

# INTEGRATED WATER RESOURCES MANAGEMENT (IWRM)

The Southern African Development Community (SADC) strategic priorities on integrated water resources development and management are outlined in its Regional Strategic Action Plan (RSAP) III (2011-2015). The RSAP III serves as a work plan to guide development and implementation of activities in the SADC water sector for five years from 2011 to 2015. It covers the strategic areas of water governance, infrastructure development and water management, and calls for the achievement of three strategic objectives – capacity development; climate change adaptation; and social development – to improve the impact of the plan on the ground:

An understanding of these elements of integrated water resources management provide a useful guide to developing a newsy water story.

#### WATER GOVERNANCE

For many people, access to water is a matter of daily survival and, with growing populations and growing economies, limited access to quality water resources can result in conflict. Improved water governance is therefore critical to reducing poverty and preventing conflict. The Water Governance

Facility <a href="https://www.watergovernancefacility.com">www.watergovernancefacility.com</a>, outlines four

Facility <u>www.watergovernancefacility.com</u>, outlines four poverty-centred and interrelated facets key to addressing governance issues:

The **social dimension** points to equitable use of water resources. Apart from being unevenly distributed in time and space, water is also unevenly distributed among various socio-economic strata of society in both rural and urban settlements. How water resources and related services are allocated and distributed have direct impacts on people's health as well as their livelihood opportunities.

The **economic dimension** draws attention to the efficient use of water resources and the role of water in overall economic growth. Aggressive poverty reduction and economic growth depend highly on water and other natural resources. Studies show better governance can exert a powerful and positive effect on per capita incomes in many countries.

The political empowerment dimension points at granting water stakeholders and citizens at large equal democratic opportunities to influence and monitor political processes and outcomes. At both the national and international levels, marginalised citizens, such as indigenous people, women, slum dwellers, etc., are rarely recognised as legitimate stakeholders in water-related decision making, and typically lack voices, institutions and capacities for promoting their water interests.

### Integrated Water Resource Management (IWRM) Principles

At its most basic, IWRM is about having more coordinated development and management of land and water; surface water and ground water; and upstream and downstream interests.

IWRM strategies are based on the four Dublin Principles presented at the World Summit in Rio de Janeiro in 1992 as follows:

- 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 as well as social good.

Dublin, 1992

Source: GWPforum.org

The environmental sustainability dimension shows that improved governance allows for improved use of water resources and the integrity of ecosystems dependent on sufficient and

quality water flow. Unfortunately, water quality appears to have declined worldwide in most regions with intensive agriculture and large urban and industrial areas. Poor people's livelihood opportunities in particular depend directly upon sustained access to natural resources, including water – especially since they tend to live in marginalised areas that are prone to pollution, droughts and floods.

### Water governance addresses among other things:

- 1. Principles such as equity and efficiency in water resource and services allocation and distribution, water administration based on catchments, the need for integrated water management approaches and the need to balance water use between socio-economic activities and ecosystems.
- 2. The formulation, establishment and implementation of water policies, legislation and institutions.
- 3. Clarification of the roles of government, civil society and the private sector and their responsibilities regarding ownership, management and administration of water resources and services, for example:
  - Inter-sectoral dialogue and co-ordination
  - Stakeholder participation and conflict resolution
  - Water rights and permits
  - The role of women in water management
  - Water quantity and quality standards
  - Bureaucratic obstacles and corruption
  - Price regulation and subsidies
  - Tax incentives and credits.

INFRASTRUCTURE DEVELOPMENT -- is the process of developing, financing, implementing and operating structures for irrigation, drainage, water supply and sanitation, hydro-power generation, flood management and other purposes.

WATER MANAGEMENT - refers to planning, developing, distributing, managing and optimising the uses of water resources under defined water policies and regulations;

CAPACITY DEVELOPMENT – involves strengthening the abilities of individuals, organisations and institutions to develop and manage water resources sustainably.

CLIMATE CHANGE ADAPTATION – is about reducing the vulnerability of people and the environment against actual or expected climate change.

**SOCIAL DEVELOPMENT** – is about ensuring that everyone has fair access to water resources and related services regardless of their economic and social status.

Source: Adapted from The Water Governance Facility www.watergovernancefacility.com and the Regional Strategic Action Plan on Integrated water Resources Development and Management (2011-2015) RSAP III, SADC



## INTERVIEWING HINTS AND TIPS

#### **ELEMENTS OF A GOOD INTERVIEW**

At the end of an interview, the listener should feel as if he/she has heard a story and could repeat it.

### A good interview:

- Has a clear focus.
- Contains stories about real people.
- Has direct, conversational language, questions and answers.
- Has a tone that relates to the subject.

