



# Puntland Water Policy

October 2007



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Ref:MW/DPS/177/07		Garowe

Subject: Puntland Water Policy

The Water Policy for Puntland State of Somalia presents a vision of the tasks and responsibilities of government, the people, private sector and development partners which are necessary to enable the water resources of Puntland to be developed to meet the needs of our people.

The policy concentrates on identifying what work has to be done, but does not fully define how that work is to be undertaken. This is because we believe that discussion, understanding and practical experience must contribute to enriching the vision for a flexible policy as we move ahead together.


The development of this policy was therefore begun through participation and consultation with sector stakeholders, a process which we aim to adopt as the corner stone of Puntlands water sector as a whole.

It is our intention that this water policy becomes a living policy, which is discussed and refined over time with the full involvement of all stakeholders and partners. At the same time the policy provides the fundamental orientation to facilitate and encourage investment, development and management of water resources under a mutually understood framework.

For those reasons this policy has not yet been subject to formal government approval, I am however launching it officially as the starting point to rejuvenate and guide the water sector in Puntland.

The stability, wellbeing and prosperity of Puntland depends extensively upon our groundwater resources whose sustainability we ourselves must ensure for the benefit of future generations. The responsibility entrusted in water sector professionals is therefore a vital national interest which demands the highest level of professional diligence and conduct at all times.

I therefore ask you to give this policy your full consideration, to follow its guidance and also to contribute your ideas and experience to make it fully representative of the views of the people of Puntland and water sector partners.

  
**Mohamud Muse Hersi**  
 President of Puntland



# 1 Introduction

Puntland State of Somalia was formed as an autonomous regional administration on May 5th, 1998, whose Transitional Constitution provides for an anticipated Federal State of Somalia. Puntland State has an area of 212,510 km<sup>2</sup>. The capital of Puntland State is Garowe, with an estimated population of 50,000. The population of Puntland State is estimated at 3.9 million, of whom 52% are nomadic. Approximately 70% of the population is below the age of 30 and 30% of the population live in the rapidly growing towns. Population growth can be influenced by the significant influx of displaced people, average population density is 11 people / km<sup>2</sup>. Islam is the religion of Puntland. Virtually all Puntlanders are Sunni-Muslims. Per capita annual income ranges between US\$ 150-300 with high inequalities.

There are presently four main sources of revenue in Puntland, livestock, marine fishing, agriculture (including Frankincense) and remittance via the Somali diaspora. Pastoralism is presently the most effective use of land in much of the State. The most valuable pastures include the Hawd region in the high plateau of the West of Mudug and Sool regions and into Ethiopia and the Nugal valley. Livestock exports provide 80% of foreign exchange earnings, 40% of the GDP and 60% of employment opportunities.

The State of Puntland is largely arid / semi arid and average daily temperatures range from 27° C to 37° C. Rainfall is variable and sparse. Therefore, nomads depend primarily on groundwater rather than surface water. There are four main seasons dictated by shifts in wind patterns. Pastoral and agricultural life revolves around these seasons.

(Source [www.puntlandgovt.com](http://www.puntlandgovt.com))

## 1.1 The Water Resources of Puntland

The rainfall in Puntland varies greatly from one year to another in intensity and reliability. Much of the country receives less than 200 mm / year - Bosaso for example receives around 17 mm / year. There is significant climate variability; a recent continuous drought from 2001 to 2004 resulted in a 55% decline in livestock. Rainy seasons are from April to June, when up to 60% of annual rain falls and in September to October.

The potential evapotranspiration is between 2000 – 2500 mm/ yr. Much of the country experiences consistent strong hot and dry winds. Actual evapotranspiration may therefore account for 90 -95% of all rainfall and given the lack of surface relief less than 10% of rainfall results in runoff. Even so runoff management represents a potential water resource for Puntland. There is a long history of harvesting rainfall and runoff catchment in berkads and ballehs and in some areas these are the only source of water supporting both people and livestock. Customary water management mechanisms exist for these traditional water sources. Soil erosion is both extensive and significant.

The topography of Puntland comprises of mountainous zones, plateaus, valleys and depressions and the coastal plain. The Nugal valley is a major drainage feature in Puntland defined by the Taleex, Sool Haud and Sool Plateaus. In places the valley is 100km wide.

Groundwater recharge occurs directly from rainfall on sandy soils and some limestone formations and is significant given the large area of such formations. Indirect recharge, via soils also occurs on the boundaries between mountains and plateau areas and where alluvial top-soils meet the basement complex. Indirect recharge is however highly variable from place to place. Recharge also occurs in the coastal plain which is up to 10km wide and underlain by recent sand and coral deposits, unconfined and semi confined aquifer conditions have been identified and can offer important sources of water for coastal -especially fishing communities. In urban areas shallow aquifers are at risk of contamination from pit latrines. Sedimentary aquifers can also give rise to highly mineralised and saline water limiting their potability.

As yet little is known about the existence of other natural contaminants of ground water.

Groundwater discharge occurs mainly to the Indian Ocean along the western coastline of Puntland and numerous cold and hot springs are found along the coastal plain.

In addition Puntland has a marine coastline of 1,640 Km, and ocean resources of great commercial significance, together with abundant inshore resources particularly lobster. These resources however are presently vulnerable to the effects of illegal international trawling which is addressed by the Puntland Fisheries Policy 2006.

Puntland has no major water resource which can transform the economy, therefore a balance has to be found between the sound management and allocation of available water resources, ensuring amicable relations with neighbouring regions and the promotion of trade so that the people of Puntland may benefit from water dependant commodities which cannot be produced from its scarce internal sources. The northern port of Bosaso therefore plays a critical role in facilitating this trade.

## 1.2 The Status of Water Resource Development

Article 67 of the Transitional Federal Charter of the Somali Republic (2003) requires that "the natural resources of the country such as the minerals, water, flora and fauna shall be public property." Water resources are therefore a public property, held in trust and protection by the government in the interest of all citizens.

