

Sirak Robele Gari

sirakr@gmail.com
sirakrob@yahoo.com
sirak.robele@aau.edu.et

+251947380225

www.linkedin.com/in/sirak-robele
https://www.researchgate.net/profile/Sirak_Gari2

Male, Married.
Addis Ababa,
Ethiopia.

Experienced Water Quality Expert, Water and Coastal Manager , WASH expert

Water Quality Analysis & Monitoring

**Develop Adaptive Environmental
Management frameworks**

**Advise PhD students on Dissertations
Deliver courses to PG students**

Summary

Water quality expert with more than 20 years of experience in water quality monitoring and surveillance. Well-versed in physico-chemical and bacteriological analysis of water. Coordinated fluoride mitigation project, led water quality monitoring system establishment and actively involved in water quality mapping. Conducted research on bacteriological, limnological and physico-chemical aspects of surface water sources (Rift valley lakes and Awash River). Involved in emergency water supply for communities affected by Acute Watery Diarrhea and conducted water quality assessment in the World Banks WASH program. Advises PhD students and delivers courses to post-graduate students in Water and Health.

Areas of expertise

- Water Quality Management
- Water sanitation
- Water Management
- Drinking water treatment
- Environmental assessment
- Developing adaptive environmental Management frameworks
- Developing social-ecological system (SES) assessment tools

Professional Experience

Ethiopian Institute of Water Resources (EIWR), Addis Ababa University: 2016-Present

Assistant Professor in Water and health

- Advise PhD students
- Deliver courses to PG students
- Involvement in the formation of African center of excellence for Water Management

Universidad de Cadiz, Puerto real, Spain:

2012-2015

PhD research Fellow

- Developed SES analytical tool
- Published papers

Oromia Water Minerals and Energy Bureau (OWMEB) , Ethiopia:

1990-2012

- Bacteriological and Physico-chemical analysis of water
- Sanitary inspection and disinfection of water sources
- Training zonal water quality control personnel on water quality monitoring activities
- Water Quality Assessment with World Bank's WASH program
- Conducting research on bacteriological, biological and physico-chemical aspects of surface water sources (Rift valley lakes and Awash river).

- Awareness creation activities on the Public on safe handling and use of water sources and water
- Fluoride mitigation activities in the rift valley zone of the Oromia region.
- Water Quality Mapping
- Emergency water supply for communities affected by Acute Watery Diarrhea

Research and teaching experience

❖ Research

- Water Quality Assessment of Rift valley lakes
- Awash River Pollution load Assessment
- Preliminary survey of the Akaki River Pollution
- Water Quality Monitoring System Establishment
- Fluorosis assessment and Eradication
- Water Quality Mapping
- Determination of light attenuating factors in lakes
- Testing the Application of SAF in the Ria Formosa
- Development of adaptive environmental management tools

❖ Teaching

- PhD courses in Water and Health
- MSc in Water and Coastal Management
- MSc in Eco-hydrology

Education and Training

Education

- 1. Consortium of Universidad de Cadiz, Spain and Universidade do Algarve, Portugal**
 - **PhD** in Marine and Coastal Management, (European Joint Doctorate): **2012-2015**
- 2. Consortium of University of Plymouth, UK, Universidad de Cadiz, Spain and Universidade do Algarve, Portugal**
 - **MSc** in Water and Coastal Management (European Joint Masters): **2008-2010**
- 3. UNESCO-IHE, Netherlands**
 - **MSc** in Env. Science (Specialization: Water Quality Management): **2003-2005**
- 4. Addis Ababa University, Ethiopia**
 - **BSc** in Biology (Minor: Chemistry): **1983-1990**

Training

- **Online course:** Disaster and Ecosystems: Resilience in a changing climate.
- **DEVOTES Summer school:** Integrative assessment of marine systems: the Ecosystem Approach in practice June 9-11, **2015**, San Sebastian, Spain.
- **Regional refresher seminar** on Decision Support Systems in River Basin Management, November 6 -16, **2011**, Nile Basin Initiative, Addis Ababa, Ethiopia.
- **Instrumental Applications in Water Analysis**, June 4-7, **2001**, Shriram Institute for Water Research, Delhi, India.

Honors and Recognitions

❖ Grants and fellowships

- **EMJ Doctoral fellowship:** 2012-2015
- **EMJ Masters fellowship:** 2008-2010
- **EAWAG fellowship:** 2004-2005
- **NFP fellowship:** 2003-2004

❖ Project funding

- **UNICEF** for fluorosis mitigation: 1999-2004
- **UNDP** for Water Quality Monitoring: 1997-2002

Academic Services

- **Manuscript review for the following Journals:**
 - Ecological Indicators
 - Environmental Engineering and Management
 - Integrated Coastal Zone Management
 - Aquatic Ecology
 - Water
 - Sustainability
 - Coastal conservation
 - Environmental Processes
 - Urban Waters

Interests and skills

❖ Research Interest

- Water and Coastal Management and Policy
- Water Quality management
- Water Resources management and Planning
- Environmental Management
- Aquatic ecology and Limnology

❖ Teaching Interest

- Water Quality management
- Water Supply and sanitation
- Water Treatment
- Aquatic ecology and Limnology

❖ Language skill

- Amharic (Native)
- English (fluent)
- French (Intermediate)
- Spanish (Intermediate)
- Italian (intermediate)
- German (basic),
- Russian (basic)

❖ Other Skills

- MS office and different softwares
- Literary skills (Amharic and English short stories and novel)

❖ **Professional associations:** Member:

