



**Name:** Elizabeth Basadi Khaka

**Current Appointment:** Water quality expert

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**Area of Research/Teaching:** Improving water quality of riverine ecosystems

### **Biography**

#### a) Personal experience with water as a citizen

I am a 62 year old female born in Zimbabwe, the last born in a family of 3 women and hence my name Basadi which literally means women. Water has played a important role in both my personal and professional life.

In my early years, I lived in towns (Bulawayo in Zimbabwe; Lusaka in Zambia) where we had no water and energy shortages. I also lived in Mapanza, Zambia a rural village where we had to fetch water from the river, before going to school an hour away and collect firewood in a nearby forest over the weekend. We drank water straight from the river and the community was able to predict rainfall and thus synchronize their farming activities. I attended a boarding school in a rural area where water and energy were never an issue. Both Zambia and Zimbabwe depended on hydro electricity from the Kariba dam.

Twenty years down the line, water in terms of both quality and quantity is a major issue. Communities are not able to predict the rainfall pattern resulting in serious crop failures and famine. Institutions in the water sector focus has been on water. Recently both Zambia and Zimbabwe have adopted the integrated water resources management approach. Water in the rivers and groundwater is polluted in both towns and villages from unsustainable agricultural practices, human and industrial waste, soil erosion etc. As an example, in Harare its not possible to treat water through the normal filtration and chlorination as it is highly polluted worsened/aggregated by long periods without water in the water supply system. A Major cause of this situation is the limited ability to support research and to use research findings to make the appropriate policy before a crisis occurs.

#### b) My career.

1977-1981 Government of Zambia

After obtaining a B.SC degree in Biology and Chemistry from the University of Zambia I worked as a Tsetse Control Biologist in Zambia.

1981-1993 Government of Zimbabwe

I undertook an M.Sc degree in Public health Engineering from the Imperial College in London.

I worked for the Government of Zimbabwe in water quality and water pollution control section. My duties were to support polluters to reduce pollution and monitor water quality.

1993-2015 United Nations Environment Programme as a Programme Officer

Over a period of 20 years, I worked in:

1. Various water related sectors which include: water quality, water technology transfer, water supply, water and waste water treatment, ecosystems management, rainwater harvesting, climate change adaptation and renewable energy.
2. Cross cutting areas included, gender and development , youth empowerment, poverty alleviation and capacity enhancement.

My duties focused on bringing emerging or persistent issues to governments at a global, regional and sub regional levels; and promoting the research activities to address specific issues. Notable achievements include the adoption of the resolutions by the UNEP Environment Assembly which include developing Water Quality Guidelines for Ecosystems and Ecosystems-based Adaptation. At a regional level the African Ministers Council on Water adopted a rainwater harvesting and youth programmes.

As a board member of the Water Research and Resource Centre, my duties included bringing the critical water issues to the Center and also the research results to governments for policy making. Notable achievements are the studies on fog harvesting and rainwater harvesting.

My publications, used information from literature and focused on influencing policy. These include:

- CABI/ IWMI (2014) , Managing Water and Agro-ecosystems for Food Security
- UNEP (2012), Releasing the Pressure: Water Resource Efficiencies and Gains for Ecosystem Services
- UNEP (2011) Ecosystems for Water and Food Security
- UNEP (2010) Blue harvest: Inland Fisheries as an Ecosystems Service
- UNEP (2009) Rainwater harvesting: a lifeline to human well being
- RELMA in ICRAF & UNEP. (2006) Mapping the Potential of Rainwater Harvesting Technologies in Africa.
- UNEP Government of Kenya (2006) Kenya Drought: Impacts on Agriculture, Livestock and Wildlife
- UNEP Government of Kenya (2000) Devastating Drought in Kenya: Impact and responses
- UNEP (1997): Source Book of Alternative Technologies for Freshwater Augmentation in Africa
- UNEP (1997): Source Book of Alternative Technologies for Freshwater Augmentation in Asia
- UNEP (1997): Source Book of Alternative Technologies for Freshwater Augmentation in Central Europe
- UNEP (1997) Source Book of Alternative Technologies for Freshwater Augmentation in Latin America and the Caribbean
- UNEP (1997): Source Book of Alternative Technologies for Freshwater Augmentation in Small Island Developing States

**New career May 2016-**

Now that I have retired, I will focus on water quality which is a major problem. I provide support to the Environment Management Authority of Zimbabwe to improve water quality in the highly polluted rivers.

# Elizabeth Khaka (B.Sc Bio, M.Sc Environ Eng). Water & Nat Expert

## Research interest

Sustainable development, using scientific info



## Achievements



Policy development, technology transfer

# One dream- improve water quality

It doesn't have to be like this



Gogo's family

