimate them on newly established allocated water source and irrigated pasture for their animals. This activity will provide water for pasture development all year round and will reduce conflicts between pastoralists and crop farmers over shared resources. • This putative agency will always mobilize the specialized departments in its industry to engage in constant research and studies on how to produce new ideas of viable and hygienic livestock production and processing industry clusters. This agency can extend its call for assistance to veterinary schools and universities offering agriculture and veterinary sciences. This activity will help in increasing the protein needs of Plateau citizens and residents in particular, and Nigeria in general. 	
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6.6. HYDROPOWER GENERATION

SPECIFIC OBJECTIVES	SPECIFIC STRATEGIES
<ul style="list-style-type: none"> • The Government will, by 2018, establish another institution to be called, <i>Dams, Water Conservation and Flood Prevention Agency</i>. This putative agency will facilitate the pooling of excess water for hydropower uses. Accordingly, it will encourage the energy sector to invest in hydro power development and participate in integrated water resources management. This activity will obviate the need for Plateau State to overly depend on power 	<ul style="list-style-type: none"> • Providing data and baseline information for prospective private sector investors in hydro power generation. • Participating in the investment of multipurpose water resources development

needs from the national grid.

6.7. RECREATION AND ECO-TOURISM

SPECIFIC OBJECTIVES	SPECIFIC STRATEGIES
<ul style="list-style-type: none">• Government will, by 2020, consider the need to merge the concepts in this new proposed institution called, <i>The Plateau State Sanitation Coordinating Agency</i>, with an existing one, revamp the resulting amalgam and make it work with relevant line ministries to create a sustainable sanitation profile all over the State. Accordingly, it will ensure that waste systems of the recreation facilities such as hotels etc., comply with water resources and environmental guidelines and standards.• This putative amalgam agency will ensure that eco-tourism infrastructure developments comply with water resources and environmental guidelines and standards.• The proposed functions of this amalgam putative agency would be fully revamped in line with a forthcoming institutional reform.	<ul style="list-style-type: none">• Conducting regular pollution control inspections and monitoring on waste disposal facilities.• Institutionalizing water resources and environmental guidelines and standards in the approval processes for eco-tourism infrastructure development plans.

7.0.

DISASTER MANAGEMENT

7.1. POLICY ISSUE: Plateau State faces increasing frequency of water-related disasters in the form of floods, droughts and pollution. These disasters cause severe socio-economic hardship, cultural disruption and dislocation, especially among the most vulnerable people in the affected communities. Most local governments in the affected areas do not have adequate contingency plans or capacity to mitigate the impact of these water-related disasters. The compounding inclusion of consequential waterborne diseases threatens health and life.

This situation, if left unattended, could jeopardize the attainment of the goals of the SDG 6 as they relate to water and sanitation, and the SDG 3 as they relate to good health and well-being.

It is in realization of these that the following objectives and strategies come useful in reversing these ugly trends and making the State achieve those stated SDG ideals by the Year 2030. It is envisaged that we shall attain a 100% achievement by this time-frame. Therefore, the objectives and strategies will guide timely, coordinated and effective response to such disaster.

SPECIFIC OBJECTIVES	SPECIFIC STRATEGIES
<ul style="list-style-type: none"> • Government will establish a putative agency called, <i>Dams, Water Conservation and Flood Prevention Agency</i>, by 2020. This Agency will thenceforth always liaise with the National Emergency Management Agency, and the State Environmental Management Agency, to handle incipient, active and prevailing floods in all parts of the State. In addition, this putative agency has the capacity to adopt measures to prevent water-related disasters in all situations and at all times. • While fighting an incipient or already prevailing flood, this putative agency will also always have the capacity to make proper and informed assessment of the impact of water-related disasters. This activity will help in providing the much-needed help to victims and prevent avoidable situations of diseases. • The putative agency, mobilizing other 	<ul style="list-style-type: none"> • Compiling basic data required to analyse and plan, including mapping of likely population at risk. • Developing systems for early warning on floods and drought in collaboration with relevant agencies. • Formulating mitigation measures to reduce the impact of climate change and climate variability as a means of disaster preparedness and management. • Promoting coordination with relevant institutions and strengthening other bodies on water related disaster management. • Providing contingency budget for timely mobilization for emergency water supply system including boreholes, hand- dug wells and potable treatment units. • Promoting reforestation of degraded water catchment areas