Whereas the Federal Charter Art 66 (2) provides for land registration, use and ownership, and the Puntland Constitution Art 30 recognises individual property rights, an effective system has not been in place since 1991. Current efforts seek to redress this problem so that reserving of lands and environmental protection has the backing of the law. Whilst the basis for individual land property rights exists, private ownership of water sources is recognised only for particular types of source.

Insufficient trained human resources, capital equipment and analytical facilities to collect and use hydrometric and hydro-geological information

represent a critical barrier for the sector. As a direct consequence drilling success rates are presently poor. For much of the population of Puntland groundwater represents the only durable and reliable water source.

To date Puntlands' deepest productive borehole is 480 metres, and the most productive borehole yields 40m<sup>3</sup>/hour. Data for many old boreholes is often not available. The FAO / SWALIM-SWIMS programme aims to establish a comprehensive water resource database for Puntland.

In recent years there has been notable success in developing urban water supplies through a private sector approach. Supplies are being managed by the local private sector under contract with government and municipalities. This has resulted in significant improvement in coverage, quantity, quality and reliability of supply. In addition effective revenue collection means that supplies are being expanded and improved. Urban supplies have also coped with influxes of internally displaced people, supported the provision of essential services and enabled the growth of small industry as well as larger commercial developments. The continued growth of urban areas will depend upon a rolling programme of new water resource development. Springs and possibly runoff catchments present an additional option for Bosaso.

Rural water supply for both humans and livestock presents a significant challenge in Puntland. There is scope to increase and improve runoff catchments, but developing more permanent durable resources again depends upon improved groundwater survey and siting. The intimate link between water supply and stock movement is a prime consideration and it is estimated that human drinking water represents only 2% of the average daily water use of an average nomadic pastoralist family in Puntland.

Where transportation exists to growing urban areas there is some potential to develop commercial agriculture. Much work is needed to develop viable run off / storage fed agriculture in areas of fertile soils and to identify suitable crops and markets. Global estimates suggest that the volume of water required to grow a persons daily food is some 70 times that of their daily drinking water needs. The national water balance of Puntland should also therefore be considered in relation to its import / export trade.

In 2005 Puntland imported a total of 140,000 tons of sugar, rice and flour and exported 1.5 million goats and sheep. The ongoing development of mineral and energy resources will call for reliable, high volume water supplies

to be developed. Cooling waters for large scale electricity production might only be possible using sea water or coastal springs. Transboundary dependence upon water resources has not yet been fully studied.

Drinking water supply & sanitation coverage				
	Drinking Water Supply		Sanitation	
Coverage	Urban	Rural / Nomadic	Urban	Rural
% served	46.8	14.5	48	14
% unserved	53.2	85.5	52	86
	Figures for Puntland.		Figures for Somalia.	
	Source UNDP / World Bank 2003		Source WHO / UNICEF JMP 2004	

Given the present capacity of the water sector and the nature of the rural water supply challenge, realising the millennium development targets for water supply will be difficult. It is also important to recognise that the abstraction of water in Puntland is highly dependant upon pumping, therefore imported fuel prices directly influence the cost of water.

### 1.3 Future Vision

The promotion of rehabilitation and construction of water facilities through sustainable environmental, economic and sector management so that the population of Puntland can participate in gaining access to and benefit from safe and secure water resources to address fundamental human and livelihood requirements, both at present and in future.

## 1.4 Key Challenges

Practical progress in the water sector in Puntland presently faces significant challenges. Not only are there acute economic and human resource difficulties to be overcome. Environmental and security issues have resulted in a sector dominated by an emergency response approach with significant levels of external intervention. Moving towards a self determined development approach will require greater levels of collaboration and cooperation, a broadly supported institutional framework and a long term commitment targeted at achieving future stability as well as short term impacts. It is necessary to identify priority areas for action which not only respond to immediate needs, but which also lay a proper foundation for a long term developmental approach. A key contribution to be made by this water policy is by providing a coherent approach, framework and focus to guide the interventions and activities of a wide range of stakeholders.

## 1.5 Priority Short Term Actions

### **Establish a framework for water resource management**

An institutional and legal framework is necessary to enable the government through its delegated authorities including PSAWEN to guide, facilitate develop and regulate the water sector. This framework must recognise the participatory role of the public, the role of the private sector in water supply development and maintenance, the role of NGOs and international agencies and the governments' role in sector development, coordination, facilitation and regulation. PSAWEN's role is presently established by Puntland Law No. 2. An effective framework is also a means to attract sector investment and provide robust leadership for the sector. For this framework to be able to work the powers and relationships of the devolved levels of government have to be identified, established and tested and this will require a programme of consultation, investment and development. This policy begins that task by identifying the roles and responsibilities of sector actors.

### **Human resources development**

At present there are insufficient trained water resource professionals available in Puntland to fill roles created in the public and private sectors.

The government sector in particular will require professionals trained in water resource assessment and design, physical and financial planning, management and regulation. Government will also need professionals able to oversee the work of the private sector in construction, repair and maintenance of water sources. Additional government professional capacity will be needed to ensure the environmental sustainability of water resources and also to be responsible for hygiene, sanitation and water quality. A good environment will be needed to attract private sector professionals to work in Puntland.

### **Public awareness and participation**

For the water sector to be sustainably developed in Puntland it is essential that the public are aware of their rights and responsibilities together with the ways in which they can best ensure their water sources are managed and maintained properly. The public must therefore be fully involved at the local level in planning, financing, developing and operation of their water supplies. Opportunities have to be created to enable the public to express their views.

### **Resource information and technical capacity**

In the absence of water resource data and professional capacity to analyse and manage that information it will not be possible for the government of Puntland to protect the States water resources on behalf of the people. This is especially relevant because the states water resources are mainly underground. Locating and managing groundwater in the absence of information has little chance of success. Any water resource exploration, survey and development data collected by sector stakeholders in Puntland are therefore to be shared in full with the government and be made readily accessible. Provision of data will be a requirement of the official supply approval process. Developing government capacity to collect, manage and analyse these data is also a priority activity.