- American Water Resources Association (AWRA-Florida)
- Center for Environmental and Marine Research (CIMA)
- Clean Air & Water
- Water Professionals
- Global Lakes Ecological Observatory Network (GLEON)

❖ **References:** Professor Alice Newton; Dr John D Icely, Professor Maria del Mar Delgado-Serrano; Dr Cesar E. Ortiz-Guerrero

❖ **Publications**

- **Gari, S.R.**, Guerrero E. O.C, Uribe-A, B., Icely, J., Newton, A. **2018**. A DPSIR- analysis of water uses and related water quality issues in the Colombian Alto and MedioDagua (AMDA) Community Council. *Water sci.*(2017). doi:<https://dx.doi.org/10.1016/j.wsj.2018.06.001>.
- **Gari, S.R.**, Newton, A., Icely, J., Delgado-Serrano, M. **2017**. An analysis of the global applicability of Ostrom's Design principles to diagnose the functionality of common-pool resource institutions. *Sustainability* 2017,9, 1287; doi: 10.3390/su9071287.
- **Gari, S.R.**, Newton, A., Icely, J. **2015**. A review of the application and evolution of the DPSIR framework with an emphasis on coastal social-ecological systems. *Ocean & Coastal Management* 103: 63-77. <http://dx.doi.org/10.1016/j.ocecoaman.2014.11.013>.
- **Gari, S.R.**, Newton, A., Icely, J., Lowe, C. **2014**. Testing the application of the Systems Approach Framework (SAF) for the management of eutrophication in the Ria Formosa. *Marine Policy* 43: 40-45. <http://dx.doi.org/10.1016/j.marpol.2013.03.017>.
- Aderajew Mekonnen Girmay, Martin R. Evans, **Sirak Robele Gari**, Azage Gebreyohannes Gebremariam, Mulumebet Tadesse Reta, 2019. Urban health extension service utilization and associated factors among community of Gullele sub-city administration, Addis Ababa, Ethiopia. *Int J Community Med Public Health*. 2019 Mar;6(3): 976-985. DOI: <http://dx.doi.org/10.18203/2394-6040.ijcmph20190001>.
- Asmamaw Malede ,KassahunAlemu, Mulugeta Aemero, **Sirak Robele** and Helmut Kloos, **2018**. Travel to farms in the lowlands and inadequate malaria information significantly predict malaria in villages around Lake Tana, northwest Ethiopia: a matched case-control study. *Malaria Journal* (2018) 17:290. <https://doi.org/10.1186/s12936-018-2434-y>
- John Icely, **Sirak Robele Gari**, Pablo Ramos, Alice Newton. Sustainable Management and Governance Models. **2015**. *Deliverable*. Dissemination level: Public.
- Chris Smith, Nadia Papadopoulou, , Steve Barnard, KrysiaMazik , Joana Patrício , Mike Elliott, OihanaSolaun , Sally Little , Angel Borja, Natasha Bhatia , SnejanaMoncheva, **Sirak Robele**, K. Can Bizsel, Atilla H. Eronat. **2014**. Conceptual models for the effects of marine pressures on biodiversity. *Technical report*. Dissemination level: Public. www.devotes-project.eu/.../DEVOTES-D1-1-ConceptualMod.

Presentations and participations

- Enhancing Policy Coherence for the SDGs through integrated climate, land, energy and water (CLEWs) assessments and institutional strengthening in Ethiopia. January 17, 2019. UNECA, Addis Ababa, Ethiopia.
- Regional Training Workshop on Effective Management of Water Quality and Emerging Pollutants in Water and Wastewater in Sub-Saharan Africa. September 27-28, 2018, Oak Plaza Hotel, Accra, Ghana.
- High level National Stakeholders Consultative Workshop on Climate Resilient WASH Program in Drought-Prone Ethiopia. October 5, 2017. Inter Bistro Hotel, Addis Ababa, Ethiopia.
- Oral presentation in the International Seminar on Rainwater Harvesting Techniques-Towards Effective Adaptation Strategies. September 26-28, Khartoum, Sudan.
- National Stakeholder Curriculum Review Workshop of Africa Centre of Excellence for Water Management (ACEWM). September 15, 2016, Desalegn Hotel, Addis Ababa, Ethiopia.
- Project kick-off and Technical Advisory Workshop of the Africa Centre of Excellence for Water Management. August 17-19, 2016, Desalegn Hotel, Addis Ababa, Ethiopia.

- Oral presentation in Conference WASH Futures 2016, Pathways to universal and sustained water, sanitation and hygiene Conference, May 16-20, 2016, Brisbane, Australia. Accepted.
- Poster presentation in The 2nd International interdisciplinary conference on agricultural land use and water quality, September 21-24, 2015, BOKU, Vienna, Austria. Accepted.
- Session chair in the YOUMARES conference, September 16-19, 2015. University of Bremen, Germany. Accepted
- Frame works for assessing Social-ecological systems (SES). WACOMA workshop, June 2014, University of Cadiz, Cadiz, Spain.
- The use of DPSIR as a tool to assess Eutrophication Problems in the Ria Formosa. WACOMA workshop, March 2013, University of Algarve, Faro, Portugal.
- Frame works for assessing Social-ecological systems (SES). WACOMA workshop, March 2013, University of Algarve, Faro, Portugal.

Participation in projects.

- Water and COoperation within the Nile River Basin (WACONI): 2017-2019.
- DEvelopment Of innovative Tools for understanding marine biodiversity and assessing good Environmental Status (DEVOTES). 2012-2016.
- Community-based Management of Environmental Challenges in Latin America- (COMET-LA): 2012-2015.
- Science-Policy Integration for Costal System Assessment (SPICOSA): 2007-2011.