

# **Sustainable Water Resources Governance for the 21<sup>st</sup> Century**

By

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## United Nations World Water Development Report: Water in a Changing World 2009

- Water is linked to the crises of climate change, energy and food supplies and prices, and troubled financial markets. Unless their links with water are addressed and water crises around the world are resolved, these other crises may intensify and local water crises may worsen, converging into a global water crisis and leading to political insecurity and conflict at various levels.

# United Nations World Water Development Report: Water in a Changing World 2009

- Effective policies and legal frameworks are necessary to develop, carry out and enforce the rules and regulations that govern water use and protect the resource. Water policy operates within a context of local, national, regional and global policy and legal frameworks that must all support sound water management goals.

# Rio Declaration 1992

## **Four Elements of Substance**

- The sustainable utilisation of natural resources;
- The integration of environmental protection and economic development;
- The right to development;
- The pursuit of equity in the allocation of resources both within the present generation and between present and future generations.

## **Two Elements of Procedure**

- Public participation in decision making;
- Environmental impact assessment.

# Draft International Covenant on Environment and Development 2000

## Article 1

- The objective of this Covenant is to achieve environmental conservation and sustainable development by establishing integrated rights and obligations.

# Agenda 21

## Paragraph 18.8

- Integrated water resources management is based on the perception of water as an integral part of the ecosystem, a natural resource and a social and economic good, whose quantity and quality determine the nature of its utilisation.
- To this end, water resources have to be protected, taking into account the functioning of aquatic ecosystems and the perenniality of the resource, in order to satisfy and reconcile needs for water in human activities.
- In developing and using water resources, priority has to be given to the satisfaction of basic needs and the safeguarding of ecosystems. Beyond these requirements, however, water users should be charged appropriately.

# Dublin Statement on Water and Sustainable Development 1992

## Four Fundamental Principles

- Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment;
- Water development and management should be based on a participatory approach involving users, planners and policy-makers at all levels;
- Women play a central part in the provision, management and safeguarding of water;
- Water has an economic value in all its competing uses and should be recognised as an economic good.

# Draft International Covenant on Environment and Development 2000

## Article 19

- Parties shall take appropriate measures to maintain and restore the quality of water, including atmospheric, marine, ground and surface fresh water, to meet basic human needs and as an essential component of aquatic systems.
- Parties also shall take all appropriate measures, in particular through conservation and management of water resources, to ensure the availability of a sufficient quantity of water to satisfy basic human needs and to maintain aquatic systems.



# Convention on the Law of the Non-Navigational Uses of International Watercourses 1997

## Article 5 (1)

- Watercourse States shall in their respective territories utilise an international watercourse in an equitable and reasonable manner.
- In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimal and sustainable utilisation thereof and benefits therefrom, taking into account the interests of the watercourse States concerned, consistent with adequate protection of the watercourse.

# Convention on the Law of the Non-Navigational Uses of International Watercourses 1997

## Article 6 (1) (a) to (f)

Utilisation of an international watercourse in an equitable and reasonable manner within the meaning of article 5 requires taking into account all relevant factors and circumstances, including:

- (a) Geographical, hydrographic, hydrological, climatic, ecological and other factors of a natural character;
- (b) The social and economic needs of the watercourse States concerned;
- (c) The population dependent on the watercourse in each watercourse State;
- (d) The effects of the use or uses of the of the watercourses in one watercourse State on other watercourse States;
- (e) Existing and potential uses of the watercourse;
- (f) Conservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect.

# Convention on the Law of the Non-Navigational Uses of International Watercourses 1997

## Article 27

- Watercourse States shall, individually and, where appropriate, jointly, take all appropriate measures to prevent or mitigate conditions related to an international watercourse that may be harmful to other watercourse States, whether resulting from natural causes or human conduct, such as flood or ice conditions, water-borne diseases, siltation, erosion, salt-water intrusion, drought or desertification.

# Constitution of the Republic of South Africa

## Section 24

- Everyone has the right to an environment that is not harmful to their health or well-being; and to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that –
  - (i) prevent pollution and ecological degradation;
  - (ii) promote conservation; and
  - (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

# Constitution of the Republic of South Africa

## Section 27 (1) (b) and (2)

- (1) Everyone has the right to have access to  
(b) sufficient food and water.
- (2) The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights.

# National Water Act 1998 of the Republic of South Africa

## Section 3 (1) and (2)

1. As the public trustee of the nation's water resources the National Government, acting through the Minister, must ensure that water is protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner, for the benefit of all persons and in accordance with its constitutional mandate.
2. Without limiting subsection (1), the Minister is ultimately responsible to ensure that water is allocated equitably and used beneficially in the public interest, while promoting environmental values.