### **Basic tools for policy implementation**

The ability to turn this written policy into effective actions will require cooperation between the Government of Puntland State, the people, civil society, the private sector and the international community.

As a priority all stakeholders are therefore urged to develop their roles and responsibilities and:

- Cooperate, participate and invest to the fullest extent of their available resources in implementing this policy the policy provisions
- Adopt the administrative and regulatory provisions which support the purpose and meaning of this policy
- Develop rural and urban supplies to enable the population to meet basic water needs
- Assist in building and developing the governments role
- Consult with all relevant stakeholders as the starting point for any intervention
- Ensure the sustainability of water resources by addressing financial, environmental and human resource requirements.

## 1.6 Overall Water Sector Principles

This policy is guided by the Transitional Federal Charter of the Somali Republic (2003), the Transitional Constitution of Puntland Regional Government (2001) water laws applicable to the State of Puntland which include Law No 2 establishing the authority and powers of PSAWEN and Law No 20 concerning Range and Water Management, together with any subsequent applicable laws and amendments which may arise. In addition interpretation of this policy is to be considered in relation to the Five Year Development Plan for Puntland 2007-2011 and subsequent planning instruments. Relevant international obligations arise from Somalia being party to the International Covenant on Economic, Social and Cultural Rights, the United Nations Convention to Combat Desertification and being signatory to the Convention on the Rights of the Child. Current developments in the international law of shared watercourses and groundwater are also noted as a source of guidance.

- **Peaceful cooperation:** Water is seen as a resource to enable the peaceful development of Puntland. Negotiation, cooperation and dispute settlement are the means available to manage scarce water resources rather than using force which only results in conflict and human suffering. Consequently water users, sector stakeholders and

development partners are required to conduct their activities in the pursuit of peaceful sharing and cooperation and so prevent discrimination and conflict.

- **Water as a fundamental human need:** There can be no life without water, consequently every individual in Puntland requires sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses. An adequate amount of safe water is necessary to prevent death from dehydration, to reduce the risk of water-related disease and to provide for consumption, cooking, personal and domestic hygienic requirements and so meet the fundamental human need. This policy therefore brings the task of recognising water as a human right.
- **Priority of use.** Meeting the fundamental human need for water has priority over other uses of water. Special priority is given to the young, poor, sick and disadvantaged in order that they may enjoy equitable access and rights to water. Where scarcity results in competing demands, priority will be given to uses which are reasonable and equitable. Consideration will be given to those factors providing for water allocation in this policy and will include water for essential public services including health and education. The special needs of water for livestock must be considered. Consideration will also be given to the role of water supply in protecting the environment, natural resources, flora and fauna of Puntland and the role of conservation in water resource management.
- **Water is a social as well as an economic good.** Suppliers of water have an obligation to ensure that the reasonable cost needed to make a supply sustainable is recovered. This should not prevent people who cannot pay from having access to water to meet their fundamental needs. Consequently part of the responsibility of supplying water is to develop economic tools to ensure sustainability rather than preventing access to water by people who genuinely are unable to pay the full reasonable cost.
- **Devolved administration and public participation:** The most effective means of sustainable management of water resources is to enable

decisions to be taken at the lowest appropriate level. This arrangement - also known as the principle of subsidiarity - creates responsibilities and calls for the recognition and participation of local level water users. The right of the public to participate fully and express their opinions freely in the water sector is recognised.

This principle follows the provisions of the Transitional Federal Charter of the Somali Republic (2003) Art 67(3) and Art 20(2) Freedom of information and Art 25 of the Puntland Constitution (2001).

- **The polluter pays.** All water users in Puntland are required to limit any harm to the public or the environment which might arise from their use of water. In the event of harm arising, then the polluter is liable to pay any damages or costs as required by the Government to reduce and redress existing harm as well as to prevent future harm arising. The cost of proving no harm as well as providing a remedy shall fall upon the polluter at the request of the government. This principle follows the provisions of the Transitional Federal Charter of the Somali Republic (2003) Art 67(4).
- **Integrated water resources management.** Because all uses of water are interdependent a process is required to coordinate, develop and manage water, land and related resources, in order to maximize economic and social welfare equitably without compromising the sustainability of vital ecosystems- (this being the current FAO definition). Whilst IWRM may present special challenges because of Puntlands scarcity of surface water, it represents international best practice for coordinating the development of a water sector. Consequently water developments will be guided by the principle of IWRM and call for extensive inter-ministerial and cross sectoral collaboration.

## 1.7 Policy Implementation

A water policy can be expressed in terms of directives setting out exact actions, standards and procedures to be followed. It can also express policy in terms of principles, which are not as prescriptive and require sector actors to interpret and tailor those principles to emerging situations and new opportunities. Current water policy practice in Africa indicates that where a directive policy encounters a dynamic and changing water sector the course of actions which it sets out can soon become discredited and redundant. On the other hand, policies which set out principles and responsibilities can continue to guide the sector in the face of change. This policy is largely concerned with establishing principles rather than definitive and fixed directives, because a water policy for Puntland must be able to adapt and be flexible. Consequently it does not consist of a set of rigid guidelines. This means that policy can evolve and grasp new opportunities to develop the sector. It also means that the principles must be applied through close collaboration with government, the water users and sector stakeholder must work closely with government so that the effect of the principles make good sense and enable rather than prevent development. Therefore the definitive guideline for policy in a specific situation will come through decision making at the appropriate level, being sensitive to specific conditions and situations and giving full consideration to the meaning of the principles of the policy. The policy is also seen as a dynamic document which should be reviewed and updated and government will undertake to coordinate such revisions.