## A good interviewer:

- Knows the story.
- Is in control of the interview.
- Is confident without being aggressive.
- Is sensitive to language and nuance.
- Remembers that the job is to inform, not impress.

#### Your interview notes

Your notes should be an interview road map. All the work and research that goes into an interview before it goes to air is distilled in a collection of notes, questions, and script.

Your notes should contain:

- The focus statement.
- The introduction.
- The all-important first question and other suggested questions.
- Brief background notes.
- Basic essentials who the guest is, the time and place of the interview.
- Alerts about any potential stumbling blocks - anything from how to pronounce the guest's name to a warning that he's sensitive about his baldness.

### Each interview should have a shape:

- A beginning that sets up the story, introduces the guest and asks the first question.
- A middle that details all the information necessary to communicate the story, with examples and illustrations.
- An end, a final question that sums it all up, resolves the story and points to the pertinent future.

#### TWO-STEPS TO A GREAT INTERVIEW

Part one is called The Search. This is where the interviewer searches for the beginning of the story. This part of the pre-interview is comprised mostly of small talk, making the guest comfortable, introducing the reason for the interview, assessing the potential for pursuing what you had in mind, or whether there is something else the guest has in mind that might be more worthy of pursuit.

Part two of the pre-interview is called The Pursuit. This is the time to get down to business and get the story. You have established the subject either before the pre-interview began, or discovered a new subject through The Search.

#### Don't underestimate the breadcrumbs

You will find during the pre-interview that your guest will mention, as an aside, another event, a person, a memory... something in answering your questions triggered another thought.

They will probably not talk about it because it is not part of their answer to your question, but it might be very important to the story.

These are the breadcrumbs and breadcrumbs can make a loaf.

Part three of the pre-interview is called The Cleanup. Once you are satisfied that you know the story and that the guest can tell the story, you can get some of the details you need for presenting it on the radio. These would be things such as proper pronunciation of the name, title, contact information and availability for a formal interview.

#### **STOCK QUESTIONS**

These are generic questions that can be plugged into the interview anytime, anywhere. People dismiss them because they look dull and sound boring, but they can generate some big surprises and have a habit of producing the sound clip.

#### 1. What happened?

The best question—but we don't use it. Too plain, too simple. We think we need something more elaborate, but nothing beats "What happened?"

### 2. What do you mean?

Pulls more out of people than people realize they possess. Totally universal and almost impossible to over-use.

### 3. Why is that?

If a five-year-old has ever asked you a consecutive series of "Why" questions you know how hard it works. "Why?" and "Why is that?" are identical, except "Why is that?" sounds softer, less brusque.

### 4. What are/were the options?

Amazingly intrusive, and yet raises no red flags. Once somebody lays out the options we know what they are thinking.

#### 5. How would you characterize that?

Very boring, but don't be fooled. It's both deceptive and hardworking. Gets great description.

## 6. What was the turning point?

Okay, it's a cliché, but look at the results. It's a heat-seeking missile that locks in on movement and change.

## 7. What did he/she/they say?

Turn people into your personal reporter and get the actual words. It reduces the event to its pure form.

# 8. What is/was it like?

It makes them fill the void. Consistently gets great description.

#### 9. What went through your mind at the time?

A more consistent alternative to the "How do you feel?" question.

#### 10. What's an example?

Use when people make broad statements without being specific. Immediately their answers become hard and specific—or alternatively their lack of knowledge is exposed.

#### Sources:

CBC Radio Skills Manual Dick Miller

#### Checklist

- Know what you want to get from your guest.
- Have your guests introduce themselves on tape to the audience.
- ✓ Let them tell the listeners why they are being interviewed.
- Record some ambient sound.
- Get both of you comfortable.
- Ask one question at a time.
- Ask questions that require an emotional response.
- Ask questions that bring out a story.
- Have your guests answer in complete sentences.
- Listen to the answers.
- Ask follow-up questions.
- ✓ Let your guest finish before you start a question.
- √ Avoid verbal nods of agreement. The uh huh's and mmmmm's.
- Be prepared to change directions to follow your guest.
- Follow the trails of breadcrumbs.
- Ask questions two or three times if necessary for depth and clarity.
- Listen. Listen. Listen.
- Check your recorder before you leave to make sure the interview is recorded.