<p>relevant institutions, will ensure timely provision of potable water and sanitation services to vulnerable communities, especially to children, women and people living with disabilities.</p> <ul style="list-style-type: none"> • The putative agency will ensure availability of relevant information to the public and riparian communities on flood and droughts to mitigate the effect of water related disasters. 	<p>with relevant stakeholders.</p> <ul style="list-style-type: none"> • Developing a risk management plan.
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8.0. MONITORING AND EVALUATION

8.1. POLICY ISSUE: Improvement of water service delivery requires that activities be continuously monitored and evaluated to guarantee the execution of projects and to ensure their sustainability. This is to improve on the envisaged impact of any project. Where feasible, participatory monitoring and evaluation will be carried out, starting from monitoring community level projects with support from state and local governments, ESAs, NGOs and the Private Sector.

The absence of this machinery necessitates the employment of the following objectives and strategies to make this matter convergent with the spirit of this Policy, of making water and sanitation accessible to all communities in order to meet the demands of the SDG 6 2030 deadline.

SPECIFIC OBJECTIVES	SPECIFIC STRATEGIES
<ul style="list-style-type: none"> • Government, after due consultations with experts in this field, will commission a <i>Monitoring and Evaluation Committee</i>, by 2018. This Committee will thenceforth ensure at all times that M&E and feedback systems are participatory, transparent, accountable, and result-oriented. • The Committee will always ensure coordinated synergy among the various levels of government in the monitoring and evaluation of programmes in the sector. • The Committee will always measure the output and impact of the water resources programmes and projects on the lives of people and the environment. 	<ul style="list-style-type: none"> • Designing template for monitoring and data collection to guide and promote relevant monitoring of data generation activities. • Establishing transparent systems for adequate data management throughout the lifetime of all infrastructure. • Ensuring clear assignment and implementation of roles and responsibilities in the monitoring, evaluation and feedback system. • Applying the state framework on M&E at local government and community levels. • Involving programme and project beneficiaries and independent stakeholders (community-based organizations, civil society and

<ul style="list-style-type: none"> The Committee will always improve the communication flow and use of information among stakeholders in the sector. 	<p>private sector organizations etc.) in the monitoring, evaluation and feedback processes of the water sector programmes and projects.</p> <ul style="list-style-type: none"> Creating mechanisms for regular reporting and publication as well as sharing of information among various stakeholders in the sector. Developing sector-wide indicators and scorecard for measuring performance of programmes and projects in the sector. Promoting public awareness on M&E and inculcate positive attitude toward efficient handling of project facilities to users.
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9.0. INSTITUTIONAL ROLES AND LINKAGES

9.1. POLICY ISSUE: The management of water resources requires integrated approach involving a number of stakeholders which include all relevant Ministries, Departments and Agencies (MDAs), other stakeholders, NGOs, civil society, the private sector, academia and other research institutions. This will produce a holistic and much more effective way of making water available in the right quantity, safe quantity, equitable amount and unhindered access to all sections and groups of the society.

The following shall be the institutional roles, responsibilities and linkages for these stakeholders'

S/N	AGENCY/INSTITUTION	ROLES AND RESPONSIBILITIES
9.2.	Ministry of Water Resources and Energy	<ul style="list-style-type: none"> Provide policy direction and coordinate water sector programmes by playing a supervisory role. Promote and adhere to regional and national obligations and agreements without compromising the state's security and territorial integrity. Undertake policy formulation reviews and development.
9.3.	Plateau State Council on Water Resources. Government will establish this by 2018.	<ul style="list-style-type: none"> The State Council on Water Resources will comprise the Hon. Commissioner responsible for water resources who shall be chairperson and the local government directors of water supply and sanitation as members. The purpose of the council shall be to