"It is more realistic to implement reforms incrementally than to await the 'perfect' policy document that may never get past the drawing board"

United Nations World Water Development Report No 2 2006



## 2 Water Resource Development

### 2.1 The Role of Government

- The government of Puntland shall be responsible for overall planning, coordination and regulation of the water sector.
- The survey and design of water supply developments in Puntland shall be done with the approval of the government. This will include environmental impact assessment where required.
- The government will also approve water abstraction / supply, management and waste water discharge arrangements.
- The government shall examine, develop and promote appropriate means to ensure that water is of adequate quality for human and livestock consumption.
- The government of Puntland will facilitate and encourage investment and activity in the sector by recognised members of the private sector, civil society organisation and international agencies. Foreign investment enjoys the protection of law in Puntland. Puntland State Law No3 (1999).
- The government of Puntland shall develop plans and programmes concerning the monitoring and evaluation of the water sector which fulfil the role of water sector regulator in the interests of protecting the public.
- The government of Puntland shall develop plans and programmes for human resource development as well as for effective capacity building in sector research, analysis and training.
- The government of Puntland shall aim to ensure that water engineering and management works are undertaken to a suitable standard. The role can include certification of suppliers and works as well as requirements for inspection and on site supervision as appropriate.
- The Government shall directly or indirectly study and analyse how operational and financial sustainability of water supplies in Puntland can be achieved. This may include the promotion and testing of particular approaches and the development and adoption of state guidelines.

- The government shall establish the legal power to act as supplier of last resort. This means that the government can take over the management of a supply on behalf of the public in cases where supply operators clearly fail to provide an adequate service. The government shall then ensure that adequate supply is restored and returned to an effective operator as quickly as possible.
- The government shall establish powers to close water supplies which are an immediate hazard to human health, and shall aim to facilitate an alternative supply as appropriate. This power arises from the Transitional Federal Charter of the Somali Republic (2003) Art 26(a) Social Welfare.
- The government shall create and provide opportunities to listen to the concerns and complaints of the public regarding their water supplies. Where appropriate government shall facilitate dispute settlement in line with the principles of the water policy.
- Because of the present constraints of available financial and human resources in the water sector the government may delegate its powers and responsibilities to appropriate public and private sector bodies. Delegation shall be enabled and protected using approved agreements based in law.
- The government will seek to examine, develop and recognise a legal basis to protect the public in the event of vandalism, deliberate destruction and illegal interference in the ownership and management or finances of water supplies, water resources and related infrastructure.
- The government shall encourage and facilitate extensive inter ministerial – interagency collaboration in the sector so that resources may be use wisely and effectively.
- The Government of Puntland shall enable it citizens to realise their fundamental need for water and provide protection against discrimination and exploitation and equality of rights, special consideration will be given to women and children and the poor as established in this policy.

## 2.2 The Role of the Public and Communities

The public have both rights and responsibilities concerning water resources in Puntland. The primary responsibility is to use water wisely and conservatively and to settle disputes through peaceful means. Every individual has a responsibility to safeguard the quality and environmental protection of water resources to the best of their abilities. The government, private sector NGOs and international agencies should help the public through awareness raising, training and education.

The public and communities will be encouraged and expected to

- Manage their water supplies effectively either by themselves or through arrangements with the private sector. Water supply users are expected to contribute in cash or kind to ensure their supplies are sustainable.
- Participate freely in all stages of their water resource development so that their needs can be expressed and appropriate, and useful, effective water supplies developed.
- Actively protect their water supplies so that they are free from hazards and pollution.
- Participate in capacity building, training and education and so have the skills needed to manage their water supplies.
- Participate and contribute to monitoring, supervising and evaluating all aspects of their water supply development.
- Where appropriate members of the public will be encouraged to form associations of water users to contribute to the good management of their water resources in accordance with the Transitional Federal Charter of the Somali Republic (2003) Art 22.

## 2.3 The Role of Private Sector

Despite difficult conditions the private sector has been able to provide services to the public in the areas of water supply development, construction, management and maintenance. Presently this approach is being rewarded with notable success. The government of Puntland encourages further growth of this role and presently does not intend to develop its own capacity in those areas. Instead it aims to develop regulation to protect both the service

providers and consumers, particularly in the form of service contracts. Given the important role the private sector can play in enabling people to get water, regulation should not become a barrier preventing the private sector from doing its job. Government may also provide legitimate incentives to promote the private sector in water. There is a corresponding duty for the private sector to refrain from profiteering and exploitation of the public.

The private sector is therefore encouraged to

- Contribute technical and managerial skills of a high standard and provide water sector goods and services to the public and the government.
- Develop agreements and contracts for the provision of goods and services that are transparent and accountable and protect the public's interest.
- Wherever possible the private sector is encouraged to invest in training, capital equipment and the financial development of water supplies.
- Work closely with government to develop effective mechanisms to ensure that poor and vulnerable members of society gain equitable and affordable access to water.

## 2.4 The Role of International Agencies and NGO's

The considerable challenge in developing the water sector in Puntland will need to be broadly supported both nationally and internationally and therefore technical and financial cooperation with ngo's and international agencies will be facilitated and encouraged. Not only will the sector need financial investment, it will also need extensive technical support and development in many specialised fields. In order to ensure that this cooperation can be of lasting benefit to Puntland it is essential that local capacity in human resources and equipment is built and so avoid dependency upon external resources in future. Financial and technical cooperation partners should aim to transfer their knowledge and skills to local partners within the duration of projects and programmes.

It is hoped that this policy will provide a framework to facilitate cooperation, and all partners are actively welcomed to contribute their expertise to

its improvement. An important aspect of this policy concerns the role of government in coordination and regulation of sector developments and stakeholders so that the best use of investments can be achieved. Having an effective water policy therefore has to be a mutual responsibility if the public are to see the full benefit of development cooperation.

International agencies and NGO's are requested to consider:-

- Investing in rural and urban water supply development for drinking water supplies as well as developing water supplies to improve the livelihoods of the people of Puntland.
- Supporting the people of Puntland to develop the capacity and skills urgently needed in the water sector. A wide range of human resources are needed, but in particular improving local capacity in the exploration, development and management of groundwater is necessary if we are to safeguard this important resource for future generations. Government capacity to plan, coordinate and regulate the sector also has to improve in order to both protect resources and encourage investment.
- It is important that water sector developments are properly monitored and evaluated in order to ensure accountability and benefit from lessons learned. Government, Ngo's and international agencies will need to jointly develop an approach which ensures that the results of evaluations can be turned into useful actions.