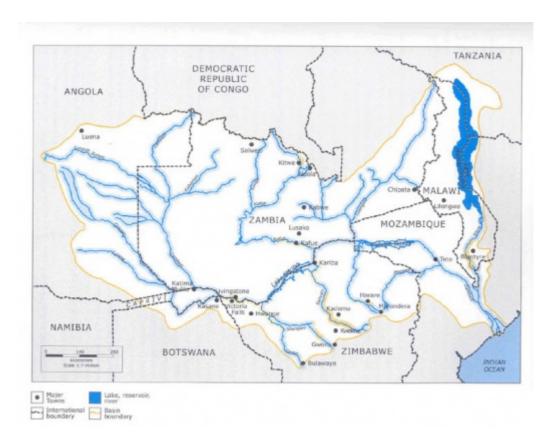


# TRANSBOUNDARY RIVER BASINS IN SOUTHERN AFRICA



Source: Limpopo River Awareness Kit www.limpoporak.com

# ZAMBEZI RIVER BASIN



Source: www.planetaction.org



#### **USEFUL RESOURCES**

#### **SADC WATER DIVISION**

Barbara Lopi

Communications and Awareness Specialist -

Water

SADC Secretariat

Infrastructure and Services Directorate Plot 54385 CBD Square Private/Bag 0095

Gaborone, Botswana

Tel: +267 395 1863 (Ext 1790) Dir. + 267

3641790 Cell: +267 72112560 Email: blopi@sadc.int

http://www.sadc.int/information-

services/water-information-services-portals

#### **RIVER BASIN ORGANISATIONS**

# Limpopo Watercourse Commission (LIMCOM)

Limpopo River Awareness Kit <a href="http://www.limpoporak.com/">http://www.limpoporak.com/</a>

# Orange –Senqu Watercourse Commission (ORASECOM)

Orange-Senqu Awareness Kit <a href="http://www.orangesenqurak.com/">http://www.orangesenqurak.com/</a>

# Zambezi Water Commission (ZAMCOM)

The Executive Secretary Mr. Michael Mutale

Email: <a href="mmutale@zambezicommission.org/">mmutale@zambezicommission.org/</a> http://www.zambezicommission.org/

# Okavango River Basin Water Commission (OKACOM)

Monica Morrison Ms

Communications and Information Specialist

DEA Compound Maun, Botswana

Email: monica@okacom.org

Phone: 267-680-0023

# TRANSBOUNDARY WATER MANAGEMENT

# GIZ Transboundary Water Management in SADC

Private Bag X12, Plot 50362 Fairgrounds, Gaborone, Botswana Tel: +267 310 2520 horst.vogel@giz.de www.gtz.de/water

#### **CLIMATE GOVERNANCE**

# Heinrich Böll Stiftung /Heinrich Böll Foundation

Regional Office Southern Africa 8th Floor, Vunani Chambers

33 Church Street

Cape Town (CBD) 000

Tel: +27 (0)21 461 6266

Email: Tigere Chagutah

[Tigere.Chagutah@za.boell.org]

http://www.za.boell.org/web/sustainable-

development.html

# INTERNATIONAL WATER RESOURCES MANAGEMENT

## Global Water Partnership

GWP Global Secretariat Drottninggatan 33

SE-111 51 Stockholm

Sweden

Phone: +46 8 1213 86 00 Fax: +46 8 1213 86 04 E-mail: gwp[at]gwp.org Website: www.gwp.org

http://www.gwp.org/en/gwp-in-

action/Southern-Africa/

# UNDP Water Governance Facility at SIWI

Drottningatan 33 111 51 Stockholm

Sweden

Tel: +46 8121 360 00

Email: watergovernance@siwi.org http://www.wtergovernance.org/

# International Institute for Sustainable

Development (IISD)
Reporting Services Division

New York Office

300 East 56th Street #11D New York, New York 10022

United States of America

**Tel:** +1 (646) 536-7556 **Email:** enb@iisd.org

http://www.iisd.ca/

### AgriWaterPedia

http://agriwaterpedia.info

A knowledge platform on Agricultural Water Management aimed at improving food security under conditions of climate change in developing countries.



# GLOSSARY – Terms Frequently Used in the Water Sector

**AQUATIC** Growing or living in or near water; refers to marine or freshwater Ecosystems

AQUIFER Underground layer of rock, sand, or gravel capable of storing water within cracks and pores, or between grains. Water in an aquifer is called groundwater, and this can be used for drinking and other purposes if sufficient quantity and quality.

**ARID** Dry

**BASIN** A large low-lying area drained by a stream or river system (see Catchment)

**BENEFIT SHARING** This concept sees the potential for sharing the environmental and socio-economic benefits of water in shared water bodies, rather than simply equal allocation.