		<p>provide guidance to the government on the proposed water related legislation, state water resources policy, strategy, and issues of coordination in the water sector.</p> <p>The council is expected to establish committees and sub-committees as required to investigate and analyse issues tabled for discussion. Representation at the technical committees of the council shall include state legislature (water committee members); professional bodies as well as stakeholders at the Federal, State and Local government levels. Others include MDAs, Civil Society Organizations, Private Sector, Academia, research Institutions and Development partners. The council will prepare annual reports providing details of discussion and recommendations, which shall be made public.</p>
9.4.	Plateau State Water Board (PSWB)	<ul style="list-style-type: none"> • Develop, operate and manage water works for the delivery, distribution and management of potable water supply in urban centres. • Enforce water by-laws related to provision of service facilities for water supply and sanitation. • Implement investment programmes, tariffs and compensation related to the development and management of water and sanitation facilities. • Monitor water quality within the water supply systems and promote catchment management and pollution control. • Collect, process, analyse and disseminate relevant data and information to all stakeholders within the sector. • Promote private sector participation in the delivery of water supply and sanitation services. • Develop and regulate water utilities in terms of tariffs and financing. • Provide a proactive arrangement for the admission of any community from the Small Towns to the urban area, based on demographic changes.
9.5.	Small Town Water Supply and Sanitation Agency. Government will establish this by 2018.	<ul style="list-style-type: none"> • Operate and manage water works for the delivery, distribution and management of potable water supply in small towns. • Develop and implement water works infrastructure. • Provide capacity building for stakeholders in each water and sanitation community with the goal of eventual handover of the project to the community. • Enforce water by-laws related to connections, delivery and permission of service facilities for water supply and sanitation.

		<ul style="list-style-type: none"> • Implement investment programmes, tariffs and compensation related to the development and management of water and sanitation facilities. • Monitor water quality within the water supply systems and promote catchment management and pollution control. • Collect, process, analyse and disseminate relevant data and information to all stakeholders within the water sector. • Promote private sector participation in the delivery of water supply and sanitation services. • To always liaise with PRUWASSA with a view to identifying any rural community that will qualify to move from rural to Small Towns area, based on demographic changes.
9.6.	Plateau Rural Water Supply and Sanitation Agency (PRUWASSA)	<ul style="list-style-type: none"> • Development and management of sustainable surface and groundwater resources in rural areas. • Development of capacity building on operation and maintenance of water facilities in rural areas. • Construction of low-cost technology latrines. • Promotion of environmental friendly activities and awareness by assisting communities to organize, establish and manage self-help projects. • Provision of participatory techniques tools, training and coordination of activities of rural- based hygiene facilities.
9.7.	Local Governments	<ul style="list-style-type: none"> • Plan and co-ordinate the implementation of water and sanitation programme at the local government level. • Prepare annual budget for water and sanitation matters. • Solicit extra funding for implementation of water and sanitation projects. • Analyse and disseminate relevant data and information to all stakeholders within the sector in the delivery of water services. • Promote stakeholder participation in the delivery of water supply and sanitation services.
9.8.	Ministry of Agriculture and Rural Development	<ul style="list-style-type: none"> • Promote collaboration with the Ministry of Water Resources and Energy for good watershed management practices. • Promote and regulate irrigation practices to improve agriculture, poverty reduction and mitigate environmental damage. • Encourage and promote on-the farm water harvesting and conservation. • Promote efficient utilization of water, prevention of pollution and water-related diseases in irrigation