## 2.5 Financing Water Development

The government of Puntland encourages financial investment in the water sector from a range of sources including:-

- Government funds
- Private sector funds
- Community contributions
- International donor funds as grants and loans
- Revenue from consumers

Until such time when the economy and taxation system of Puntland is fully developed the challenge of financing the building of new supplies and their long term maintenance as well as investing in government capacity and hardware will remain with us. Presently the tax base is growing rapidly as a

result of trade related taxation.

The challenge however is considerable and many lessons and experiences have been gained from the African continent.

Current experience in Puntland is that the past “emergency response” to water supply development has not resulted in sustainable water supplies. All too often recently built supplies fail to be working after a few years. In part this problem is due to the approach. For financial sustainability to be achieved a shift from “emergency” to “development” oriented thinking is needed. More recent progress in urban water supply is showing that where there is the initial capital to develop a supply, these problems can be overcome by encouraging public participation and the payment of tariffs to cover operation and maintenance costs. Good management can be provided in a variety of ways, particularly by the local private sector.

There is also an additional and harder problem to solve. Whereas the government has a responsibility to approve tariffs which are affordable by all, that revenue may not always enable the full costs of a project to be met, and this problem particularly affects the rural poor and vulnerable communities. In future government subsidy could address this problem – but for the present it means some water supplies are not sustainable.

The government therefore actively encourages innovations, studies and pilot projects which address this finance gap. These might include establishing special trust funds and finance instruments. Until this problem can be resolved there will be a risk in building new supplies and a need for ongoing rehabilitation and improvement of failed supplies.

In general however it is the users’ responsibility to pay for the operation and maintenance of their water supplies.

New investment is called for in many areas:

- Because present capacity and data to improve the success of drilling is limited, rehabilitation and expansion of existing supplies provides a low risk opportunity to succeed in supplying water. Rehabilitation of water supplies for livestock is also linked to existing stock movement routes.
- Any new investment must pay attention to enabling effective operation and maintenance including providing adequate resources for training as

well as ensuring the quality of supply is adequate and that the environment around the supply is protected.

- Mixed investment is required. There is a need to improve water supplies for the people and at the same time a need to invest in government capacity to protect and regulate the sector on their behalf.
- Urban centres in Puntland are presently growing rapidly. Significant investment will be needed to provide suitable sanitation systems and to regulate industrial pollution as well as address increased future demand.

## 2.6 Rural and Urban Drinking Water Supply

The development of safe, accessible and affordable water supplies to meet fundamental human needs is a priority in Puntland. Realising investment and construction on a sufficient scale is a question of creating and using all acceptable and reasonable opportunities that may arise. This policy sets out a framework where government facilitates enables and regulates the water sector and the private sector, NGOs, agencies and the public invest, construct, maintain and manage those supplies.

Arrangements will vary between the rural and urban sectors as the relationship between the users and their water supplies are significantly different. Rural water supplies cannot ignore the needs and implications of livestock since that is the basis for survival for much of the population.

## 2.7 Water for Livestock and Agriculture

Livestock provides 80% of Puntlands foreign exchange earnings and 60% of the employment opportunities through a nomadic pastoralist system. The income generated enables water intensive agricultural products to be imported from water rich areas. The success of the livestock industry depends upon the availability of water, sustainable grazing and an accessible market. Livestock also represents a traditional form of social security. This water policy should therefore be followed in close collaboration with the policies of the Ministry of Livestock, Agriculture and Environment. Particular attention has to be paid to the location of supplies to be developed, respecting stocking densities, stock movement routes, grazing areas, livestock concentration

areas, marshalling yards and animal health checking points. The government water authorities will liaise closely with the Ministry of Livestock, Agriculture and Environment to ensure that construction and abstraction permits are only issued in accordance with such guidance.

Presently agriculture makes a relatively small contribution to the economy of Puntland. There are however some areas of fertile land which have yet to be matched to the potential for rain –runoff fed irrigation and water / soil conservation techniques. The government water authorities will provide technical support as required to identify, evaluate, allocate and regulate such water supplies as are necessary for the development of agriculture in Puntland.

## 2.8 Water for Industry, Mining and Energy

The future development of industry, mining and energy production in Puntland will call for dependable large volume resources. The allocation of these resources will have to be made with respect to competing uses of water resources. It is also important that wastes and discharges are controlled so as to protect the environment, water resources and supplies. Marine water may represent the most appropriate source for cooling energy production where feasible. The government water authority will therefore provide appropriate technical and regulatory assistance and guidance to support the development of industry.

## 2.9 Fisheries and Marine Resources

The marine fishing industry represents a major economic resource for Puntland. Fishing communities and the processing and distribution industry will require safe and reliable sources of water in order for fisheries to fully contribute to the economy and well being of Puntland. At the same time the inshore and offshore marine environment must be protected from all sources of discharges and dumping of hazardous wastes and chemicals. Consequently the government water authorities will collaborate closely with the other relevant ministries, industries and communities to enable both the provision and protection of water resources.

## **3 Water Resource Management**

### **3.1 Public Use of Water**

This policy seeks to realise the fundamental human need for water of the population of Puntland. Water resources management objectives are a necessary part of ensuring the protection of the public and ensuring equitable access to water supplies and associated benefits. Government guidance and regulation is called for in a number of areas. Whilst water in its natural state may be considered to be free, it also has to be protected from harm from other users. Abstracting, pumping and supplying water calls for significant investment and running costs and repairs to equipment have to be financed. Consequently the users of water in Puntland are faced with having to cover the costs of those services if they are to continue to enjoy them.

Government also has a responsibility to guide the sector by setting standards and in particular these concern the appropriate quality and quantity which meets the fundamental human need. Public use of water is also affected by a number of other factors where government has a responsibility, particularly regarding vulnerable and under represented members of society as well as enabling and ensuring that water resources are used properly.