# National Strategy for Ecologically Sustainable Development 1992

## Water Resource Management

### **Challenge**

- To develop and manage in an integrated way, the quality and quantity of surface and groundwater resources, and to develop mechanisms for water resource management which aim to maintain ecological systems while meeting economic, social and community needs.

# National Strategy for Ecologically Sustainable Development 1992

## Water Resource Management

### **Strategic Approach**

- Governments will work to ensure that development decisions which impact on water resources are based on acceptable water quality and quantity criteria, and that management requirements to meet those criteria on a sustainable basis are recognised. Efforts will be focussed on: using water more efficiently; allocating water for stream-flow and other environmental uses; and minimising pollution.
- Careful resource management policies, pricing policies aligned to the real value of the resource, and a national approach to environment protection measures for water quality will be introduced.



# Water Act 2007 (Commonwealth)

## Section 3 (b)

The objects of this Act are:

(b) to give effect to relevant international agreements (to the extent to which those agreements are relevant to the use and management of the Basin water resources) and, in particular, to provide for special measures, in accordance with those agreements, to address the threats to the Basin water resources.

# Water Act 2007 (Commonwealth)

## Section 3 (c)

The objects of this Act are:

(c) in giving effect to those agreements, to promote the use and management of the Basin water resources in a way that optimises economic, social and environmental outcomes.

# Water Act 2007 (Commonwealth)

## Section 3 (d)

The objects of this Act are:

(d) without limiting paragraph (b) or (c):

- i. to ensure the return to environmentally sustainable levels of extraction for water resources that are over allocated or overused; and
- ii. to protect, restore and provide for the ecological values and ecosystem services of the Murray-Darling Basin...; and
- iii. subject to subparagraphs (i) and (ii) – to maximise the net economic returns to the Australian community from the use and management of the Basin water resources.

# A Structure for Sustainable Water Resources Governance

- a cardinal rule,
- an explanation of how to comply,
- an obligation to comply,
- an obligation to comply with the operational plans,
- an obligation to comply with the conditions of an entitlement , and
- the need for coherence.

For details of this structure see, D.E. Fisher, *The Law and Governance of Water Resources: the Challenge of Sustainability* (Edward Elgar Publishing, Cheltenham, UK, 2009) pp 344-357.

# The Cardinal Rule

1. The cardinal rule for the management of water resources is their sustainable use and development.
2. The cardinal rule applies as the standard according to which the lawfulness of an existing use of a water resource is determined.
3. The cardinal rule applies as the outcome to be achieved in determining whether the proposed development of a water resource is to be undertaken or to be permitted.

## How to Comply with the Cardinal Rule

1. For the purposes of the cardinal rule an existing use is sustainable if it satisfies the social and economic needs of the community and the ecological needs of the environment and if these needs have been assessed and determined in accordance with the principles of sustainable development.
2. For the purpose of the cardinal rule a proposed development is sustainable if it will satisfy the social and economic needs of the community and the ecological needs of the environment and if these needs have been assessed and determined in accordance with the principles of sustainable development.

## An Obligation to Comply

1. A person must not use or develop water or a water resource except in accordance with the cardinal rule for the management of water resources.
2. Water or water resources must not be used or developed except in accordance with the cardinal rule for the management of water resources.

# An Obligation to Ensure Internal Operational Coherence

It is the duty of those using or developing water resources or those using and developing water resources –

1. To achieve their sustainable use and development;
2. To comply with the cardinal rule for the management of water resources;
3. To comply with the rules stated in this statute;
4. To comply with the rules stated in the water plans made under this statute;
5. To comply with the conditions stated in an entitlement granted under this statute; and
6. To take all reasonable and practicable measures to prevent or minimise any harm to the environment arising out of the use or development of water resources.



# An Obligation to Ensure Internal Regulatory Coherence

It is the duty of those authorising, permitting or approving the use or development of water resources or the use and development of water resources:

1. to comply with the cardinal rule for the management of water resources;
2. to observe the principles for the management of water resources stated in this statute;
3. to ensure that the use or development authorised, permitted or approved –
  - a. achieves the sustainable use and development of the water resource;
  - b. complies with the rules stated in this statute;
  - c. complies with the rules stated in the water plans made under this statute.

# An Obligation to Ensure External Coherence

In the exercise of powers, in the performance of functions and in the discharge of obligations under this statute full and appropriate consideration must be given to:

1. The principles generally accepted by the international community and the strategies, policies and objectives by which they are implemented that together comprise the normative framework of international rules of law;
2. The rules of customary international law;
3. The obligations imposed upon the state by any international agreement to which the state is a party;
4. The obligations imposed upon the state by any interstate agreement to which the state is a party;
5. Any relevant rules of the law of the state about the rights and duties of persons and juridical entities in their private capacities;
6. Any relevant customary rules;
7. Any relevant local practices.