		<p>fields.</p> <ul style="list-style-type: none"> • Collect, process, analyse and disseminate relevant data and information to all stakeholders within the water sector. • Provide water demand requirements for irrigation development to the Ministry of Water Resources.
9.9.	Ministry of Environment and Mineral Development	<ul style="list-style-type: none"> • Facilitate the delineation of regulated areas, planning, zoning and development in controlled water areas. • Ensure that fragile and marginal areas are not used for agricultural activities; and that there are no permanent settlements in areas planned for reservoir and dam development. • Improve conservation and protection of catchment areas of public water bodies. • Promote the protection and rehabilitation of river catchment to restore favourable ecosystem environment and its development. • Co-ordinate all cross cutting environmental activities required for water resources management and water services. • Facilitate identification of water resource issues to be included in the state environmental plan. • Enforce legislation and implement policies on natural resources management. • Provide water demand requirement on natural resources development to the Ministry of Water Resources and Energy. • Ensure proper management and disposal of clinical, domestic, industrial and other wastes to avoid pollution of the environment.
9.10.	Ministry of Health	<ul style="list-style-type: none"> • Monitor and provide guidance concerning the quality of drinking water. • Provide research on water-related health issues. • Provide guidance on HIV and AIDS mainstreaming efforts to the water and sanitation sector. • Provide water demand requirement for public health institutions.
9.11.	Ministry of Women Affairs and Social Development.	<ul style="list-style-type: none"> • Shall liaise with the ministry of water resources in community mobilization for community-based management training, advocacy awareness and gender mainstreaming.
9.12.	Ministry for Lands Survey and Town Planning.	<ul style="list-style-type: none"> • Shall co-ordinate and provide policy and regulatory environment to promote sustainable human settlement and development in both urban and rural areas in relation to water and sanitation.

9.13.	Ministry of Housing and Urban Development.	<ul style="list-style-type: none"> • Will work with the Ministry of Environment and Mineral Development to perform functions related to water and the environment.
9.14.	Non-Governmental Organizations and the Civil Society.	<ul style="list-style-type: none"> • Assist in empowering communities to have community based water services and water resources management in Planning, Implementation, Operation and Maintenance. • Encourage communities to manage their water supply system. • Participate in provision and investment in rural water supply consistent with the prevailing government's policies and guidelines on such investments. • Assist in mobilization and securing funding for rural and low-income communities for water and sanitation projects. • Assist in community sensitization on water, sanitation, catchment management and conservation. • Liaise with rural communities and governments/donors and other operating partners through local governments for funding. • Assist in the provision of water supply and sanitation services in rural areas and low-income groups within urban centres. • Consult the Ministry of Water Resources on issues related to water and sanitation development. • Collect, process, analyse and disseminate relevant data and information to all stakeholders within the water sector in accordance with national statistics guidelines and standards. • Ensure compliance with state policies and regulations governing water and sanitation activities, including registration with the Ministry of Water Resources and other relevant authorities.
9.15.	Private Sector	<ul style="list-style-type: none"> • Invest in water resources development and water supply and sanitation services. • Assist community based water management activities on commercial basis, taking into cognisance necessary inputs to Community Based Management (CBM) like sale of spare parts and skilled maintenance services for water supply systems. • Provide capacity for consulting and contracting services in the water, sanitation and related industries. • Collect, process, analyse and disseminate relevant data and information to all stakeholders within the

		<p>sector in accordance with national statistics, guidelines and standards.</p> <ul style="list-style-type: none"> • Ensure compliance with state policies and regulations governing water and sanitation activities. • Consult with the Ministry of Water Resources and Energy on issues related to water, sanitation and development. • Provide capital for investments in water and sanitation developments.
9.16.	Other Public Stakeholders	<ul style="list-style-type: none"> • Ministry responsible for commerce, industry, science, and technology shall regulate the development and operations of industries and trade that can contribute to over-exploitation and pollution of public waters, through conditional licensing of industries and trade operations. • Ministry responsible for transport shall co-ordinate and develop its transport plans with the Ministry of Water Resources to ensure that its operations are accommodated in the Water Resources Development and Management Plans. • Ministry responsible for education shall liaise with Ministry of Water Resources in curriculum development and capacity building programmes that would support efforts in WASH management, development and utilization; and will also provide water demand requirement for institutions. • Universities and other training institutions shall promote research and undertake capacity building in the water and sanitation fields. • The Department of Energy shall liaise with the ministry of water resources on issues relating to the development of hydropower. • The Plateau State Planning Commission will play its pivotal role in including water and sanitation matters in the continuous plans of the State.