#### **The Price of Water**

- The purpose of a water tariff is to meet the costs to operate and maintain a water supply.
- The water tariff may also be a means to raise finance to expand and develop a water supply system.
- The government authorities will approve the tariff set by supply operators and tariffs should not exploit the public, and must ensure it is accessible in terms of both availability and price. Whilst it is necessary for private sector operators to profit from their efforts, such profits from water should not be excessive.
- Tariffs may vary between locations, water sources and the technologies employed.

- The government water authority will provide a service to hear complaints from the public and suppliers, where appropriate the authority will facilitate meetings between the parties to enable a reasonable and equitable solution to be found.
- The government authorities should encourage and approve a special tariff to be applied for the socially vulnerable, the poor and the providers of essential public services.
- The government authorities should encourage and approve a special tariff to be applied for major users of water in order to enable good management of scarce water resources.
- All approved water tariffs must be made available to members of the public.
- The disconnection of water supplies is permitted to enable the reasonable recovery of the costs of supplying water. Consumers must be given adequate warning of disconnection by the operators so that they have a reasonable opportunity to raise the necessary finance or make arrangements to meet their basic water needs. Present experience in Puntland shows that disconnection of an individuals' pipe connection does not deprive the person of water. Without disconnection there is presently no reasonable means to recover the cost of supplying water. Cultural mechanisms exist to provide that person with water as well as financial help should it be necessary. Consequently the penalty of disconnection does not affect a persons' ability to pursue their livelihood or to look after their family.

### **The Quality of Water**

- Water quality regulation in Puntland is not able to adopt a set of water quality supply or discharge standards until such time as adequate laboratory facilities and trained personnel are in place. The intention will then be to adopt the international guidelines provided by the World Health Organisation. The provision of water quality testing services is therefore a priority activity. The government recognises and encourages collaboration between health and water authorities to establish common laboratory facilities, particularly as regards microbiological aspects of testing. The government of Puntland will establish the powers to close water supplies which are harmful to human health.
- Consequently the most effective means to safeguard water quality at

present concern environmental protection, consumer awareness and water safety plans.

- Government authorities will therefore ensure that water sources proposed for development are approved on the basis of posing the minimum health risk, through approving the proper design of a supply and approving plans through which the users / operators maintain the environmental and hygienic aspects of the source.
- Government have the responsibility to approve the quality of water at the source is safe for consumption.
- Water supply operators are responsible for ensuring that the quality of water in a distribution system is safe for consumption. Water supply operators should also develop a water safety plan to respond to water quality problems should they arise. This can include orders to boil water.
- As an interim measure, all agencies in the water sector in Puntland should make provision to monitor the quality of water sources which they are involved in developing and supplying- where their resources and capacity allow. This is seen as a commonly held professional responsibility until such time as the government authority can take sole responsibility. All water users also have a responsibility to ensure the safe disposal of waste waters.

### **The Quantity of Water**

The Government of Puntland recognises that a minimum adequate supply of water is required by every individual as a fundamental requirement for survival. The developers and suppliers of water should therefore aim to enable individuals to have access to at least 20 litres per person per day and that this minimum must be increased to 50 litres per capita per day wherever possible. Those amounts correspond to the present definition provided under international human rights law (UN ICESCR General Comment 15). A minimum quantity of water is required to prevent death from dehydration, to reduce the risk of water-related disease and to provide for consumption, cooking, personal and domestic hygienic requirements. It is essential that water users understand how this minimum quantity can be used to properly protect themselves from the risk of disease.

## **Sanitation and Health**

The government water authority will work in collaboration with other ministries to address all aspects of sanitation and hygiene which directly affect water supplies in Puntland. This will include the discharge of wastewaters, where government will apply the polluter pays principle. At present the safe disposal of human and other waste is of high priority given that it has a direct relationship to enjoying the benefits of improved water supply. Whereas government has responsibilities to enable the provision of water supplies and sanitation, the individual also has responsibilities to use those facilities wisely.

For urban areas, there is an inter-ministerial responsibility to develop and regulate sanitation. Where appropriate the water authority will initiate collaboration between ministries, local government and development agencies to ensure that the disposal of human waste does not present a risk to water supplies and consumers. This collaboration is also intended to promote, develop and initiate the long term response to urban human waste disposal. Urban centres are particularly at risk as a result of using both shallow ground water and pit latrines hence sewerage and waste treatment systems are urgently required.

For rural areas, the government water authority will ensure that at the time of construction adequate means are in place to prevent supply contamination from sanitary hazards. Local stakeholders are to be trained in the means to ensure that no such hazards arise in future.

## **Women and Children**

The water authorities of Puntland recognise the important role of women in the water sector and the provisions of the Transitional Federal Charter of the Somali Republic (2003) Art 26(i) Social Welfare and Art 18 of the Puntland Constitution (2001). Women and children are the main beneficiaries from improved water supplies and will suffer disproportionately when there is a lack of water. Having to carry water over long distances causes significant health problems and can lead to miscarriages. Women are also important contributors to the national economy, particularly as they care for the family, often without support from men. Child morbidity and mortality arising directly from inadequate provision of water and sanitation facilities is an enormous burden upon the people and wellbeing of Puntland as a whole and its

eradication must be given high priority by the water sector as a whole.

The role for women in the sector should therefore enable their full involvement through:-

- **Planning Stage:** Women should be fully involved in the planning stages of water projects because they can facilitate the planning process and provide valuable experience.
- **Fund Raising:** Women can contribute to the financing of water projects in a number of ways. They can provide advocacy and lobbying at the community, national and international agency levels. They can also contribute directly to financing a project and they can promote financial contribution amongst the community as a whole.
- **Decision Making:** Women are to be included in all water supply ownership and management bodies. The involvement of women is necessary in these decision making bodies because they are the main users and can advise on quantities, location, pricing and future development of supplies.
- **Supply implementation:** Women should be represented on the executive committees of water supply bodies, and have an equal opportunity to act as kiosk managers, cashiers, vice managers and accountants. Women should also be represented on bodies concerned with the operation of water supplies.
- **Community Awareness:** Women should be encouraged and enabled to play an important role in promoting community awareness of water supplies, especially through woman –to – woman projects. Their role in promoting knowledge of hygiene, pollution, disease, water use and protection is an essential component that leads to an effective water supply. Women can make a key contribution to explaining why payment for water is necessary.
- **Representing Children:** The presence of women in planning, decision making and water supply management is also necessary to ensure that the water and sanitation needs of children are addressed. It is particularly important to promote adequate water supplies and sanitation at schools.