**CATCHMENT** An area that receives or "catches" the rain that flows into a watercourse (see Basin)

**CLIMATE CHANGE** Alteration to measured quantities of rain, temperature, wind, cloudiness and other characteristics of a climate system that departs significantly from previous average conditions and remains, causing changes to ecosystems and socioeconomic activity

**COMMUNITY PARTICIPATION Process** whereby a community is encouraged to take part in decision-making and implementation of development programmes in which it is a beneficiary

**CONSUMPTIVE USE** Any use that permanently removes water from the natural stream system

**DAMBO** Shallow, seasonally or permanently waterlogged, grass-covered depression

**DEGRADATION** Deterioration of the environment through depletion of resources such as water or soil

**DELTA** Triangular tract of sand and soil at the mouth of a river where it flows into the sea enclosed or traversed by its diverging branches

**DESALINATION** Process of removing salt from water

**DOWNSTREAM** In the direction to which a river or stream flows

**ECOLOGICAL VALUE** A measure of the significance of an area of land as a habitat supporting trees, plants and animals

**ECOSYSTEM** All the living organisms and the physical environment in an area as well as the processes that link them together

**EFFLUENT** Liquid waste that is a by-product of human activity, such as sewage or industrial discharge

**ENDEMIC** Species believed to exist only in a specific area

**ESTUARY** Part of a the river where it meets the sea, characterised by a mixture of seawater and freshwater

**FLOODPLAIN** Area adjacent to a river or lake and seasonally flooded

FLOOD An overflow or influx of water beyond its normal confines

FOOD SECURITY Availability of food when needed, through production, storage or import

**FRESHWATER** Water with less than 0.5 parts per thousand of dissolved salts, found in lakes, rivers and groundwater

**GROUNDWATER** Rainfall that seeps into the ground through cracks in the soil, sand, or rocks until it reaches a layer of rock and collects there

**GROUNDWATER RECHARGE** Replacement of water, usually through rainwater seeping into the ground, to replenish that lost through abstraction, evaporation of transpiration

**HELSINKI RULES** A basis for international agreements on water management, stating that each basin state has rights to an equitable share of water in the basin, and that maximum benefit should be achieved with minimum disadvantage to other states

**HYDROLOGICAL CYCLE** Process by which water reaches the Earth through rain, passes through transport and storage stages on the Earth's surface, and is returned to the atmosphere through evaporation

**INTEGRATED WATER RESOURCES** MANAGEMENT (IWRM) The coordinated development and management of water, land and related resources, to maximise the economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems

**IRRIGATION** Watering land by canals, sprinklers or drips for purpose of crop production

NON-CONSUMPTIVE USE Water usage that does not involve reduction in the quantity of water available

PERENNIAL Lasting throughout the year or for a long time

**POLLUTION** Poisoning of land, air or water with anything that reduces its ability to support life

RAINFALL VARIABILITY Pattern of rainfall in arid environments where the amount and location of rain differ widely from year to year

**RAMSAR** Treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources

**RIPARIAN** Adjacent to a river

RIVER BASIN Area of land from which all surface run-off of water flows through a sequence of streams, rivers and sometimes lakes into the sea at a single river mouth, estuary or delta

**RUNOFF** Storm water flowing over the ground surface

**SADC TREATY** The Treaty establishing the Southern African Development Community (SADC) signed on 17 August 1992 in Windhoek, Namibia

**SANITATION** The maintenance or improvement of sanitary conditions through drainage and disposal of sewage and refuse

**SEMI-ARID** Areas where mean annual rainfall is between about 250 and 600mm, rainfall is seasonal and variable, and potential evaporation is high

**SURFACE WATER** Water found on the surface of the land, such as that in rivers, lakes and dams

SUSTAINABLE DEVELOPMENT Term used by the World Commission on Environment and Development to denote development that meets the needs of the present without compromising the ability of future generations to meet their own needs

**UPSTREAM** The opposite direction to the water flow in a river; towards the source

WATER ALLOCATION Distribution of water among the various sectors of society

WATER-BORNE DISEASES Those caused by parasites that live in water, for example cholera, dysentery, bilharzia, or typhoid, among others

WATER HARVESTING Collection of rainwater

WATER RESOURCES Water that is useful or potentially useful

WATER SCARCITY This occurs when the annual freshwater supplies drop below 1,000 cubic metres per person, and there is not enough water to support agricultural, urban, human, or environmental needs

**WATER STRESS** A community or country is said to be water stressed when annual supplies of freshwater drop below 1,700 cubic metres per person. This can be caused by the drying up of boreholes or lakes, or other activity that reduces the liquid water available.

WATER TABLE A more or less horizontal layer in the soil below which all spaces between soil particles are saturated with water.

[Source: Media Handbook]