10.0. INSTITUTIONAL REFORMS OF THE PLATEAU STATE WATER AND SANITATION SECTOR

10.1. POLICY ISSUE: Plateau State has a sizeable amount of ground and surface waters that can serve the entire communities of the State in many years to come, notwithstanding the finite nature of water resources and the impediments of the effects of climate change. However, the water supply profile in the entire State is a picture of a community living in water-strained and water-deprived environment. The main reason for this situation has always hinged on the inability of the extant water and sanitation agencies to meet up with the challenges facing them. It is in the light of this observation that this Policy finds it necessary to carry out a reform of the institutions

10.2. POLICY OBJECTIVES:

- i. Government will facilitate a total reform of the institutions by 2020, to bring them up to a level each institution will function effectively and efficiently.
- ii. This Policy will determine the most viable legal status the institutions will adopt in order to vest on the institutions a position of strength that will benefit Plateau State in any PPP agreement the State will enter into with a private sector partner.
- iii. Furthermore, government will facilitate the addition of new agencies to beef up the activities, performance and productivity of the entire water and sanitation sector.
- iv. It is therefore envisaged that the effect of this exercise will be felt all round the State by 2025; and will improve the entire water and sanitation outreach in all parts of the State by way of effective allocation of water and its equitable distribution to all users. This will make Plateau State convergent with the SDG 6 expectation by the Year 2030.

11.0. FUNDING FOR WATER AND SANITATION

11.1. POLICY ISSUE: Plateau State, like other States of the federation, is continuously saddled with the problem of funding for services and capital projects; the water and sanitation sector is not an exception. And this state of affairs is foreseen to last for a long while. It is in the light of this situation that the State Government decides to take itself by the bootstrap and design other methods of funding.

11.2. POLICY OBJECTIVES:

- i. Government will always honour the cost-sharing arrangements for capital investment, operation and maintenance, as recommended in the National Policy on Water and Sanitation. This will engender the sense of responsibility and expectations among the State Government, Local Government, and the Community.
- ii. Government will endeavour to honour in every financial year the budgetary instruments related to the State's water and sanitation sector. Commitment to this must always subsist irrespective of any leanness in statutory allocation from the federal government.
- iii. Government will endeavour to intensify all drives for internally generated revenue. Government recognizes the prevalent harsh economic climate but, at the same time, citizens enjoy some tolerable level of government presence. Accordingly, everybody must be made to contribute to the common pool for continuation and improvement of government's functions.
- iv. Government has recognized the need to join forces in funding and management of the State's water and sanitation infrastructure. It is in the light of this that government has adopted a plan to recruit, as much as possible and as is practicable, the private sector. This PPP partnership will go a long way in improving the infrastructure and delivering water and sanitation services to all citizens and residents of Plateau State.

12.0. SANITATION SERVICES IN PLATEAU STATE

12.1. POLICY ISSUE: Sanitation, as a twin member in water and sanitation matters, which is usually heard of but given a brush-aside consideration, has, in consequence, been a recurring societal problem, ranging from personal hygiene to domestic and community breakdowns and failures of this concept. This has resulted in tell-tale signs of littering garbage heaps and human wastes all over the landscape, and intolerable defacing of land, surface water and groundwater integrity. Though, a designated ministry handles the concept of sanitation, a lot of responsibilities still resides on the water ministry, since sanitation impacts the quality of water that is its responsibility. Accordingly, government will support all efforts at improving sanitation matters. Adopting the inter-ministerial liaison and networking articulated in this Policy, government will implement the following objectives, as mentioned below. It is envisaged that, by 2020, government will position all communities in Plateau State to a salutary state of sound sanitation and, therefore, make the State, by the Year 2030, to be convergent with the requirements of the SDG 6 on water and sanitation, SDG 3 on good health and well-being, and SDG 15 on life on land.