## 3.2 Institutional Framework

The future development of the water sector in Puntland depends upon effective collaboration between a wide range of stakeholders who include:- Central government, regional government, urban and rural water supply agencies, local communities, private sector, international and national NGOs and international finance and development bodies. Those agencies are fully expected to work together under the umbrella of this policy to serve the needs of the people of Puntland and protect its environment and natural resources.

Central Government has a specific responsibility to develop policy, develop water sector institutional capacity and financial sustainability, coordinate plan and supervise the sector and encourage investment. It also has responsibility to regulate, monitor, evaluate and manage data for the sector.

Regional Government water authorities have the responsibility to represent central government, to implement technical guidelines, inspect and approve water supplies and issue permits. In addition they are to ensure all relevant data and information is reported to central government. Where appropriate they will also represent government in private sector relationships.

Urban and rural water supply agencies will be responsible for facilitating the implementation of water supplies, local planning, and monitoring and reporting as required.

### **Proposed Institutional Framework**

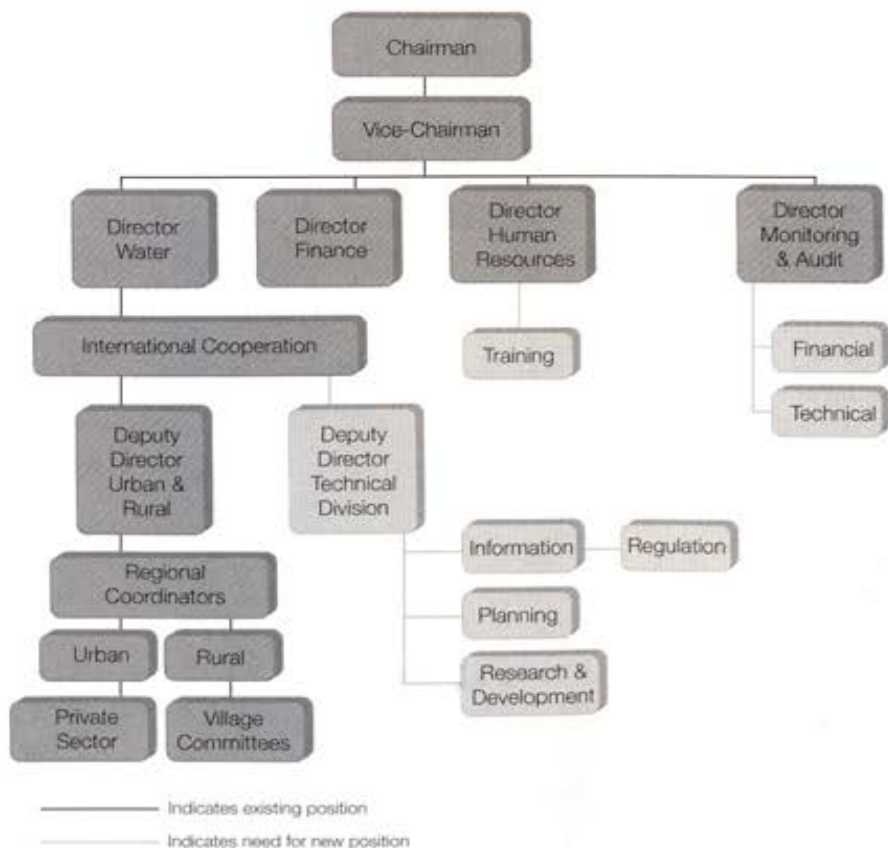
The private sector and NGOs will be engaged in order to survey, design, construct, operate manage, maintain and provide training for water supplies as appropriate. The private sector and NGOs will be encouraged to invest in water sector development.

Local communities have responsibilities to contribute to the planning of water supply development including the choice of technology, construction, management, maintenance and operation of their water supplies. Local communities are expected to contribute in cash and kind to ensure that their water supplies are sustainable and meet the needs of the people. Local

communities as well as every individual have a responsibility to ensure water supply and sanitation facilities are used properly and that environmental and health hazards are prevented.

International agencies are requested to contribute to policy development and implementation in full collaboration with the relevant government authorities. International agencies are encouraged to invest broadly in the water sector through both financial and technical cooperation. In particular international cooperation is needed to develop administrative and technical human resources to lead the water sector and provide basic resources to enable the sector to function.

Provision is made within the government institutional framework for growth in the critical technical areas of, information, data and regulation, planning, research and development as well as training.



### 3.3 Legal Framework

The legal framework for the water sector in Puntland is guided by

The Transitional Federal Charter of the Somali Republic (2003),  
The Transitional Constitution of Puntland Regional Government (2001)  
Law 2 which establishes PSAWEN & Law 20 which concerns range  
and water management as well as any subsequent amendments and  
laws as applicable to Puntland and published in the Faafinta Rasmiga.

The Government of Puntland will develop the necessary legal instruments as  
required by the water sector which ensure necessary powers, responsibilities  
and duties are established to protect the citizens and their water resources.  
Those legal instruments can originate in the form of codes of practice for the  
development, protection and use of groundwater and surface waters.

Water laws and codes for Puntland must urgently address the following  
critical issues:-

- The development, allocation, abstraction and use of water
- Environmental and sanitary protection of water resources, including  
impact assessment, pollution and discharge issues.
- The protection of groundwater recharge areas and catchment basins
- The approach to water disputes and settlement, and shared national  
and international waters.
- The approach to a groundwater reserve and over pumping which might  
cause irreversible damage to an aquifer.
- Ownership of data concerning groundwater, aquifers, hydrology and  
hydrometric information.

These issues are seen as critical because of the significant dependence  
upon groundwater in Puntland.

The government of Puntland shall also develop an effective means of  
regulating the sector based in law. Two important tools for regulation are  
urgently required to protect the peoples water resources, prevent exploitation  
and protect the environment. These are:

### **A permit to construct a water supply.**

In order for standards of survey, impact, design, participation, use, purpose, contracting and construction to be ensured all new water supplies in Puntland must apply for a construction (or drilling) permit. Government will charge a one off fee to cover the costs of the services it provides. Award of the permit will result in the official registration of a water supply.

### **A permit to supply/ abstract water**

All significant users of water in Puntland will be required to have a supply permit. This permit is to be renewed periodically for which a fee will be charged to cover the cost of government regulation of the sector. Where a water supplier is shown to have failed to meet the conditions of this permit, it can be removed by government and an alternative supplier can be awarded the permit in the interests of the public and the owners of the supply.

Government will establish various special conditions for the award of supply / abstraction permits which may cover industrial, agricultural and urban uses. In addition certain vulnerable communities may be exempt from a license as may be decided – for example users who agree to abstract less than 5m<sup>3</sup>/hr.

In addition government shall establish powers to act as the “supplier of last resort” in the public's interest. In the event of a supplier failing to ensure a proper supply, government will have the power to intervene to ensure supply is not interrupted. At the same time government will have a responsibility to ensure that effective supply management is restored as soon as possible. Government shall also develop the powers to close a water supply which is or may become hazardous to human health or livestock, or whose management may cause irreversible harm to a water source itself. An appropriate legal response will also be developed to address acts of vandalism, interference in the use and management of water supplies and the deliberate destruction of water supplies or sources.

In 1990 important work was done to codify and propose a Somali National Water Law (Husani et al 1990) this work should be revived and completed. Water law in Somalia has evolved out of the intimate relationship between scarce water resources, the nomadic-pastoralist livelihood and traditional Somali Islamic custom. The traditional clan based Xeer system, is augmented by Shaari'a courts, statutory- administrative law as well as aspects of

international law. The period of breakdown of law following the collapse of the previous government has led to irregularities in the application of this system.

The proposed Somali National Water Law recognises the private ownership of specified sources of water on the basis of appropriation, established through the development, investment and use of that water. Riparian ownership is not recognised. The right of ownership is not exclusive because the Somali Islamic tradition requires owners to provide access to the public and their livestock under specified conditions. That traditional mechanism is an essential means to safeguard the security and well being of society as a whole.

The proposed law provides for dispute settlement through water tribunals whose task it will be to determine and interpret the applicable laws on a case by case basis. The law also requires government to keep a register of water supply owners and permit details.

### 3.4 Environmental Considerations

Puntland is a water scarce country whose future generations' survival will depend upon the wise management of the environment and water resources by the present population. It is therefore essential that the use of water resources is controlled and protection of the environment is enforced. There is a clear government responsibility to guide the people of Puntland towards realising these objectives. But because much of Puntlands water resources lie underground it is often difficult to relate our activities on land to their effects below ground. Even so it is possible to adopt a "precautionary principle" which means that even in the absence of all of the necessary information we must still act in the interests of protection and conservation. Groundwater in Puntland is not an infinite resource; it must be replenished from rainfall. There is a risk that more water is taken from an aquifer than can be replaced by rainfall and in such cases all users find their boreholes dry up. Rainfall can also recharge aquifers large distances away from where water is being abstracted, and so changes of land use in one part of the country

can therefore affect groundwater availability in another part. Whilst some of these changes in aquifer water levels are to be expected as use increases, the use of groundwater should never be allowed to cause harm which cannot be reversed. The capacity to develop new water sources in Puntland must therefore be matched to an equal capacity to protect those resources. Therefore while we struggle to enable everyone in Puntland to enjoy a right to water, everyone in Puntland also has a responsibility to protect their most valuable resource. The government of Puntland will also require appropriate impact assessment to be undertaken for new projects as deemed necessary given the size and potential impact of a project.

### 3.5 Disaster Management

The government water authority will collaborate closely with lead government agencies responsible for disaster management. Wherever possible, technical expertise will be provided to support planning and response measures.

### 3.6 The Response to Shared Water

Given the scarcity of water, the urgency to provide water for fundamental human needs and the high degree of dependency on nomadic pastoralism as well as meeting growing urban, industrial and agricultural demands; the challenge of sharing water amongst the population of Puntland is complex. Water conservation and demand management will have to form an important part of the response. Even so difficult decisions will have to be made to ensure that water allocation is reasonable and equitable and of greatest benefit to the well being of the public and the state. Peaceful and effective allocation and dispute resolution mechanisms must be developed, based in law and supported by the public.

As part of this process public access to information, decision making and justice will be needed.

Puntlands' transboundary dependency upon water has yet to be studied, and in practice may not result in a complete understanding of the runoff – aquifer recharge situation. It is however the intention of the government of

Puntland to pursue a policy of peaceful negotiation of water sharing, based upon the principles of international watercourse and groundwater law and so contribute to the stability and prosperity of the region.





Since its formation as an autonomous regional administration in 1998, a number of agencies and individuals have contributed towards the development of a water policy in Puntland. In 2001 a Water Supply Policy was developed as a Green Paper. The Government of Puntland has consistently promoted efforts to arrive at a water policy through public participation and consultation and it was possible for UNICEF /EC to provide the financial and technical support by which this approach could be consolidated and a water policy fully realised. The policy therefore reflects a wide range of views and inputs arising from the people of Puntland, stakeholders and partners. The policy is directly applicable to the existing legal framework and can be used to update urban water supply contracts and also inform decisions taken through existing legal systems. In due course there will be a need to link the policy to national water law and statutory provisions. Every encouragement is therefore given to agencies, decision makers and the public to now turn their vision of water policy into everyday practice.

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