12.2. POLICY OBJECTIVES

12.2.1. URBAN AREAS:

- i. Government will facilitate and also empower the state water board to adopt a direct role in the monitoring of all vicinities relevant to and contiguous to its sources of water supply. This will be especially enforceable where its water sources are open and vulnerable to contact with sewages, town refuse dumps, human wastes, legal and illegal outlets for wastewater.
- ii. Where a source of water supply is groundwater, the state water board will always endeavour, and at all times, to monitor the environment surrounding its source to avoid the unbearable and serious pollution of this water source.
- iii. The state water board will enter into a multipartite arrangement with the Ministry of the Environment, the Ministry of Works, and the private sector, for constructions of accessible and sustainable public toilets at all strategic parts of any urban settlement.
- iv. Mindful of the special needs of people living with disabilities, the state water board will include special toilet designs to accommodate this category of citizens.
- v. As this Policy recommends, the state water board will follow all principles of due process, equitable spread, fairness and ease of access in the siting and building of these public toilets in all urban areas of the State. This is very important to make sanitation accessible to all citizens and residents of Plateau State.

12.2.2. SMALL TOWNS SETTLEMENTS:

- i. Just like in the urban settlements, the Small Towns Agency will be on continuous monitoring of all its water sources to avoid any possible contamination by solid and liquid wastes and other contaminants.
- ii. The Small Towns Agency will always liaise with the local governments, local branches of the State Ministry of the Environment, the State Ministry of Works, and the private sector, for constructions of public toilets at strategic locations in the small town community.
- iii. The Small Towns Agency will follow all due process, equitable spread, fairness and ease of access in the siting and building of these public toilets in all Small Towns areas of the State. This is very important to make sanitation accessible to all citizens and residents of Plateau State.

12.2.3. RURAL SANITATION:

- i. Just like in the urban and Small Towns settlements, the PRUWASSA will be on continuous monitoring of all its water sources to avoid any possible contamination by solid and liquid wastes and other contaminants.
- ii. The PRUWASSA will follow all due process, equitable spread, fairness and ease of access in the siting and building of these public toilets in all rural communities of the State. This is very important to make sanitation accessible to all citizens and residents of Plateau State.

13.0. PUTATIVE WATER AND SANITATION INSTITUTIONS

13.1. POLICY ISSUE: One of the factors militating against a realization of water access to all parts of the Plateau society has been that of vesting enormous responsibilities on the few water and sanitation institutions currently operating in the State. Naturally, this practice has reduced the management of these responsibilities with the attendant reduction in output in these institutions. This Policy will aim to reverse this trend by establishing, by 2020, more institutions with distinct and focused responsibilities.

13.2. OBJECTIVES:

In the light of the above policy issue, the following water and sanitation institutions, with full status of an institution, will be established by 2020:

- i. *Dams, Water Conservation and Flood Prevention Agency:* This will have administrative functions that will ensure a coordination of activities among bodies charged with the named activities. It will be in continuous monitoring of the various dams and liaise with dam authorities to regulate and prevent siting of settlements very close to the dams, especially in areas that could be flooded should a dam accident occur.
- ii. *Plateau State Water and Sanitation Regulation Agency:* This will monitor continuously the activities of all water and sanitation institutions, under a mutually-agreed situation. The remit of this Agency will include the checking of all materials relating to development of water resources, including construction of water resources infrastructure, development of an economic regulation model, regulation of tariff

setting on all kinds of waters, registration of users, regulation of wastewater disposals and other matters.

DEFINITIONS

- Aquaculture** : All activities aimed at producing fish in restricted areas, processing and marketing aquatic plants and animals from fresh, brackish or saline waters.
- Buffer zone** : A strip of vegetated or bare land along a river bank/shoreline of a watercourse, which acts as a screen for protecting a water body or a reservoir from environmental degradation.
- Catchment area** : An area that receives precipitation and naturally drains into a water course.
- Cost Recovery** : The extent to which users are charged for goods and/or services to generate revenue or cover the cost of supply.
- Demand Driven Approach** : Strategy through which communities are empowered to operate and manage their water services including aspects of water-related hygiene during the course of implementation.
- Demand Responsive Approach** : A strategy that empowers a community to initiate, choose and implement a water project that it is willing and able to sustain that which elicits the appropriate response from the sector actors and stakeholders.
- Discharge or Disposal** : The continuous or intermittent release of waste/effluent.
- Economic Good** : Any commodity or service which yields “utility” to an individual or community and which must be paid for in money terms and monetary economy, or “in kind” in non-monetary economy.
- Effluent** : Waste water or other fluids originating from a domestic or an agricultural or industrial activity, whether treated or untreated and whether discharged directly or indirectly.
- Eco-system** :
- Groundwater** : All waters which are beneath the surface of the ground; and not visible on the land concerned and includes waters in wells and boreholes.
- Human Settlements** : For the purposes of this policy, human settlements shall be those inhabited areas that supports integrated planning and management involving incorporation of water supply and sanitation, land use, housing, waste management,

employment, education and healthcare services, and transport and other infrastructure, through a rights driven approach in their design and development.

Monitoring : The continuous or periodic assessment of the actual and potential impact of any activity on the environment.

Participatory Approach : A planning approach in which all stakeholders, and in particular the envisaged beneficiaries are part of the discussion process.

Pollutant : Any substance whether in a liquid, solid, gaseous form which directly or indirectly:

- i. Adversely alters or destroys the quality of water or environment; or
- ii. Is dangerous or potentially dangerous to public health, plant or animal life.

Polluter-Pays-Principle : The concept that the producer of any pollution should meet the full cost of treatment, monitoring and management of water resources to reduce pollution loads to acceptable standards that will not cause environmental damage or loss of beneficial use to others.

Pollution : In relation to water, this means such contamination or other alteration of the biological, chemical physical properties of the water, including changes in colour, odour, taste, temperature or turbidity; or such discharge of any gaseous, liquid or solid substances into any water or public stream; as will or is likely to, create a nuisance or render the water as the case may be, detrimental, harmful or injurious to the health, safety and welfare of the public or any section thereof or any consumer or user of the water or birds, fish or other aquatic ecosystem, livestock or wildlife.

Poverty : Is the situation facing those in society whose basic social and material needs are least satisfied.

Protocol : An instrument of implementation of the SADC Treaty, having the same legal force as the Treaty.

Riparian Country : A country through or along which portion of a transboundary river flows or water body lies.

Sanitation : Refers to the hygienic disposal of solid and liquid waste. At the household level this includes excreta, kitchen rubbish, waste water from cooking, bathing and washing, and any other discarded items.

Social Good	: Water as a commodity to which social value is attached, arising from the fact that water is an essential building block of life.
Stakeholder	: Organization, group or individual that is concerned with or has an interest with water resources and that would be affected by decisions on water resources management and development.
Strategies	: Are tools developed for the implementation of policies and these constitute the general framework of activities to be undertaken through time to meet previously defined objectives.
Surface Water	: All water found on the public stream and includes water in storage works, permanent pools, marshes, springs, swamps and lakes forming the source of or found on the course of public stream.
Unaccounted-for-water	: Is the difference between water produced and consumed. It refers to all physical water losses.
Wastes	: Unwanted products or by-products in liquids, gas or solid form.
Water-area	: Means the area declared under section 4 of the Water Works Act as being an area serviced by water utility.
Watercourse	: A system of surface and ground waters consisting by virtue of their physical relationship a unitary whole normally flowing into a common terminus such as sea, lake or aquifer.
Water Resources Management	: Refers to water resources development, appropriation, utilization, conservation, protection and control that incorporate physical, social economic as well as environmental interdependence.
Water Supply	: For the purpose of this policy, water supply implies human uses of water such as drinking water, water for livestock use, water for industrial use, and water for municipal use.
Wetlands	: Areas of marsh, fen, peat land, or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt including areas of marine water the depth of which at low tide does not exceeds six meters.
100-year Flood	: Is a flood that on average can be equalled or exceeded once in every 100 years' time frame.